Eureka-Arcata Route 101
Corridor Improvement Project

Humboldt County, California
District 1 – HUM – 101 PM 79.9 / 86.3

EA / EFIS
01-36600 / 0100000127
01-0E000 / 0113000091
01-0C970 / 0113000094
01-0C930 / 0113000078
01-0F220 / 0115000092
State Clearinghouse Number: 200109035

Final Environmental Impact Report/Statement

Volume III of IV
Response to Comments: General and Agency
December 2016

Prepared by the U.S. Department of Transportation
Federal Highway Administration (FHWA) and the
State of California Department of Transportation (Caltrans)
For the Humboldt County Association of Governments (HCAOG)

Table of Contents

Appendix F is bound separately as Volume IV.

Introduction and Background

Volume II of the Final Environmental Impact Report/Study (EIR/S) for the Eureka-Arcata Route 101 Corridor Improvement Project consists of State of California Department of Transportation (Caltrans) prepared responses to written comments from the public regarding the proposed project. Volume I consists of the main Final EIR/S document.

On August 7, 2007, Caltrans, Humboldt County Association of Governments (HCAOG), and the Federal Highway Administration (FHWA) held a public hearing to provide the public an opportunity to review project information, including the results from the Draft EIR/S, and submit comments. A Notice of Completion form and Draft EIR/S copies were submitted to the State Clearinghouse (SCH) in a memorandum dated June 29, 2007, with a request to close the circulation and comment period on August 24, 2007. However, two CEQA Responsible Agencies requested an extension of the review and comment period and the public review/comment period was extended to September 28, 2007.

In response to public comments from the 2007 Draft EIR/S review period, Caltrans staff modified two of the existing alternatives resulting in Alternatives 1A and 3A. These two alternatives were presented to the public at a December 3, 2008 open house. Written public comments regarding the new alternatives are also included in this Volume II.

Caltrans received a total of 708 public comments in the form of comment cards, letters, form letters, emails, and transcripts of verbal comments from individuals during the 2007 and 2008 public comment periods. There were no resolutions or petitions received at public meetings or during the comment period. Some individuals and organizations submitted more than one written comment.

Public comments were not tallied in terms of project opposition and endorsement. Most comments received did not clearly specify either unqualified opposition or endorsement. Public comments often consisted of suggestions or requests for additional information.

Organization of Public Comments

Each public comment that was received on the project was placed into one of the following five main categories and in the following order within this document:

1. Government elected officials
2. State and Federal Agencies
3. Local and regional governments
4. Organizations
5. Court reporter-prepared transcripts of verbal comments from individuals
6. Form letters
7. Individuals (alphabetical order by last name)

Each written comment is included in this volume with individual responses or referenced to grouped responses (grouped responses are explained later in this document). In the case of form letters, only one representative copy of the form letter is included. A list of individuals who submitted the same form letters are included in this document.

Index to 8 Letters from State and Federal Agencies and Elected Officials

1. California Coastal Commission – 2007 letter
2. California Coastal Commission – 2008 letter
3. California Department of Fish & Wildlife (formerly Game) – 2007 letter
4. California Department of Toxic Substances Control
5. National Oceanic and Atmospheric Administration
6. Patty Berg, California Assemblywoman, First District
7. U.S. Environmental Protection Agency
8. U.S. Fish & Wildlife Service

Index to 8 Letters from Local Agencies

1. City of Arcata – 2007 letter
2. City of Arcata – 2008 letter
3. City of Eureka
4. Humboldt County Association of Governments (HCAOG)***
5. Humboldt County Board of Supervisors – 2007 letter. (including the attached comments from the following:
    - Humboldt County Department of Public Works – Engineering Division

- Humboldt County Department of Public Works – Aviation Division
- Humboldt County Department of Planning and Building (formerly Community Development Services)

6. Humboldt County – 2008 letter
7. Humboldt County Aviation – Advisory Committee
8. Manila Community Services District

******* *In addition the Comment Letter from HCAOG the following comments were submitted as part of the HCAOG comments:*

- HCAOG Boarding Meeting September 2007 Public Comments
- Association's Citizen Advisory Committee
- Mark Schaffer – Citizen Advisory Committee member
- A coalition consisting of the following organizations:
  - Redwood Alliance Climate Action Project
  - Green Wheels
  - Democracy Unlimited of Humboldt County
  - Healthy Humboldt
  - Humboldt Baykeeper
  - HSU Student Nurses Association
  - Keep Eureka Beautiful
  - Northcoast Environmental Center
  - Redwood Community Action Agency
  - Trails Trust of Humboldt Bay
- Siddiq Kilkenny
- John Schaefer
- Tim Shreeve
- Sandra Sutton
- Craig Klapmon
- Lynne Sarty

Index to 17 Letters from Organizations

1. 101 Corridor Access Project (101CAP) – 2007 letter
2. 101 Corridor Access Project (101CAP) – 2008 letter
3. Audubon Society
4. Citizens for Port Development

5. Eureka Heritage 2007
6. Green Wheels – 2007 letter
7. Green Wheels – 2008 letter
8. Humboldt Bay Bicycle Commuters Associations – 2007 letter
9. Humboldt Bay Bicycle Commuters Associations – 2008 letter
10. Humboldt Baykeeper – 2007 letter
11. Humboldt Baykeeper – 2010 letter
12. Jacoby Creek Land Trust
13. Keep Eureka Beautiful – 2007 letter
14. Keep Eureka Beautiful – 2008 letter
15. Redwood Community Action Agency
16. Sierra Club, North Group, Redwood Chapter
17. Trails Trust of Humboldt Bay

Index to 5 Transcripts Comments

All transcripts of comments by the following individuals can be found in this volume in alphabetical order by last name.

1. Arlett, Charlis
2. Cahill, Dennis
3. Cramer, Nova
4. Hawking, Neil
5. Wolf, Minnie

Index to 3 Form Letters

Three different form letters supporting Alternative 3 were submitted during the 2007 comment period. One example of each form letter is included after the individual written comments.

The first form letter, identified as Form Letter 1, was sent by the following 64 Mid-City Motor World Employees:

8 Indecipherable signatures
Alley, Austin
Anderson, Allison
Anderson, Chris
Barnes, Garrett
Bonimini, Alan
Boswell, Patricia
Bricker, Ronald
Bryant, Shawn
Brown, Becky
Castellanos, Angela
Dalton, John

Dawson, Renée
Egle, Shan
Esskew, Daniel
Ferrera, Celina
Fleek, Renee
Ford, Jim
Garcia, Adrian
Griffin-Flynn, Helene
Handly, Lacie
Harper, Dan
Hrdina, Rick
Hewitt, Cherri
Howard, Melissa
Klapman, Craig
Lake, Scott
Lee, Janice
Lohn, Robert
Mahoney, Janine
Manson, Michael
Masino, Bob
Matheson, Necia
Matthews, Colt
McPartland, Charles
Medeiras, Kurt
Mokhtari, Saba
Morgan, Chrysalis
Murphy, Zachary
Perreault, Matthew
Pyle, Victor
Rapp, Joshua
Rasmussen, Jeremy
Reeves, Alison
Rossig, Vernon
Sahlman, Torg
Schroeder, Daphne
Small, Doug
Stolte, Patricia
Sullivan, Steven
Thomas, Jessica
Travis, Mike
Turner, Scotty
Wilson, Jack
Younkin, Jeff
Zaugg, Jon
Zawadi, Zu-Kenya

Form letter 2 is similar to the Mid-City Motor World form letter and was sent by the following 31 individuals:

5 Indecipherable signatures, Bracut Lumber and Mill Yard customers
1 Indecipherable signature, Humboldt Wholesale customer
1 Indecipherable signature, R & S Supply customer
2 Indecipherable signatures – property or business owners
Alves, Vera – Alves Inc., R & S Supply customer
Anonymous Mill Yard customer
Berkowitz, Amy – Licensed landscape architect, Farm Store customer
Blair, Ray – R & S Supply customer
Dixon, Paul, Vice President of NewLife Service Co., - R & S Supply customer
Foster, Jessica – Humboldt Wholesale customer
Harper, Harvey – Mid-City Motor World owner
Henriksen, Wayne – Henriksen Roofing owner, R & S Supply customer
Hess, Rick – Bracut Lumber owner
Hunt, Stephen – Alternative Design & Development, owner

Johnston, Pete – Johnston Construction, R & S Supply customer
Lytle, Jeffrey – J. L. Construction, R & S Supply customer
Mendes, Nick – Nick Mendes Construction, R & S Supply customer
Pickle, Cori – Farm Store customer
Rector, Thomas – Thomas Home Center, President
Rice, Stephen – Arcata Millworks owner
Robinson, Colleen – Humboldt Wholesale customer
Roney, Robert – President of Northcoast Awning, R & S Supply customer
Schager, Charles – Rogers Machinery, Eureka Oxygen, Papé Material, and Redwood Kenworth customer
Sutton, Sandra – Farm Store customer
Sutton, Tom – Farm Store customer

Form letter 3 was sent by the following Happy Dog (local business located at 3346 Jacobs Avenue, Eureka) customers (37 total letters):

3 Indecipherable signatures
Anderson, Linda
Barnhartt, Heidi
Bauriedel, James
Browning, Gailey
Calwell, Marjorie
Cammack, James
Cassatt, Denise
Grimm, Rick & Robin
Hammer, Kathie
Hodges, Gayle
Janson, Eva
Jarvis, Jody
Love, Martin
Lotz, Kathleen
King, Patricia
Murray, William
Peterson, Brenda
Rahner, Cecilia
Rips, Barbara
Rusconi, Jody & Lee
Schapiro, Sherman
Sloane, John
Somerton, Pat
Sousa, Andrea
Steel, Bertram
Stewart, Jeremiah
Stewart, Tracy
Tomkins, William
Vollenweider, Ann & Ken
Wilkins, Lori
Willits, Tom
Willoughby, Erzi
Woempner, Helen
Yates, George & Sheila

Index to 532 Individual Written Comments

All written comments submitted by the individuals can be found in this volume and listed below in alphabetical order by last name. If more than one comment was received it was noted by the either received from a comment card, letter, or email.

69. Carter, Halie
70. Carter, Lea
71. Castro, Andrea
72. Cedillo, Judy
73. Celhey, Sean
74. Chandler, Jereme
75. Chandler, Lora E.
76. Chaney, Pat
77. Chaney, Ronald
78. Chatfield, Carl L.
79. Chelton, Elaine
80. Christensen, Don
81. Christie, Linda
82. Christopher, Gina
83. Ciridall, Elaine
84. Clark, George
85. Clark, James W.
86. Clark, Tahme
87. Cleary, Patrick
88. Clevenger, Perry
89. Cogger, Corrine
90. Collier, Natalia
91. Cone, Pam & Tom
92. Cook, Terry R.
93. Copple, Nathan R. MD
94. Crandall, Elaine
95. Crotty, Sean
96. Dadlani, Haresh
97. Daniels, Timothy
98. Davis, Ben
99. Davis, Edith
100. DeBoice, John
101. DeGraff, Earnie
102. DeSantis, Catherine
103. Doerflinger, Linda – comment card
104. Doerflinger, Linda – letter
105. Doran, Jean
106. Dradoarian, Haig
107. Draper, Margaret
108. Duncan, Barbara
109. Durbin, Bill
110. Dvorak, Will
111. East, Robert
112. Elfing, Annie
113. Elias, Elias
114. Ellinwood, Jud & Webb, Anda
115. Ellsworth, Chuck
116. Emad, Faye – comment card
117. Emad, Faye – email
118. Endsley, Jeremy
119. Engber, Eamon
120. Escher, Robert
121. Evans, Barry, P.E.
122. Evenson, Michael
123. Farrar, Jonathon M.
124. Faust, Ralph - 2007 letter
125. Faust, Ralph - 2008 letter
126. Fennell, Sharon
127. Fleek, Jessica
128. Fogg, Alissa
129. Forsyth, Suzanne
130. Francis, Julie
131. Franco, Cheryl
132. Freewoman, Julia
133. Frey, Nancy
134. Friedrichsen, Jan
135. Frugoni, Corrinne, MD
136. Fuller, David
137. Gallagher, Mary
138. Gang-Halvorson, Sage
139. Gardner, Bob
140. Gardner, Randy
141. Garrett, Spring
142. Gearheart, Mary – comment card
143. Gearheart, Mary – 2007 letter
144. Gearheart, Mary – 2008 letter
145. Gelinas, Mary V.
146. Gentile, Carman
147. George, Denise
148. George, Diane

149. Gephart, Donna
150. Gerring, Edge
151. Giampaolo, Jim
152. Giraud, Deborah
153. Glen, Lin
154. Goodman, Lori
155. Goodwin, Charles F, Jr.
156. Grace, Pat
157. Green, George
158. Grenfell, Sue
159. Griffin, Helene
160. Gronemeyer, Brett
161. Grunthaner, Teri
162. Guerra, Suzanne
163. Gurnee, Lynne
164. Gustafson, Rick
165. Halstrom, Tyla
166. Haggard, Judy
167. Hall, Deborah
168. Halvorsen, William
169. Hamm, Luke
170. Hansis, Richard
171. Harper, Trevor
172. Harper Motors employee
173. Harris, Ron
174. Hartin, Arlene
175. Hartley, Lori
176. Hassrick, Ginni
177. Hawk, Sunny
178. Hedgecock, Virginia
179. Hehner, Annie
180. Heidrick, Phil
181. Helen
182. Hendny, Suzanne
183. Herbelin, Charles
184. Herbelin, Margaret – comment card
185. Herbelin, Margaret – letter
186. Hesseltine, Glenda
187. Higgins, Pat
188. Hinz, Tom
189. Hockaday, J. Warren
190. Hodgkins, Gad A.
191. Hodgson, Matt
192. Hoff, James
193. Hoffman, Linda
194. Holland, Annette – undated letter
195. Holland, Annette – 2008 letter
196. Holland, Rick & Carol
197. Holstein, Shelley
198. Holstein, Solon B.
199. Hoopes, Geoffrey
200. Hourany, Larry, PhD
201. House, Lee
202. Houston, John
203. Houston, Joyce M.
204. Howell, Adam
205. Hoyle, Charles, Dr.
206. Hueske, Ben & Beverly
207. Hueske, Nancy
208. Hughes, Rees
209. Hugo, Kitty& Michael
210. Hui, Helen
211. Hume, Nicholas
212. Ihara, Dan
213. Ingold, Douglas A.
214. Jacoby, Cartice
215. James, Roger
216. Janisse, CJ
217. Jimenez, Robert
218. Johnson, Carl
219. Johnson, Chad
220. Johnson, Leif
221. Johnson, Richard E. – 2007 letter
222. Johnson, Richard E. – 2008 letter
223. Johnston, Jeremiah
224. Kahle, Salena
225. Kamprath, Douglas
226. Kamprath, Michele – email
227. Kamprath, Michele – letter
228. Kaneko, Violet Ray & Brian

229. Kasek, Melanie
230. Kay, Mary H.
231. Kennedy, Barbara – comment card
232. Kennedy, Barbara – letter
233. Kerns, Regina
234. Kessler, Bruce, MD & Pamela
235. Kilkenny, Siddiq
236. Kim, Kiju
237. Kimnach, Erica
238. King, Joyce
239. Kissling, Elmone & Rich
240. Klarner, Kara Lynn
241. Knapp, Rick
242. Knight, Ann Marie
243. Kocourek, Amy
244. Kokish, Ron
245. Konicke, Ronald
246. Krause, Lester L., III
247. Kroth, Alicia
248. Kuhnel, Ron
249. Kurtz, Jared
250. Kuttner, Cindy
251. Lane, David
252. Lange, Derek
253. L`Annunziata, Helen
254. Lau, Michael
255. Lawton, Robert
256. Lazzarotto, Laura
257. Lazzarotto, Taslim
258. Leer, Lee, MD
259. Leer, Nancy Dye, PhD, MHP
260. Lengyel, Jerome – comment card
261. Lengyel, Jerome – letter
262. Lengyel, Nancy
263. Leppig, Gordon – 2007 comment card
264. Leppig, Gordon & Neander, Julie - 2007 letter
265. Leppig, Gordon – 2008 letter
266. Lescher, Diana
267. Leskiw, Sue
268. Levan, Matt
269. Levin, Rick
270. Liegel, Lora
271. Light, Edmund
272. Limmer, Jack
273. Lindsay, Ann
274. Linvville, Keith
275. Lockie, Jane
276. Loetterle, Pete
277. Lotus, Patricia L. Shade
278. Love, Helen
279. Love, Kari
280. Luchner, Jill
281. Luening, Rebecca
282. Lyle, Kelley
283. Lyon, J. R.
284. MacEvoy, John D.
285. Magneson, Jan – 2007 comment card
286. Magneson, Jan – 2008 comment card
287. Mangicapra, Anthony
288. Manns, Xandra – comment card
289. Manns, Xandra – letter
290. March, Eli
291. Marseille, Tanya
292. Marshall, Kathy
293. Mattson, Ed
294. Mattson, Linda
295. McBeth, Rob
296. McCombs, Robert E.
297. McDonald, Erin
298. McDonald, Jonathon – comment card
299. McDonald, Jonathon – letter
300. McHatton, Dora
301. McHatton, Wayne
302. McKeegan, Michele
303. McKelvey, Alden
304. McKelvey, Joann

305. McKinney, Melvin – 2007 comment card
306. McKinney, Melvin – 2008 comment card
307. McLaughlin, Nancy
308. McLaughlin, Thomas
309. McMurray, Madeline & David
310. Meister, Jeri
311. Mellon, Gregory, DDS
312. Merrill, Denise
313. Merrill, Tom
314. Meserve, David
315. Metcalf, Todd
316. Metz, Colette
317. Michaels, C.L.
318. Mid-City Motor World employee
319. Mierau, Darren & Megan
320. Miller, David
321. Miller, John J.
322. Miller, Ken
323. Miller, Mark
324. Mollring, Diane
325. Moloney, Amy
326. Moné, Carol
327. Montgomery, Rachel
328. Moore, Michael T.
329. Moore, Randall B.
330. Morgan, Elizabeth
331. Morrison, Shelley
332. Mueller, Karen
333. Mueller, Mark
334. Muha, Jennifer
335. Mull, Cameron
336. Myers, Randy
337. Neander, Julie
338. Neely, Maria
339. Nelson, Kristen
340. Nichols, Bill
341. Nikolausen, Glenda
342. Ogan, Chet – 2007 letter
343. Ogan, Chet – 2008 letter
344. Oloughlin, Alisha
345. Olsgard, E. C. MD & McKeegan,
346. Olsgard, E. C. – comment card
347. Olson, Carla
348. Olson, John
349. Orr, James – 2007 letter
350. Orr, James – 2008 email
351. Ontman, Arthur
352. Palmrose, Wayne
353. Park-Segura, Lena
354. Pasztor, Suzanne
355. Penn, Susan
356. Pereira, Linda
357. Perricelli, Claire – 2007 letter
358. Perricelli, Claire – 2008 email
359. Peters, Tom – comment card
360. Peters, Tom – letter
361. Peterson, Rebecca
362. Petterson, Elisabeth
363. Phoenix, Fhyre
364. Pierson, Bill
365. Poklemba, Allison
366. Poole, Chris
367. Popham, Gail
368. Post, Beverly
369. Potter, Caren
370. Pounds, Jacob L.
371. Powell, Charles
372. Powell, Donley Brian
373. Prus, Jenine
374. Rael, Dennis
375. Ramp, Rudy
376. Randall Trask, Colleen M. & Randall, Scott E.
377. Redhorse, Judy
378. Reed, Mary Colleen
379. Reid, Galen
380. Reid, Javan & Alexandria
381. Rheaume, Melanie

382. Ricca, Bobbi
383. Rich, Barbara
384. Ridenhour, Richard L.
385. Ritsch, Sharon F.
386. Roberts, Elizabeth
387. Roberts, Terry
388. Robinson, James
389. Roche, William
390. Roger
391. Rogers, Louisa
392. Rothrock, Janice
393. Rousselot, Tina
394. Roversi, Elizabeth
395. Roversi, Mary
396. Salzman, Richard
397. Sanchez, Jorge – comment card
398. Sanchez, Jorge – letter
399. Sarty, Lynne
400. Scarla, Kalia
401. Schaden, Carrie
402. Schaefer, John, PhD – 2007A
403. Schaefer, John, PhD – 2007B
404. Schallert, Tom
405. Schock, Jay
406. Schwab, Angeline
407. Seelhoff, Shirley
408. Selcer, Uzi M, MD
409. Sergi, Julie
410. Shames, Gabe
411. Shaugnessy, Dennis
412. Shimizu, Sarah
413. Shishido, Nathan, MD
414. Shoenberger, Sarah
415. Short, Nancy
416. Shows, Amber
417. Shreeve, Tim
418. Shuler, Brett
419. Sievert, James
420. Simpson, Suzanne
421. Sinclair, Vanessa
422. Sinkhorn, Emily
423. Skulski, Jon
424. Smith, Alan
425. Smith, Ann King – 2007 comment card
426. Smith, Ann King – 2007 letter
427. Smith, Ann King – 2008 comment card
428. Smith, Ann King – 2009 letter
429. Smith, Joshua R.
430. Smith, Kathyleen
431. Smith, Marysol
432. Smith, Rémie
433. Snider, Kristie
434. Snodgrass, Rondal – September 27, 2007
435. Snodgrass, Rondal – September 28, 2007
436. Snow, Stilson
437. Snyder, Bob
438. Stadler, Christopher
439. Stanton, Kathleen – 2007 letter
440. Stanton, Kathleen – 2008 comment card
441. Starr, Patricia
442. Stebbins, Peggy
443. Steinach, Suzan L.
444. Stewart, Luella
445. Stuart Romano, Cynthia & Edgar, Patrick
446. Stillman, Alex
447. Stock, Jane & Douglas
448. Stock, Jane
449. Stockwell, Abbey
450. Stregletz, David
451. Strickland, Kaye – 2007 email
452. Strickland, Kaye – 2008 email
453. Stubbs, Maryruth
454. Sullivan, Dennis
455. Sunstein, Sara
456. Taylor, Janis

457. Taylor, Jennifer
458. Teasley, Grady & Lynn
459. Temple, V.
460. Terrill, Ken
461. Terry, Jennifer
462. Thode, Judy
463. Thoman, Robert, Jr.
464. Thomas, Michelle
465. Thompson, Willard R.
466. Thornton, Becky
467. Thurman, Brett
468. Torquemada
469. Tracey, Shannon
470. Trainor, Devin Wright
471. Travers, Kathy
472. Trudeau, Jess
473. Uyeki, Amy
474. Valachovic, Yana
475. Valentine, Catherine
476. van Hattem, Michael – comment card
477. van Hattem, Michael – 2008 letter
478. Van Kirk, Susie – 2007 letter
479. Van Kirk, Susie – 2008 comment card
480. Van Kirk, Susie – 2008 letter
481. Vasseghi, Stefanie
482. Veach, Annalee
483. Viall, Gary
484. Viande, Maurice
485. Vivian
486. Vogelsang, Kathleen
487. Wagner, Derek
488. Wahlund, Linda
489. Wallace, Ann
490. Walsh, Susan
491. Waters, James & Virginia
492. Watson, Stephen G.
493. Wattle, Thomas A.
494. Webb, Edward
495. Webb, Judy
496. Weiss, Ellen
497. Weiss, Michael
498. Wells, Lynne & Bob
499. West, Chris
500. Wheeler, Jennifer
501. Wheeler, Jessie
502. White, Judy
503. Whitney, Andrew
504. Whitworth, Chris
505. Wieland, Lawrence J., MD
506. Wilcox, Cindy
507. Willingham, Scott
508. Willson, S. Brian
509. Willson, S. Brian – 2007
510. Wilson, Charles
511. Wilson, David P. – undated letter
512. Wilson, David P. – 2008 letter
513. Wilson, Mark
514. Winegar, Dwight – 2007 email
515. Winegar, Dwight – 2008 email
516. Winker, Ben
517. Winkler, Michael
518. WinterSun, George – 2007 comment card
519. WinterSun, George – 2008 comment card
520. WinterSun, PA
521. Wishnoff, Jaya
522. Wolf, Minnie
523. Wollter, Adam
524. Womack, Larry
525. Wood, A.K.
526. Wood, Beth
527. Wrenn, George
528. Wright, Jay
529. Yalcinkeyer, Jon
530. Young, Holly
531. Zalowski, Andy
532. Ziegler, Gretchen

Formatting of Responses to Public Comments

As mentioned previously, numerous written comments from governments, public agencies, organizations, and individuals were received regarding the Draft Environmental Impact Report/Statement and the proposed project. These comments appear in this document in their entirety in the order listed previously.

Responses to these public comments are addressed in the following pages first by group topic and then individually. Each written comment has one or more numbers inserted in the right margins. These numbers correspond to Caltrans written responses which follow each public written comment. Note that in some cases responses to public comments correspond to numbered responses in the following Grouped Responses section.

Grouped Responses to Common Public Comments by Topic

Many of the written comments received from the public raised similar concerns regarding the proposed project. To avoid repetition of responses to similar comments, common issues raised in public comments were grouped together by topic, and responses were prepared to address each topic in detail. The following Grouped Responses section precedes the actual copies of public comments. Each Grouped Response is assigned a number for reference.

I. Project Need and Purpose

Several comments were received stating the project purpose was either not appropriate or too narrowly defined. Different purpose and need topics are identified and addressed separately in this section.

Comment I-A

There is no need for a major highway improvement project to enhance safety because the existing Safety Corridor has prevented and will continue to prevent fatal collisions and collisions involving injuries. (For a detailed description of the Safety Corridor, see Chapter 2.)

Response I-A

The Safety Corridor has performed well overall in reducing severe (fatal and injury) collisions and other types of collisions; however it has not performed well at either Mid-City Motor World or Indianola Cutoff. Without the proposed highway improvements, the existing highly traveled expressway with six at-grade intersections that allow direct lefts on and off of Route 101 (points of potential conflict) will continue to pose an ongoing serious safety concern. Motorists (and bicyclists) who are inattentive, misjudge, or make driving errors increase the likelihood of collisions at the existing at-grade intersections. Without addressing the at-grade crossings, the potential for severe collisions with catastrophic results continues to exist, even with a 50 mph speed limit in place, which is still considered high-speed. The increased prevailing speed in 2010 was 56 mph.

With over six years of operation of the Safety Corridor, four of the six intersections had total collision rates below the statewide average for a similar facility. However, at the Mid City intersection with Route 101, the fatal-plus-injury collision rates exceeded the statewide average rate for four out of seven years of Safety Corridor operation. At the Route 101/Indianola Cutoff intersection, the fatal-plus-injury collision rates exceeded the statewide average rate for seven out of seven years of operation. In the first and fifth years, the fatal-plus-injury collision rate was approximately three and one-half times the statewide average rate. The Safety Corridor has not resolved the basic roadway configuration that is the underlying cause of collisions at these intersections.

When collision history frequency and especially severity is highly elevated in spite of safety measures already in place, the State evaluates improvements in the interest of public safety: consequently, the proposed project was initiated to provide a long term safety enhancement.

Another factor to consider is the aging population. In 20 years, the largest proportion of the population will be 65 to 83 years old. Studies have shown that as drivers within this approximate age range have diminished visual capacity to accurately judge an adequate gap in traffic to turn across two lanes of on-coming traffic could exacerbate traffic at at-grade intersections.

Finally, traffic volumes are expected to increase over the next 20 years within the Eureka-Arcata Route 101 corridor. As the traffic volumes increase, the frequency and length of traffic gaps decreases making it more difficult to make left-turns across on-coming traffic. See response to next comment for more information about the predicted traffic volume increases.

Comment I-B

Many comments stated that traffic volumes are not likely to substantially increase in the future. These comments were in response to the Draft EIR/S stating that when traffic volumes increase, this would reduce the effectiveness of the Safety Corridor. Other comments stated that the predicted traffic increase data reported in the Draft EIR/S were inconsistent.

Response I-B

In some locations of the Draft Environmental Impact Report/Statement, the traffic volumes on Route 101 between Eureka and Arcata were reported to increase by 50% by the year 2031. This has been corrected and the current estimate is an increase of about 33% from about 37,000 ADT in 2014 to about 50,000 ADT in 2041.

Caltrans District 1 projected future traffic volumes are based on growth factors calculated as a 20-year straight-line determinant. For example, a segment of highway with a growth factor of 1.4 is predicted to have a 40% increase in traffic volumes over the next 20 years. Likewise, it is predicted to have a 20% increase over ten years, or an 80% increase over forty years.

Growth factors are determined based on both projected travel trends and historical growth from two Caltrans data resources--the *California Motor Vehicle Stock Travel and Fuel Forecast* (CMVSTAFF) and historical Average Vehicle Miles Traveled (AVMT) comparisons from *Traffic Volumes on the California State Highway System*. The CMVSTAFF, taking into account long-range socio-economic trends, forecasts a Vehicle Miles Traveled (VMT) growth estimate for the State highway system by county. The growth factors are then developed for each route which trend toward the CMVSTAFF VMT estimate, using historical AVMT comparisons to constrain growth on each highway route based on local trends.

Growth factors are applied over highway segments that were determined using observed conditions; these segments vary in length, but they are not longer than fifty miles in length. Traffic volumes over segments are based on a calculated weighted average of volumes (Annual

Average Daily Traffic) for the entire segment. This is done for logistical reasons. While actual growth at a local level can vary considerably, the emphasis is on overall growth over the long-term for the purposes of the 20-year design-life of the highway. It should be noted that growth factors forecast traffic growth only for State highways and not local streets.

Caltrans District 1 Growth Factors are revised every three to four years, with the publication of the new CMVSTAFF. Periodically, actual traffic volumes are compared over time with Caltrans growth factors. Anomalies are corrected in subsequent revisions to the growth factors. The accuracy of Caltrans District 1 growth factors for long-range forecasting has been found to be well within acceptable industry norms.

A growth factor of 1.25 was used to predict future traffic volumes for Route 101 between Eureka and Arcata. Route 101 between Eureka and Arcata the average annual daily traffic is expected to increase from 37,000 vehicles per day in 2014 to approximately 50,000 by year 2041. It should be noted that generally for every new driver using the corridor, each new driver would generally add two trips per day. For example, a new driver commuting to work from Arcata to Eureka would drive one way in the morning and make a return trip in the afternoon, which would add two trips per day. Population growth is only one factor in predicting traffic growth rates on a particular roadway segment. The location of the population growth, and the corresponding employment, and commercial activity needs to be analyzed to determine vehicle trip origins and destinations on the local and regional transportation system. For Route 101, interregional traffic growth is also an important factor in the Greater Eureka Area Travel Model (Travel Demand Model), which predicted future traffic volumes in the Environmental Impact Report/Statement.

Regarding the difference between the County's projected population growth and Caltrans Growth Rate in the corridor, the Caltrans 20-year growth projection is substantially the same as that used by the City of Eureka and the County of Humboldt. As previously noted, District 1 uses straight-line growth factors, rather than a compounded yearly traffic growth, as the latter has a tendency to overestimate projections beyond the 20-year horizon. The City and County compute growth with an annual compounding percentage.

Comment I-C

Many comments stated that a new project is not needed and disputed the finding that average traffic speeds are steadily increasing on the Eureka-Arcata Route 101 Corridor, which would reduce the effectiveness of the Safety Corridor.

Response I-C

The Route 101 Eureka-Arcata Safety Corridor from approximately X Street in Eureka to the Gannon Slough Bridges currently has a 50 mph posted speed limit, while the freeway segment of Route 101 north of the Gannon Slough Bridges currently has a 65 mph posted speed limit.

The Caltrans District 1 Traffic Safety unit has been monitoring the performance of the Eureka-Arcata Safety Corridor since it first began on May 19, 2002. As part of this monitoring, traffic

engineering measurements have determined the following off-peak hour prevailing speeds for the Safety Corridor:

Fall 2001 pre-Safety Corridor*****:	65 mph
July 2002:	54 mph
April 2003:	55 mph
March 2004:	54 mph
April 2005:	54 mph
April-May 2006:	54 mph
March 2008:	55 mph
September 2010:	56 mph
December 2011:	54 mph

****** *Prior to the Safety Corridor, the posted speed limit was 60 mph.*

Source: Eureka-Arcata Safety Corridor Ninth/Tenth-Year Report. Caltrans District 1 Traffic Safety Office. September 20, 2012.

Even if the prevailing highway speeds remain constant, the existing roadway configuration of potential vehicle conflicts (e.g. cars turning left across through traffic lanes) and vehicle operating speeds above 50 mph remain: these are two interrelated factors affecting vehicle collision probability. The following excerpt from the 2004 American Association of State Highway and Transportation Officials *A Policy on Geometric Design of Highways and Streets* makes the point that access control and reduction of potential conflicts is essential in providing a safer high-speed facility:

> *Speed reduces the visual field, restricts peripheral vision, and limits the time available for drivers to receive and process information. Highways built to accommodate high speeds help compensate for these limitations by simplifying control and guidance activities, by aiding drivers with appropriate information, by placing this information within the cone of clear vision, by eliminating much of the need for peripheral vision, and by simplifying the decisions required and spacing them farther apart to decrease information-processing demands...Control of access to the traveled way reduces the potential for conflicts by giving drivers a clear path. Clear roadsides have been provided by eliminating obstructions or designing them to be more forgiving…*

Given a roadway facility with operating speeds of 50 mph or greater (high operating speeds), and at-grade intersections allowing turning movements (more potential conflicts and greater speed variance), a higher rate of collisions may be expected than on a freeway-like facility with very high operating speeds but with access control, ramps and speed-change lanes (fewer potential conflicts and less speed variance.) This is substantiated by the Highway Rate Tables, which lists a statewide base rate of 0.50 collisions per million vehicle miles (COL/MVM) for a suburban freeway, four lanes or less, average highway speed greater than 65 mph compared to almost twice that rate, 0.90 COL/MVM for a suburban divided expressway, four lanes or more, average highway speed less than 65 mph. (Source: *Highway Safety Improvement Program Guidelines, Table 2-Basic Average Accident Rate Table; Highways, Intersections and Ramps.* Caltrans

Traffic Operations Program, Office of Transportation Safety. August 2002.) The collision rates after the 2002 Safety Corridor was installed remain higher than the statewide collision rate at the Mid-City Motor World and Indianola Cutoff intersections. For more collision related information, refer to Chapter 1 – Project Need and Purpose of the Final EIR/S.

Comment I-D

There is a need for major bicycle and public transit improvements. There is a need to protect non-motorized traffic from high speed motorized vehicular traffic on the Route 101 corridor.

Response I-D

Caltrans, FHWA, and HCAOG acknowledge the importance of both non-motorized traffic and public transit. However the proposed project was developed in coordination with local and regional public agencies to address pressing highway safety concerns and long term roadway maintenance issues. The proposed project evolved to meet a specific project need and purpose of enhancing safety at intersections and implementing major roadway maintenance activities between Eureka and Arcata.

All Build Alternatives include the following improvements that will benefit non-motorized traffic:

- The elimination of uncontrolled (non-signalized) left-turn movements;
- An 8-foot wide, barrier separated travel way for non-motorized traffic on the new southbound Jacoby Creek Bridge;
- Extending acceleration and deceleration lanes which will provide more area for lane changes.

The Redwood Community Action Agency Humboldt Bay Area Bike Map designates the Route 101 intersections at Mid-City Motor World, Indianola Cutoff, Bracut, and Bayside Cutoff as "Difficult Intersections – Use caution in these areas." Modified Alternative 3A, the Preferred Alternative identified in the Final Environmental Impact Report/Study, includes a grade separation at Indianola Cutoff located approximately midway between Eureka and Arcata that protects all transportation modes crossing Route 101. Modified Alternative 3A also includes a signal at Airport Road which would allow bicyclists to turn left to and from Route 101.

In addition, the following improvements were made since the Draft EIR/S was approved in 2007:

- Installed rumble strips along the outside shoulders and along the center median (yellow edge stripe); replace raised pavement markers; and replace the thermoplastic traffic striping on Route 101 between Eureka and Arcata;

- Installed "share the road" bicycle awareness signs on both sides of Route 101 between Eureka and Arcata;

- Restriped the Route 101 roadway to provide consistent 10-feet wide outside shoulders in both directions.

Bicycle and pedestrian improvement projects within the Route 101 Eureka-Arcata Corridor will be implemented separately from the proposed Route 101 Eureka-Arcata Corridor Improvement project. On November 14, 2013, the California Coastal Commission voted to approve Federal Coastal Consistency Certification for the proposed project with conditions that included a bicycle trail:

> Coastal Trail Planning. Construction of the Route 101 Corridor Improvements will not commence until adequate commitments are in place to assure that a separate Class 1 bike and pedestrian trail, parallel to Route 101 from Arcata to the northern end of downtown Eureka, will be constructed and operational by the time the major project components are completed. Such commitments will include, but may not be limited to, assurances that adequate funding for construction of the trail exists, as well as a demonstration that the necessary assurances are in place to secure ownership interests or permissions to enable the trail construction to proceed in a timely manner, prior to or concurrent with construction of the corridor improvements.

Caltrans will coordinate with representatives from the Humboldt County Association of Governments, the County of Humboldt, Caltrans, the City of Arcata, the City of Eureka, Humboldt Bay Harbor Recreation and Conservation District, the State Coastal Conservancy, the California Coastal Commission, the Northcoast Rail Authority, and several non-governmental groups to fund, design, and construct a Eureka-Arcata trail.

The proposed Route 101 Eureka-Arcata Corridor Improvement project would link to the proposed trail and provide a safe crossing of Route 101 at Indianola Cutoff.

Bicycle and public transit alternatives are addressed in the next section, II. Range of Alternatives.

Comment I-E

There is a need to improve safety on State Route 255 through Manila.

Response I-E

State Route 255 is not within the project construction limits discussed in the EIR/S, however it is within the study limits. None of the Eureka-Arcata Route 101 improvement Build Alternatives would adversely impact State Route 255. See the traffic and transportation section in Chapter 3, Volume I of the Final EIR/s.

Caltrans acknowledges safety concerns on State Route 255 in Manila. Planning and preliminary design efforts for traffic calming improvements on State Route 255 in Manila are currently underway as a separate action from the Route 101 Eureka-Arcata Corridor Improvement project. A feasibility study will also look at some possibilities identified by an earlier Caltrans-funded study the Manila Community Services District completed. Some of the ideas posed were crosswalks, roundabouts and signals, as well as revising currently posted speed limits.

II. Range of Alternatives

This section addresses suggestions for additional project alternatives.

Comment II-A

The range of project alternatives is too limited; none of the alternatives address actual relevant transportation issues such as reducing the number of single passenger vehicle trips or non-motorized transit improvements.

Response II-A

The Eureka-Arcata Route 101 Corridor Improvement Project was initiated in 1999 to address recurring and anticipated safety, traffic operation, and long term roadway maintenance concerns. A project of this type involving major maintenance and closing roadway medians requires several years of planning and design prior to construction. Caltrans, working with other public agencies, identified and evaluated a range of alternatives starting in 1999. The five Build Alternatives evaluated in the Environmental Impact Report/Statement were chosen in an attempt to meet the project need and purpose while balancing cost and impacts.

Because the focus of this project is to address safety, traffic operations, and maintenance concerns, it does not directly provide major improvements for public transit and non-motorized transit modes; however, all proposed Build Alternatives would enhance safety and provide long-term roadway maintenance for trucks, buses, and bicyclists that directly or indirectly serve the non-driving population. Specific public transit and bicycle improvement alternatives are discussed separately later in this section, under II-E, II-F, II-G and II-H

Caltrans will continue to work with local and regional agencies to plan transportation projects that meet transportation needs while minimizing energy use, such as in areas of integrating land use and transportation planning.

Comment II-B

Maintain the Safety Corridor as the Preferred Project Alternative.

Response II-B

Maintaining the existing Safety Corridor as a long-term solution and keeping the Route 101 median crossings open have been extensively evaluated as an alternative to a major highway construction project. However, the Safety Corridor was intended to be a temporary solution until a long term solution could be constructed. See the responses to comments I-A and I-C for a discussion of recent collision data, speed data, and the reasoning for why allowing the at-grade crossings to remain open or uncontrolled is a primary source of safety concern in the corridor. Also see Chapter 1 of the Final EIR/S for an explanation of the need for long term roadway major maintenance and rehabilitation.

Comment II-C

Why was signalizing all intersections in the corridor rejected? Why is signalizing Airport Road different than signalizing all of the intersections? What conditions need to change before signalizing all of the intersections would be considered?

Response II-C

In general, there are many factors that are examined before a decision is made to signalize an intersection. Typically, one or more traffic signal warrants need to be met before signalization is considered at an intersection. (A traffic signal warrant describes threshold conditions to evaluate the potential safety and operational benefits of traffic signals.) However, pursuant to the *California Manual on Uniform Traffic Control Devices for Streets and Highways*, Section 4C, 4th paragraph and onward,

> *The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal...A traffic control signal should not be installed unless one or more of the factors described in this Chapter are met. A traffic control signal should not be installed unless an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection. A traffic control signal should not be installed if it will seriously disrupt progressive traffic flow...*

Surrounding land use, traffic volumes, pedestrian volumes, and the number of correctable collisions occurring at the intersection are some of the factors looked at in the warrant analysis process in addition to looking to see if intermittent non-signal improvements have been previously applied prior to considering signalization. Other considerations such as the Route 101 Concept (discussed in Chapter 1), the characteristics of the highway, and the potential impact of signalization to adjacent segments of highway need to be considered before a decision is made to signalize an intersection.

Alternatives 1A, 3, and Modified 3A propose a signal at Airport Road and the closure of the remaining at-grade left turn median openings. It is acknowledged that signals typically have elevated rear end collision rates when compared to other intersection types. For this project however, there are overriding considerations for placing a signal at Airport Road only, which include the following:

1. **Business, resident access.** Jacobs Avenue and Airport Road have residents as well as numerous businesses (employees, customers, truck deliveries) that rely solely on Route 101 for access to Eureka and Arcata. Alternative 3 includes a full signal at this location that would provide continued and improved access to Jacobs Avenue and the Airport, with a left turn opportunity that is protected with a signal. Alternatives 1A and Modified Alternative 3A both include partial signalization at Airport Road.

2. **Signal location.** Because Airport Road is the median crossing closest to Eureka, this is a logical location for a signal with reduced speeds as an entrance to the more urbanized setting of the city streets of Eureka. In addition, the businesses, airport, and residents along Airport Road/Jacobs Avenue are isolated from central Eureka.

3. **Safety.** When considering the placement of a signal, it is recognized that signals typically have higher collision rates than other intersection types. However, when considering the elimination of all of the remaining operational conflicts of the median crossing opportunities, it is anticipated that sufficient motorist warning devices would alert motorists of this single potential traffic conflict. With only one proposed signalized intersection within this segment of Route 101, it is expected that speed reduction for this intersection and sufficient warning can maintain a collision rate that is below the statewide average for signals.

Caltrans staff performed a brief traffic operational analysis of a "boulevard" facility in the corridor by signalizing all six intersections and extending southbound Route 101 left turn lanes (no additional through lanes). The analysis conclusions included the following:

- Because of the resulting slower speeds on Route 101 from signalization, a high proportion of traffic would likely divert to Old Arcata Road and State Route 255 to avoid signalized Route 101 intersections and thus increase traffic through residential areas. In addition, it is unlikely that Caltrans would receive funding approval from the California Transportation Commission for a project that does not follow the approved Route Concept and would in fact lower the performance of the facility.

- Multiple signalized intersections would result in traffic slowing, stopping, and accelerating, which in turn would result in more global greenhouse gas emissions, greater energy consumption, and greater air quality impacts compared to maintaining a constant approximate speed of 50 mph increases fuel efficiency and reduces greenhouse gas production.

- Pedestrians would not be accommodated at the signalized intersections. The signal timing required for pedestrian crossing would add further traffic delay. An Americans with Disability Act compliant pedestrian overcrossing was also briefly evaluated and found to be costly and would have visual and wetland impacts similar to roadway grade separation while only serving pedestrians and bicyclists.

- The cumulative travel delays that would be introduced into the corridor from the stop delay at each signalized intersection would adversely affect other roads. The analysis and modeling of the Alternatives show that all Build Alternatives, except Alternative 1, minimizes traffic impacts on both Old Arcata Road and State Route 255. Considering the increase in traffic on State Route 255 due to a speed reduction of 10 mph (from 60 mph to 50 mph) maintaining a reduced speed and placing additional stop signals along Route 101 would likely divert a high proportion of traffic to both Old Arcata Road and State Route 255.

- Placing additional signals within this segment of Route 101 would require adding additional lanes to minimize traffic queuing and provide proper vehicle merges. The roadway widening to accommodate more traffic lanes would result in substantial wetland impact and create difficult conditions for pedestrians to cross the Route 101 roadway.

In addition to traffic related concerns, a "boulevard" of consecutive signalized intersections with drivers stopping and starting again would substantially change the existing semi-rural setting to one that is more intensely urban. The signalized intersections would also have growth related impacts because existing commercial development could be more easily intensified from the opportunity provided by signalized traffic controls. For additional discussion of signalization within the Route 101 corridor, please see Chapter 2 – Project Alternatives in Volume I of the Final EIR/S.

Signalizing Indianola Cutoff

There are also many drawbacks to signalizing just the Route 101/Indianola Cutoff intersection:

- By adding an isolated signal at Indianola Cutoff, there is the expectation that due to repeated alerts to hazards and signals, this would leave motorists less aware of a single signalized intersection about halfway between Eureka and Arcata, increasing the potential for collisions.

- Bicycle access through the signal would be problematic. From Route 101, both westbound to southbound and southbound to eastbound turn moves by bicyclists would require crossing the highway (mainline) through lanes to access left-turn channelization and may be perilous and disruptive to the mainline traffic stream.

- Pedestrians are allowed on the expressway segment of Route 101 between Eureka and Bayside Cutoff: their presence would likely cause longer signal phasing time for mainline Route 101 traffic, which in turn would result in longer traffic queues,

increased potential for rear end collisions and diverting traffic to State Route 255 and Old Arcata Road.

- Signals are not an appropriate traffic control system for an isolated intersection on a rural expressway with high traffic volumes. Since there is a well-documented, continuing safety problem at Indianola Cutoff, collision projections and existing poor performance of similar facilities affirm that installing a traffic signal there would not solve the problem. Conversely, a grade separation feature (an interchange) would reduce collisions and provide safer access for all travel modes including bicyclists and pedestrians.

Comment II-D

Instead of the proposed project, implement "smart technologies" or Intelligent Traffic Management Systems to reduce collisions or enforce lower speeds to secure enhanced compliance. Is there a system to prevent left turn movements during high traffic periods, and if so, what is their effectiveness?

Response II-D

There are many emerging Intelligent Transportation Systems (ITS) or "smart technologies." The current radar speed detection dynamic message signs within the safety corridor are an example of an ITS application already in use within the Route 101 corridor; however, the effectiveness of all types of ITS is not fully known.

Speed enforcement camera systems are another example of ITS applications that can be installed to encourage drivers to drive at the speed limit. These systems have been widely used in other states and countries for speed enforcement; however, these systems are currently prohibited in California. The California Legislature does not authorize the use of automated enforcement systems for speed enforcement (Source: California Vehicle Code Section 21455.6). A more reliable and proven strategy to reduce operating speeds on intersection approaches with "speeding" as a frequent primary collision factor is to provide targeted speed enforcement through increased patrols, citations and other traditional traffic law enforcement methods. (Source: *National Cooperative Highway Research Program Report 500, Volume 5: A Guide for Addressing Unsignalized Intersection Collisions* Transportation Research Board, Washington, D.C., 2003.) Given the current budgetary climate, it is not realistic or prudent to rely on costly traditional enforcement as a long or even short term solution to the problems on the Route 101 expressway (between Eureka Slough and Gannon Slough Bridges.

Other ITS technologies that could improve safety within the corridor are being developed for use in vehicles, such as collision avoidance systems, but their usefulness is limited to those motorists who purchase such systems for their vehicles.

Systems to prevent left turn movements during high traffic periods range from signage with hourly restrictions to physical barriers, such as gates. Experience has shown that the

effectiveness of turn restrictions is maximized when they are accompanied by physical barriers. With the lack of barriers and regular law enforcement, violations of turn restrictions may be expected. Also, the key to this unproven strategy is to ensure that there is an alternate route available that can safely accommodate the displaced traffic. The effectiveness and feasibility of such treatments vary depending upon location and/or type of facility. Often such systems are confusing to the driver, the restrictions are difficult for law enforcement agencies to enforce, and moveable barriers (i.e., gates) present themselves as potential objects that can be struck by vehicles. The net effect on safety of turn restrictions is highly site specific and difficult to quantify.

There are ITS systems available that may provide advance warning and a way to inform drivers of the suitability of available gaps for turning and crossing movements. The following excerpt from *National Cooperative Highway Research Program Report 500, Volume 5: A Guide for Addressing Unsignalized Intersection Collisions* Transportation Research Board, Washington, D.C., 2003 discusses these systems:

> *…Automated systems can be used to assist drivers in judging the adequacy of available gaps in traffic for entering the major road from a stop- or yield-controlled approach. Such systems can range from simple pavement loop detectors and flashing lights with a simple control algorithm to more complex real-time computer-controlled systems (CCS).*
>
> *…CCS does this by providing warnings of vehicles that are entering the approaching intersection. Drivers approaching an intersection on a major through road will be warned by a flashing car symbol on a dynamic roadside sign that one or more vehicles are about to enter the intersection from the cross street. The system will also warn drivers on the cross road that there is traffic approaching on the through road.*

The National Cooperative Highway Research Program Report also states that there are non-automated systems that provide information to assist drivers in judging the suitability of available gaps in oncoming traffic. They involve the use of roadside markers or pavement markings placed in the field of view of a driver observing approaching traffic. Drivers would need to be told, by signing and/or a public education program, not to proceed when an approaching vehicle is closer to the intersection than the marker is.

Both the automated and non-automated gap-selection devices are considered experimental, and carefully controlled and executed pilot studies should be conducted before their use. It is possible that these devices may only serve to add to sign clutter and information overload for roadway users, and actually exacerbate instead of resolve problems at intersections on the Route 101 corridor.

Comment II-E

The project should include major ridesharing and public transit improvement alternatives. Public transit will become increasingly important as petroleum based fuels increase in price and during periods of economic downturn.

Response II-E

Public transit improvements would not meet the need and purpose of the project to enhance safety by eliminating left-turn movements at intersections and resolving long-term roadway maintenance needs. Although some research has shown public transit use can rise as a result of increased fuel costs and times of economic downturns, there are other factors to consider. For example, during and immediately after the 1973 OPEC oil embargo, single passenger trips did decrease but eventually over the following years the number of trips increased as well as many people adjusted to higher fuel prices by driving vehicles with higher fuel efficiency.

There are other factors which influence transit choice: the locations of trip origins and destinations; the frequency of bus trips; the number and waiting period of bus transfers required; acceptability of switching to fuel-efficient vehicles; and the ability to carpool. Public transit is very effective and efficient in densely populated, compact urban areas such as San Francisco, which has bus routes that have excellent geographic coverage; buses that run frequently; and buses that connect to regional public transit. The Eureka-Arcata Route 101 corridor is very different from San Francisco in terms of population and geography; even if the number of buses were doubled on Route 101, feeder buses which connect to buses on Route 101 operate relatively infrequently. For longer, trips with multiple destinations (e.g. school, work, errands), individual motor vehicles generally provide far more flexibility and convenience. Given these conditions, a high proportion of travelers switching from motor vehicles to bus transit is unlikely.

Even a major improvement in public transit would not substantially reduce the current and projected number of vehicle trips within the Route 101 corridor. Even a doubling or tripling of bus ridership would not offset the need to enhance safety within the Eureka-Arcata Route 101 Corridor. Route 101 between Eureka and Arcata the average annual daily traffic is expected to increase from 39,000 vehicles per day in 2013 to 54,000 by year 2038. As long as vehicle trips continue to increase, the proposed project is needed to address safety and long term roadway maintenance concerns.

Caltrans recognizes the importance of a balanced transportation system and actively promotes and encourages public transit through support on regional committees. For example, Caltrans is a voting member on both the Humboldt County Association of Governments Service Coordination Committee and the Social Services Transportation Advisory Council. These committees identify and develop solutions for local transit problems. Caltrans also participates in the statewide Transit Gap Study, a study aimed to fill in the gaps that currently exist in the Caltrans north coast District 1 transit network. Caltrans maintains ridesharing lots in Trinidad and at the Route 101/Herrick Road interchange to encourage and facilitate ridesharing.

Caltrans also administers transit funding through grant programs. For example, Caltrans is the contract administrator and grants manager for several Federal Transit Administration (FTA) grants. In addition, the Caltrans Division of Mass Transportation manages funding from Proposition 1B-Public Transportation Modernization, Improvement, and Service Enhancement Program for transit operators.

Caltrans and FHWA acknowledge the many benefits of public transit. Caltrans will continue to coordinate with public transit, local cities, and regional bus agencies to enhance public transit on the State highway system.

The Humboldt County Association of Governments Regional (HCAOG) Transportation Plan (RTP) outlines future transportation needs for the region, including public transit. As part of updating the RTP HCAOG requests public testimony regarding the "Unmet Transit Needs for Humboldt County." HCAOG then considers public testimony to make possible changes. An increase in bus ridership from future population growth and rising fuel costs could conceivably be accommodated by expanding the existing public transit services, but as mentioned previously there are several factors which influence public transit use. In other words, providing a full range of bus options does not guarantee full or near full bus ridership.

Several local public transit operators have Transit Development Plans. The purpose of these plans is to document future needs of transit providers, to lay out service goals and alternatives, and to serve as the primary planning document for administering public transit services. The Humboldt Transit Authority (HTA) provides bus service between Scotia and Trinidad.

None of the five build alternatives would substantially affect public transit since the existing transit access and routes would not be affected. See Chapter 2 for more information on the public transit alternative.

Comment II-F

Bus rapid transit (BRT) should be included as a project alternative.

Response II-F

A Bus Rapid Transit project would not meet the need and purpose of the project to enhance safety by eliminating left-turn movements at intersections and resolving long-term roadway maintenance needs. This topic has been divided into four related subtopics as follows:

a. Feasibility of implementing bus rapid transit (BRT) for commuting between Eureka and Arcata.

Bus Rapid Transit (BRT) is a mass transit strategy that combines features of traditional fixed route bus service and light rail transit to create a rail-like transit experience while capitalizing on the relatively low-cost and flexibility of bus systems. BRT systems generally feature frequent all-day service, a simple route structure with wide station spacing, streamlined fare collection,

easy to board buses that are level with the station platforms, a "branded" distinctive identity at stations and on vehicles, and the use of Intelligent Transportation Systems such as real-time "next bus arrival time" information at stations or traffic signal prioritization for buses. Many of these features/services can be phased in over time, with a "complete" BRT system as a long-term goal.

Examples of BRT systems being implemented in California generally apply to urban areas such as Los Angeles County (population 9.6 million) Metro Rapid & Orange Line, Oakland (population 0.4 million) AC Transit, and Santa Clara County (population 1.7 million. These BRT systems have riderships of 20,000+ daily passengers. An example of a recently-constructed BRT system in a less-populated area is Eugene (population 0.2 million) Emerald Express (EmX) in Oregon. According to the National Transit Institute (NTI), the Eugene transit system had previously accommodated 2,700 passengers/day before the BRT debut and is now averaging more than 4,800 passengers/day.

However, public transit ridership in rural Humboldt County does not appear to support the need for a new BRT system. Redwood Transit System (RTS) provides transit service between Eureka, Arcata, and many other communities in Humboldt County spanning from Scotia to Trinidad. The extensive range of the RTS service area makes a traffic reduction analysis for the Arcata-Eureka corridor alone a difficult task in regard to bus transit ridership because riders from areas outside the Eureka-Arcata corridor will be also be reflected in these counts. Presently, origin-destination counts are not performed on the RTS system therefore the 2006 daily ridership count of 1,185 reflects all passengers traveling on the RTS system.

b. What is the potential reduction in traffic?

2014 Average Annual Daily Traffic (AADT) on the Eureka-Arcata Corridor between Post Miles 80.26/86.5 was 39,000 (http://traffic-counts.dot.ca.gov). Using the District's current 20-year straight line growth factor of 1.25, the projected 27-year (2041) AADT for this corridor is 53,500 – a 13,000 increase in AADT. NTI reports ridership increases on BRT systems average from 20% to 80% over the previous conventional transit system. Please refer to the following table which shows current (2006) and projected ridership statistics on the RTS, average percent increase in ridership to offset growth in AADT, projected increase in ridership.

To offset all growth in AADT in the corridor, a 1,097% increase in ridership would be required, which is unlikely considering the average increase of 20%-80% (NTI). Based on the NTI study, the ridership increase would not meet the Purpose and Need of the project.

Eureka-Arcata Route 101 Corridor Statistics	
Current AADT(2014)	39,000
Projected AADT (2041)	52,000
25 Year Increase in AADT	14,500
Current Ridership (2006)	366,158
Current Daily Ridership (2006)	1,185
Percent Increase in Ridership Required to Obtain Zero Growth in AADT	1097%
Additional Daily Riders Needed to Obtain Zero Growth in AADT	12,165
20% Projected Increase in Ridership	1,422
2041 AADT Associated w/ 20% Transit Ridership Increase	12,763
80% Projected Increase in Ridership	2,133
2031 ADT Associated w/ 80% Transit Ridership Increase	12,052

c. What are potential costs of permanent improvements?

While capital costs associated with vehicle purchases are large, ongoing maintenance and operation costs are the major expenses associated with a BRT system. This is due in large part to the frequency of service that must be maintained. NTI reports typical BRT component costs are as follows:

- At-grade bus way: $5-$13 million/mile
- Median bus guide way (support structure): $4 million/mile
- Enhanced station: $30,000
- Major station: $150,000+
- Specialized BRT bus: $1+ million
- Transit signal priority: $30,000 per intersection

Typical project costs range widely from $0.5 million/mile for an arterial mixed flow system to $20-$40 million/mile for a dedicated bus way system. Purchasing additional specialized buses would be required. RTS utilizes ten buses per day on average for their existing transit system, making 39 weekday trips per day and 18 Saturday trips per day, operating from 5:45 AM until 10:46 PM Monday through Friday and 8:00 AM until 8:30 PM on Saturday. Frequency averages (1-2 stops) an hour, though areas on the fringe of the RTS service area average less than one stop per hour (RTS). If a BRT system were constructed, more specialized BRT buses would be needed to increase the amount of stops/hour. By definition, BRT systems have maximum 10-minute peak hour and 15-minute off-peak hour headways (time between succeeding buses) and a 14-hour service span (NTI).

d. What are potential funding sources for a BRT system or commuter rail?

Most BRT projects in the United States have been built through federal grants combined with state and local matching funds. The biggest federal funding source for major new "fixed guide way" transit projects is the Federal Transit Administration's New Starts program, which is part of the Section 5309 Capital Investment Program. Another program that applies more to the local area and the Eureka-Arcata Corridor is the Small Starts program. This program is designed to make it easier to fund inexpensive BRT projects. Small Starts is a category in the 2005 federal transportation bill of the broader New Starts program. Unlike New Starts, projects do not have to operate exclusively on a separate right-of-way to be eligible for Small Starts funding. FTA Small Starts program provided funding for Eugene, Oregon's EmX BRT (NTI). Other alternatives for funding include exclusive State and local funding, or private financing.

Funding for support of the operations and maintenance of a BRT system could be supplemented through several transit-related funding opportunities such as:

- Prop 116 Clean Air Act
- Transit Capital Improvement Program
- Transportation Development Act
- State Transit Assistance
- Local Transportation Fund

Comment II-G

The project should include major bicycling and pedestrian improvement alternatives such as Non-motorized commuter, recreational, and interim coastal trail options.

Response II-G

It is understandable that many bicyclists would feel intimidated or uncomfortable riding adjacent to high speed motor vehicle traffic and that a separated path would encourage bicycle commuting. Bicyclist needs and improvements have been considered from project initiation for all build alternatives. See response to comment I-D for more information. Additional non-motorized traffic information has been added to Section 3.1.6 – Traffic, Transportation/Pedestrian, and Bicycle Facilities in Chapter 3.

The completed CAPM project incorporated features to better define the shoulder as a separate lane to improve safety for bicycles. The improvements included widening the shoulder from 8 feet to 10 feet, widening the white stripe from 4 inches to 6 inches, adding a rumble strip and adding color to the shoulder to better define the shoulder. These were completed as part of the CAPM project.

A bicycle and pedestrian path would not meet the need and purpose of the project to enhance safety by eliminating left-turn movements at intersections and resolving long-term roadway maintenance needs. Bicycle transit, even with improved bus transit, cannot reasonably offset projected growth in traffic volume to justify constructing a commuter path instead of the proposed Route 101 improvements. According to the 2001 *Humboldt Bay Trails Feasibility Study*, prepared by the Redwood Community Action Agency for the Coastal Conservancy, a non-motorized Humboldt Bay trail could potentially save over 30,000 vehicle trips annually or 82 trips per day. Route 101 between Eureka and Arcata the average annual daily traffic is expected to increase from 35,500 vehicles per day in 2008 to 48,800 by year 2033. As long as vehicle trips continue to increase, the proposed project is needed to address safety and long term roadway maintenance concerns.

There is insufficient roadway width for a barrier-separated bicycle/pedestrian corridor on either side of the highway or median without filling in wetland or encroaching into railroad right-of-way or wildlife refuges: consequently, adding a bicycle and pedestrian path component to the project would dramatically increase wetland impacts and the overall cost of the project.

Caltrans is an active participant on the Humboldt Bay Trail Planning Team. Caltrans is supportive of the effort to develop separated non-motorized trails adjacent to Route 101 between Eureka and Arcata and have committed that no elements of the Arcata-Eureka Corridor project will preclude development of a bay trail. Route 101 shoulders will remain open to bicyclists both during and following project construction.

Any proposal for an interim or permanent multiuse trail using the existing railroad bed would be outside of the Caltrans right-of-way. Furthermore, the railroad bed between Eureka and Arcata is owned and operated by the North Coast Railroad Authority (NCRA), which was formed by the California Legislature and has a mission to ensure continuation of railroad service in Northwestern California.

It should be noted that fast moving commuter bicycling usually occurs on weekdays during peak periods. These periods are not common for recreational bicyclists.

Caltrans, where feasible, supports trail options described in the 2007 Humboldt Bay Trails Feasibility Study. Any one of the proposed project Build Alternatives would not preclude constructing a bicycle/pedestrian bay trail.

Comment II-H

Construct a bikeway with guardrail separating motor vehicle traffic.

Response II-H

See Response to Comment I-D regarding constructing a separated trail for non-motorized transit.

In terms of a protected bikeway on Route 101, guardrail could potentially lessen the severity of a collision (both to driver and pedestrian/cyclist) if it were placed as a barrier between non-motorized and motorized traffic. However, guardrail is not intended to be used as a protective barricade as it is designed to yield in a collision. Guardrail would also eliminate or reduce the shoulder width for disabled vehicles and law enforcement, reduce the usable shoulder width for bicyclists, eliminate the clear recovery zone for motorists, and introduce a new fixed object in the roadway (itself a hazard).

There is insufficient roadway width for guardrail separated bicycle/pedestrian corridor on either side of the highway. The cost and wetland impact to widen the roadway would be substantial. Furthermore, the Humboldt Bay National Wildlife Refuge, Fay Slough Wildlife Area, and protected agriculture land severely constrain trail development adjacent to Route 101 between Eureka and Arcata.

A more adequate barrier would be a concrete barrier (preferably in addition to increased distance from traffic) which does not yield. If a separate trail is ever constructed a barrier could be placed at locations where the trail must be located within the clear recovery zone (< 20 feet from travel way). However, the shoulder width would still be needed for the same reasons discussed above.

II. Frequent Comments on Specific Issues in Chapter 3 of the Draft Environmental Impact Report/Statement

A. Traffic Circulation, Bicycle, Pedestrian, Public Transit

Comment III-A-1

Several comments were made about raising the posted speed limit to 65 mph after project construction (includes closing all Route 101 median openings at local street/driveway intersections). Instead of raising the speed limit, increase enforcement to maintain the existing speed limit.

Response III-A-1

After project construction, the current posted speed limit of 50 mph between the Eureka Slough Bridges and Gannon Slough Bridges would tentatively remain at the existing 50 mph. However, 45 days after project construction, Caltrans will conduct an Engineering and Traffic Survey to

comply with the California Vehicle Code. The California Vehicle Code requires a renewed engineering and traffic survey whenever substantial changes in roadway or traffic conditions have occurred. If the prevailing 85th percentile of traffic eventually rises above 55 mph after project construction, Caltrans will be required to address the condition: raising the posted speed limit will be considered and possibly implemented. NOTE: North of the Gannon Slough Bridges, Route 101 is a freeway with a current posted speed limit of 65 mph. The posted freeway speed limit will remain the same after construction.

Currently prevailing highway speeds are over 50 mph (see response to comment I-C). The speeds within the corridor are not expected to decrease after project construction. Permanent funding of police departments for additional enforcement on Routes 101 and 255 cannot be provided through any of the funding sources associated with the Eureka-Arcata Route 101 Corridor Improvement Project. Previously, temporary police enforcement on the corridor had been funded through an Office of Traffic Safety (OTS) grant. Reapplying for an OTS grant could provide temporary funding for police enforcement efforts in these areas in the future. The suggestion to maintain the Safety Corridor with enhanced traffic enforcement has been made to the Humboldt Council of Governments (HCAOG).

Even if the prevailing highway speeds remain constant, the existing roadway configuration of potential vehicle conflicts (e.g. cars turning left across through traffic lanes) and vehicle operating speeds above 50 mph remain: these are two interrelated factors which continue to pose serious traffic safety concerns, and which would be addressed by the proposed project.

Comment III-A-2

Can the speed limit be reduced to 35 or 45 between V Street and Airport Road if a signal is constructed at Airport Road? Can the posted speed limit on State Route 255 be reduced to 45 mph?

Response III-A-2

The process for setting reduced speed zones for both State and local agencies is governed by law, and guidance is provided in the 2006 *"California Manual on Uniform Traffic Control Devices"* (California MUTCD) in Chapter 2B, Regulatory Signs. Speed limits in California are governed by the California Vehicle Code (CVC), Sections 22348 through 22413 and Sections 627 and 40802, among others. As stated as a standard on page 2B-8 of the California MUTCD, CVC Section 627 defines the term 'Engineering and traffic survey' and lists its requirements. Standard: An engineering and traffic survey (E&TS) shall include, among other requirements deemed necessary by the department, consideration of all of the following:

- Prevailing speeds as determined by traffic engineering measurements.
- Collision records.
- Highway, traffic, and roadside conditions not readily apparent to the driver

(Source: *California Manual on Uniform Traffic Control Devices.* Caltrans Division of Traffic Operations. Sacramento, California. January 2012.)

The CVC requires posted speed limits be based on traffic and roadway conditions and natural driver behavior, not isolated traffic events or public requests.

CVC Section 22349 provides for maximum speed limits of 65 mph on State highways (except for 70 mph for freeways as provided in Section 22356), and 55 mph on two-lane, undivided highways with not more than one through lane of travel in each direction.

CVC Section 22350 is the Basic Speed Law, which always applies and reads as follows:

> *No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.*

Delegation of legal authority to set speed limits on State highways is given to the Department of Transportation's District Directors under CVC Section 22354 which reads in part:

> *Decrease of State Highway Speed Limits:*
>
> *(a) Whenever the Department of Transportation determines upon the basis of an engineering and traffic survey that the limit of 65 miles per hour is more than is reasonable or safe upon any portion of a state highway where the limit of 65 mph is applicable, the department may determine and declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30 or 25 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie (at first sight) speed limit shall be effective when appropriate signs giving notice thereof are erected upon the highway.*

CVC Section 22354.5 sets out the requirements to consult with the California Highway Patrol, and also to consider the input from local agencies. It states the following:

> *Speed Limit Change: Consultation and Consideration Requirements:*
>
> *(a) Whenever the Department of Transportation determines, upon the basis of an engineering and traffic survey, to increase or decrease the existing speed limit on a particular portion of a state highway pursuant to Section 22354, it shall, prior to increasing or decreasing that speed limit, consult with, and take into consideration the recommendations of, the Department of the California Highway Patrol.*
>
> *(b) The city council or board of supervisors of a city or county through which any portion of a state highway subject to subdivision (a) extends may conduct a public hearing on the proposed increase or decrease at a convenient location as near as possible to that portion of state highway. The Department of Transportation shall*

take into consideration the results of the public hearing in determining whether to increase or decrease the speed limit.

State Route 255 has a posted speed limit of 55 mph. The same laws and principles apply to setting appropriate speed limits on State Route 255. In April 2012 the average critical speed through Manila on State Route 255 was measured at 58 mph. (Source: *Eureka-Arcata Safety Corridor: Fourth-Year Report.* Caltrans District 1 Traffic Safety Office, September 2006.) With 85th-percentile or critical speeds already exceeding the maximum speed limit of 55 mph, it is not prudent or consistent with the law to reduce speeds on State Route 255 to 45 mph or even 50 mph at this time.

Comment III-A-3

Would the proposed Indianola grade separation be a detriment to bicyclists in terms of safety and an additional grade to climb?

Response III-A-3

The proposed grade separation would not be a detriment to bicyclists in terms of safety or additional grades--especially compared to the existing roadway situation. Currently, bicyclists crossing or turning left across Route 101 at Indianola Cutoff must make the following maneuvers:

1. Starting from the outside roadway shoulder, cross two lanes of highway traffic to access the median;

2. Wait in the unprotected median between the southbound and northbound Route 101 lanes for an adequate gap in traffic; within the median, bicyclists would need to yield or avoid traffic turning left from different directions;
3. Merge or move across two lanes of on-coming traffic to access the opposite outside shoulder.

In contrast, the proposed grade separation would provide a protected undercrossing for bicyclists to access Route 101 via the on-ramps and off-ramps. This elimination of at-grade, unprotected crossing presents a substantial safety improvement for both bicyclists and motor vehicles. For both bicyclists traveling on Route 101 or the proposed Humboldt Bay Trail, the proposed grade separation would provide a safe, convenient means of crossing Route 101 to access Indianola Cutoff and destinations east of Route 101.

For bicyclists traveling on Route 101 that are not intending to access Indianola Cutoff, bicyclists could use both the off- and on ramps at the proposed grade separation to avoid and minimize potential conflicts with merging and turning motor vehicles on Route 101. In other words, instead of remaining on Route 101, by exiting and re-entering Route101 bicyclists could avoid crossing and merging movements with motor vehicles (if bicyclists remained) on Route 101.

The proposed grade separation exit ramps were extended to minimize steepness, making it no greater than a 2.5% grade. For reference, a 2.5% grade is only 0.5% greater than the cross slope of the highway surface (minimum 2% slope to allow drainage) and does not present a substantial obstacle to most bicyclists.

Comment III-A-4

Closing the Route 101 medians at Bayside Cutoff and Bracut will dramatically increase traffic on Old Arcata Road and force travelers to turn around at the Route 101/255 interchange in Arcata.

Response III-A-4

Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, includes a grade separation at Indianola Cutoff approximately midway between Eureka and Arcata. This grade separation would minimize out of direction travel resulting from left turn and crossing restrictions on Route 101. Modified Alternative 3A would still allow right turns on Route 101 to and from both Bracut and at Bayside Cutoff. Left turn moves and crossing moves on Route 101 would result in out of direction travel as described in the following scenarios at Bracut and Bayside:

- Southbound Route 101 travelers needing to access the east side of Bracut would likely turn around at the proposed Indianola Cutoff proposed grade separation and proceed north on Route 101 to Bracut.

- Currently many southbound Route 101 travelers from Arcata (and locations north of Arcata) access Old Arcata Road in Arcata to travel to the Bayside area since using Route 101 and Bayside Cutoff requires out of direction travel as well as requiring a left turn across two lanes of Route 101 traffic. Consequently, eliminating the left turn moves from Route 101 at Bayside Cutoff is not expected to substantially increase traffic on Old Arcata Road.

- For travelers starting in the Bayside area needing to travel southbound on Route 101, these travelers could travel southbound on the recently improved Old Arcata Road to access the proposed separation at Indianola Cutoff. This would possibly add delay and up to approximately one mile of out of direction travel, but would be safer than the existing condition of turning left from Bayside Cutoff onto Route 101—especially during peak travel periods.

- On the other hand, traveling from the Bayside area north on Old Arcata Road to access southbound Route 101 at the Route 101/255 interchange in Arcata would not likely save time since there are speed bumps, traffic circles, and a reduced speed limit north of Jacoby Creek Road; in addition, traveling north on Old Arcata Road to turn south on Route 101 at the Route 101/255 interchange in Arcata would require out of direction travel.

Route 101 is an expressway and a freeway between Eureka and Arcata. These types of roadway facilities are designed to efficiently carry high traffic volumes within both a local and regional transportation system. Route 101 has a higher posted speed limit and a direct alignment between the urban cores of Eureka and Arcata compared to Old Arcata Road. In addition, Old Arcata Road south of Indianola Cutoff veers to the east and would add out of direction between Eureka and Arcata. Consequently, travelers on north or south trips longer than a few miles are more likely to use Route 101 rather than Old Arcata Road, State Route 255, and other local streets. For these reasons, Modified Alternative 3A is not expected to reduce the level of service on Old Arcata Road. See Section 3.1.6 Traffic in Chapter 3 of the Final EIR/S for more information.

B. Other Topics

Comment III-B-1

If business driveways at Route 101 are a safety concern, then relocate these businesses to locations that would not require a driveway to the corridor.

Response III-B-1

Relocating businesses was considered as an alternative to eliminating left-turn moves; however many businesses are attracted to their high-visibility, low cost location adjacent to Route 101. Finding comparable locations would be difficult in addition to high costs for relocation. Even if businesses could be relocated, the primary broadside collision factor of left turn and crossing moves across Route 101 through traffic lanes would remain at Airport Road (and Jacobs Avenue), Indianola Cutoff and Bayside Cutoff where the need to access residential areas would remain.

Comment III-B-2

Many individuals, organizations, and public agencies have commented on the proposed removal of Eucalyptus trees, which is included in all Build Alternatives. This issue encompasses aesthetic values, historic values, biological considerations, as well as roadway safety and improvement considerations.

Response III-B-2

Much of the tree removal concern has been addressed by redesigning the project to realign the Route 101 southbound lanes to avoid eucalyptus tree takes on the west side of Route 101; however, only Alternative 1A, not the Preferred Alternative, would remove Eucalyptus trees on the west side of the roadway. Depending on the Alternative, tree takes would range from 23 to 83. Modified Alternative 3A would remove up to 54 trees. Most of the tree takes would be on the east side of roadway and in the median.

A qualified architectural historian evaluated and discussed in detail the eucalyptus tree row west of Route 101 for their potential as historic resources, and concluded, as concurred by State Historic Preservation Officer, that the trees did not stand alone as eligible for the National or California Register, or as part of a historic landscape. It is Caltrans' finding that the trees still do not meet the criteria for National or California Register eligibility, either alone, or as part of a historic landscape. The possibility of the trees contributing to a historic corridor has been negated by the lack of integrity the corridor otherwise possesses in relation to its period of significance.

Many comments stated that the road and its adjacent items (trees) should have been considered as a historic (cultural) landscape. Caltrans did consider the trees in this context, in accordance with the criteria set forth in National Register Bulletin 18 (Guidelines to Evaluate and Nominate Designed Historic Landscapes), which states:

> *A designed historic landscape is defined as a landscape that has a significance as a work of art; was consciously designed and laid out by a master gardener, landscape architect, architect or horticulturist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition; has historical association with a significant person, trend, event, etc. in landscape architecture; a significant relationship to the theory or practice of landscape architecture.*

The potential for this stretch of roadway to be considered a historic (cultural) landscape was considered and Caltrans determined that it does not meet any of the criteria to be considered an eligible historic landscape. As the results of Caltrans cultural resources studies for the proposed project concluded, the roadway along Humboldt Bay has been substantially altered as result of the widening of the road from a two-lane road (its historic context) to a four-lane road with interior median. This change effectively compromised the roadway's historical integrity in that it no longer retains the engineering and design features that it possessed when originally designed and built. Thus, Caltrans determined that the roadway cannot be considered a historic landscape.

Presently what distinguishes this roadway from others is its location alongside Humboldt Bay. This is an aesthetic or scenic value that alone does not qualify a resource for significance under the National Register or California Register criteria. Concerns about this issue are addressed in the Landscape Architecture Visual Analysis section of the Environmental Document and within the public comments section focusing on this aspect of the project.

Although this corridor is not a designated scenic highway or byway, it is eligible for California State Scenic Highway status. Section 3.40(B)(5) of the County of Humboldt Bay Area Plan states in part the following:

> *The Humboldt County Board of Supervisors shall initiate the preparation of a Scenic Route Study pursuant to the adopted Scenic Highways Element of the Humboldt County General Plan for the portion of Highway 101 between Eureka and Arcata and that portion south of Fields Landing, inclusively.*

The Scenic Route Study shall be prepared by the County Planning Department in cooperation with the California Department of Transportation.

Caltrans recognizes the value of trees, however public safety has the highest priority and mature trees are generally unyielding fixed objects in the event of a vehicle collision. However, Caltrans will incorporate all feasible and practicable means to avoid and minimize tree removal. The trees within the clear recovery zone on the east side of the roadway were evaluated individually for both biological and scenic value. Based on scenic quality, size, and distance to the roadway, some trees within the clear recovery zone will remain. Guardrail is an option to protect certain trees, however, guardrail would add another visual element; the length required would extend far beyond the trunks of the trees. In addition, the guardrail itself is a fixed object that needs to be minimized in the clear recovery zone. The visual and biology sections of Chapter 3 of the Final EIR/S have been revised to address these issues. Also refer to the plan sheets in Appendix A for tree removal locations.

Comment III-B-3

A grade separation at Route 101 and Indianola Cutoff would be visually incompatible with the existing rural setting and views of Humboldt Bay.

Response III-B-3

Modified Alternative 3A does include constructing a grade separation at Route 101 and Indianola Cutoff. The proposed grade separation would not visually resemble an urban freeway interchange because the proposed grade separation would connect a local two-lane County road (Indianola Cutoff) from only one direction to a four-lane highway (expressway). In addition, the highway would gradually slope over the County road and would be visually enhanced with landscaping. Overall, the small-scale grade separation would proportionately match the surrounding agricultural, rural, and commercial setting. The proposed grade separation would not obstruct bay views, other than from Indianola Cutoff, since there are no public vantage points that would be behind or have views blocked by the proposed grade separation. In fact, bay views would be enhanced for Route 101 travelers because Route 101 would be elevated over Indianola Cutoff. Please refer to revised Section 3.1.7 Visual / Aesthetics in the Final EIR/S for more information.

Comment III-B-4

Several written requests were made to remove existing billboards along Route 101 between Eureka and Arcata.

Response III-B-4

On November 14, 2013, the California Coastal Commission voted to approve Federal Coastal Consistency Certification for the proposed project, which included the following condition pertaining to billboard removal:

> Visual Impact Mitigation. Prior to or concurrent with its submittal to the Commission of a coastal development permit application for the project at issue, Caltrans will develop and submit a plan to the satisfaction of the Executive Director to provide mitigation for the visual impacts of the project by removing, to the maximum extent feasible, all billboards along the corridor, as well as other overhead infrastructure (such as power poles and power lines), and by steepening the inside slopes proposed for the Indianola interchange to maximize the view towards the bay from Indianola Cutoff.

At the time of this writing, Caltrans is in the process of determining underlying land ownership, researching outdoor sign advertising lease agreements, public agency permitting, and other related factors that would affect the feasibility of billboard removal.

It should be noted that the billboards between Route 101 and Humboldt Bay are not within the existing Route 101 right-of-way but could be within the North Coast Railroad Authority right-of-way, U.S. Fish and Wildlife refuge owned land, and/or privately owned land.

Comment III-B-5

Will this project induce development/growth?

Response III-B-5

The proposed project, which included a new grade separation at Indianola Cutoff, involved local and regional governments in the planning process in order to fulfill long-standing transportation needs and avoid land use sprawl. See Volume 1, Section 3.1.2 Growth.

None of the Build Alternatives would increase the traffic carrying capacity of Route 101. Although an intensification of growth of existing development could occur at the immediate Route 101/Indianola Cutoff location, development growth occurring in outlying areas resulting from the proposed grade separation is not anticipated. The area around the Indianola cut-off is currently under-developed, and with the improved access of a grade separated interchange, there could be a small amount of induced growth as the area is developed to its potential. There are however major impediments to growth including: limited sewage access, Coastal Zone

permitting, lack of potable water, and permit complexities from overlapping jurisdictional interests.

Overall, the separated grade interchange may lead to a small amount of development in the area.

References

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Appendix A – State and Federal Agency Comments

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

MAILING ADDRESS:
P. O. BOX 4908
EUREKA, CA 95502-4908

September 28, 2007

Hand-delivered on September 28, 2007 and placed in regular mail on September 28, 2007

Kim Floyd, Project Manager
California Department of Transportation, District 1
Post Office Box 3700
Eureka, CA 95502-3700

RE: Comments on the Draft EIR for the Eureka-Arcata Safety Corridor

Dear Ms. Floyd:

The North Coast District office appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) prepared by Caltrans for the Eureka-Arcata Safety Corridor project. Our comments are attached.

Staff comments on the DEIR are of necessity general and limited to the relatively conceptual degree of project design and analysis presented in the DEIR. For this reason, when coastal development permit applications are eventually processed for the project, the level of staff review and analysis will be more detailed. Additional issues may therefore be subsequently identified that were not part of the attached comments. 1

Please feel welcome to call me or Melanie Faust of my staff at 707-445-7833 if you have any questions.

Sincerely,

Robert S. Merrill
North Coast District Manager

Eureka-Arcata Highway 101 Safety Corridor
Comments: Draft Environmental Impact Report
September 28, 2007

1.0 Alternatives

The overall purpose of the project as stated by Caltrans is to improve the safety of the approximately four-mile stretch of Highway 101 from the north side of the Eureka Slough Bridges to the south side of Arcata, just beyond the Bayside Cutoff. This section is referred to as the Eureka-Arcata 101 Safety Corridor.

The primary effect of the build-alternatives identified by Caltrans is to transform the present 50-mph Eureka - Arcata Safety Corridor into a higher speed (65 mph) Expressway. Prior to implementation of the present safety corridor restrictions, the posted maximum speed was only 60 mph. The DEIR does not state that the speed increase is a necessary part of the project purpose and need, nor does there appear to be any argument that the increased speed would be consistent with increased safety. To the contrary, numerous studies indicate that increased speed is correlated with increased frequency of accidents, as well as more severe consequences for the accidents that do occur. 2

Caltrans has also folded into the Draft Environmental Impact Report (DEIR) a related but distinct project to perform maintenance of the highway in this location (resurface, restore and rehabilitate). These maintenance objectives should proceed, with appropriate review, whether or not the new development proposals outlined in the build-alternatives posed by the DEIR are implemented. Therefore the comments provided here focus primarily on the non-maintenance features of the build-alternatives identified in the DEIR, and particularly the significant infrastructure development and related changes that are proposed. 3

In brief, the Commission staff proposes that a new alternative be developed and analyzed in the final EIR that would include one feature of Alternative 3 (signalization of the Airport Road intersection with Highway 101), eliminate the proposed Indianola Interchange, reduce or eliminate other proposed median closures(in combination with other measures described more completely below); and retain the present 50 mph maximum speed limit within the corridor (with enhanced enforcement of that limit. 4

Under such an alternative, HCOAG and local representatives should pursue whatever administrative or legislative remedies may be required to secure the permanent status of the safety corridor (including the 50 mph speed limit and headlight requirements) and to provide a permanent funding mechanism for enhanced enforcement presence and authority to strictly enforce compliance with the safety measures. 2, 5

Our principal concern is that the DEIR has not adequately identified or evaluated feasible alternatives that would better address the safety of the subject portion of Route 101 with 6

significantly reduced impacts on coastal resources and decreased expenditure of scarce transportation infrastructure funds – with equal or possibly better safety benefits for the corridor.

In addition, the DEIR does not adequately consider the regional and local interrelatedness of the Highway 101 corridor. The corridor is inextricably linked with Highway 255 and Old Arcata Road, and with the controlling limitations of the immediately adjacent section of Highway 101 south of the corridor, where the highway becomes a surface boulevard for the City of Eureka. The subject corridor is also tied to the commuter linkages of Highway 101 beyond the subject four miles of the safety corridor through Arcata and into McKinleyville. The DEIR does not adequately address these interconnections, overlooking, for example a pending proposal to "neck down" Highway 255 from two same-direction lanes to one lane near the Samoa Boulevard exit from 101 and on through the portion of Arcata traversed by Highway 255 on the west side of the Highway 101 corridor. 7

Traffic that is impacting the four-mile Eureka-Arcata corridor is primarily generated locally, by commuters and businesses serving the Fortuna to McKinleyville area (this is clearly shown by the peak demand patterns at the pertinent intersections on the Eureka – Arcata safety corridor). Thus, appropriate solutions must take into account comprehensive transportation planning strategies that fully include Old Arcata Road, Highway 255, and links to the greater Fortuna and McKinleyville areas. There will be no simple solution to the intense traffic bottleneck that already exists in downtown Eureka. The 101 Corridor through Eureka and the entire Old Arcata Road corridor are the two most dangerous places in the local transportation network from the perspective of bicyclists and pedestrians – and likely for motorists as well. 8

The DEIR does not substantively analyze the impacts the build-alternatives would have on Old Arcata Road (a far more dangerous roadway than the Highway 101 Safety Corridor) nor does the DEIR address appropriate mitigation measures for these impacts. The DEIR only states that one day the County will improve Old Arcata Road. Transportation improvements within the interconnected roadways should be comprehensively planned so that overall safety, efficiency, and optimal utility for multi-modal transportation are best realized. 7, 9

For all of these reasons, it is not clear that the injection of $30 to $60 million for the proposed project into one four-mile stretch of Highway 101 will have an optimal benefit if these other related constraints on traffic management and safety are not comprehensively addressed. 10

At a minimum, staff suggests that a different alternative, described below, could provide at least a medium-term solution that would increase the safety of the corridor as much as 4, 11

the proposed transformation of the corridor into a 65-mph-Expressway. With the additional time provided by implementing this alternative, other solutions may emerge that combine comprehensive transportation and land use planning to reduce the pattern of increasing sprawl and dependency on single-occupant motor vehicles. 11

Contemporary planning strategies designed to address the adverse impacts of global warming are increasingly challenging the traditional development practices that have pushed new construction further and further out into rural lands, often by subdividing tracts of agricultural land. This practice has produced sprawl, increased the public's dependence on private automobiles, and resulted in the patterns of traffic congestion evident in developed areas around the state. Land use development in Humboldt County has mirrored these patterns and Caltrans appears to project more of the same trends in the future by stating that traffic volumes in the Safety Corridor will increase by 50% within less than twenty-five years. Since actual county population growth projections fall far short of that estimate, it appears that this assumption by Caltrans is based on the assumption that single-occupant motor vehicles will increase substantially, and that there may be even more trips per person on the affected roadways. This assumption also suggests that Caltrans has not considered the changes that may arise instead through smart growth planning, carbon constraints, multi-modal transportation improvements, and improved public transportation options. In other words, the DEIR build-alternatives appear to be based solely on the traditional transportation planning paradigm of achieving ever-greater transportation "efficiency" by moving more vehicles (and the people & goods they carry) faster. 12

The DEIR preparation cycle was initiated before the advent of major new planning initiatives by Caltrans and a multitude of other federal, state, and local planning agencies to address global climate change. Global warming isn't addressed in the DEIR, but if the document is reconsidered in light of emerging smart growth planning strategies, many new options other than moving more cars faster would likely emerge. If the reduction of greenhouse gas emissions becomes a weighted objective in the Safety Corridor alternatives consideration, a very different profile of the project alternatives, impacts, and potential mitigation measures would likely become apparent. Providing such analysis is beyond the scope of this letter, but clearly is the way of future environmental planning documents – particularly those documents that evaluate transportation projects (the transportation sector generates a majority of greenhouse gas emissions) with a lifespan of up to 100 years (the Indianola Interchange and some of the bridge replacement components of the corridor would typically be expected to last at least 75 years). 12 13

The Commission staff believes that alternatives that provide flexible, phased, current and mid-term Safety Corridor solutions have the best chance of addressing real problems without requiring a premature, substantial infrastructure investment that turns out to be the wrong solution in the long-term. Briefly, an alternative (or a combination of alternatives) not identified in the DEIR that should be analyzed in the final EIR is one 11

that would have the following features and would incorporate comprehensive smart growth transportation and land use planning strategies: 11

1. Permanently retain a speed limit of not more than 50 mph in the subject four-mile section of Route 101 and consider coordinated speed controls/reductions on inter-tied corridors (Highway 255 & Old Arcata Road, for example). With signalization of some intersections, a lower speed in some stretches (such as between the Eureka Slough Bridges and Airport Road) as discussed in item 2 below, may be advisable to achieve optimal traffic flow and safety. 2, 14

Note: There is little benefit to increasing the speed to 65 mph within the corridor when the bottleneck that will always exist within the 101 corridor through the City of Eureka cannot be resolved to match an adjacent 65 mph corridor. The hazard of delivering southbound traffic traveling at 65mph into the 50 mph-limited Eureka Slough Bridges and 35 mph section of 101 through the city just beyond, seems to offset any advantage of time savings on the stretch from Arcata to that point in the route. In addition, if speeds are limited, local drivers may feel safer driving in the corridor in smaller, high efficiency vehicles that pollute less, reduce fuel demand, and reduce greenhouse gas emissions. Many drivers state that they choose larger vehicles so that they will be safer when surrounded by larger vehicles, particularly at highway speeds. 2

2. Install at-grade traffic lights dependent on emerging "Intelligent Traffic Management Technology" to facilitate optimal flow of traffic – first at Airport & Indianola, and later at Bracut and/or Bayside Cutoff, as warranted, through a phased approach. Even one light at Airport or Indianola would produce more predictable "punctuation" in the traffic flow, allowing cross traffic to find openings for safer ingress/egress at other intersections on Highway 101. 14, 15

Northbound Highway 101 speed limits leaving Eureka should be maintained at 35 – 45 mph, rather than increased to 50 mph south of Eureka Slough Bridges, to modulate traffic approaching the bridge or the proposed signal at Airport Road. A second signal at Indianola could mark the appropriate point for transition to 50 mph. If traffic gaps created by Intelligent Traffic Management technology at Airport and Indianola signals prove inadequate, then signals could be added at Bracut and/or Bayside Cutoff (or elsewhere as deemed necessary by traffic analysis). 2, 14, 15, 16

3. Install a guard-rail separated bicycle/pedestrian corridor on one - or both - sides of the highway, depending on a review of optimal bicycle safety issues. Commission staff supports the use of existing median open space areas where constraints on total corridor width would otherwise preclude provision of adequate paved width for the guard-rail-separated bicycle/pedestrian corridor. Caltrans should include providing for the safety and access of pedestrians and bicyclists as a priority in Safety Corridor planning. Alternative bicycle/pedestrian trail routes may be developed in the future, but until or 17

unless another route is identified and constructed, this corridor remains the Coastal Trail and an important commuter linkage, and Caltrans should therefore include the safest multi-modal transportation improvements available.

4. Protect and enhance tree plantings along the corridor through the same use of guard rails to separate traffic – the guard rails protect against elevation changes that are common off the roadway shoulders through out the corridor and would eliminate the need stated in the DEIR for the removal of hundreds of trees to produce a nine-meter "clear recovery zone." 18

5. The Cities of Arcata & Eureka police departments, the Sheriff's Department, and the California Highway Patrol (CHP) should coordinate existing enforcement resources to secure safety compliance on the subject corridor. Funding solutions that would endow or otherwise fund through enforcement proceeds, a permanent corridor speed and safety compliance program should be pursued by Caltrans, the CHP, and local government. This could begin with optimizing resources available now through interagency law enforcement coordination but must be enhanced with permanent funding. Funding for compliance management would represent a fraction of the estimated costs Caltrans projects in the DEIR for the preferred build-alternative. 5

6. Invest in emerging compliance and traffic management/calming "smart technologies" ("Intelligent Traffic Management Systems") – a technology that is expanding the range of affordable tools to secure motorist compliance. Caltrans presently monitors traffic through the use of cameras on Highway 101, through Eureka, for the purpose of providing real time, operator-directed traffic management, e.g., signal light changes. More sophisticated technologies are emerging, and will provide future opportunities to secure enhanced compliance at less cost. A variety of "traffic calming" measures, in addition to reduced posted speed, could also be considered where there is also a problem with the corridor delivering higher speed southbound traffic into the narrow Eureka Slough Bridges and the reduced speed zone beyond. 15

7. Integrate planning and improvement of the Eureka – Arcata corridor with other parts of Highway 101, Highway 255, and Old Arcata Road. Consider expanding safety and multi-modal improvements to including the Highway 101 corridor north of the Eureka – Arcata corridor, into McKinleyville. These are inter-related components of the local and regional transportation network that should not be unbundled in the manner contemplated in the DEIR. Caltrans should plan consistently in terms of phased, integrated, multi-modal systems that optimize regional transportation links. 8, 12

8. The railroad corridor, trail systems, bicycle lanes, and vehicle corridors should be planned as an integrated system. This is particularly evident when considering influences on the corridor that will affect all of these transportation features, such as sea level rise. Related increases in storm surges and seasonal flooding could destabilize inadequately 19

engineered roadbed fill, railroad ballast, and existing revetments. No one of these systems can be adequately planned or managed for the long-term in isolation from the others in light of these forces. This will become more evident in the future as the impacts of climate change force Humboldt County into competition with more populated areas of the state for scarce public funds.

The Commission staff also encourages Caltrans to:

1. Assist Humboldt County with the pursuit of a Scenic Highway designation that County leaders have indicated would be desirable for this highly scenic stretch of Highway 101. Investigate strategies to remove billboards and reduce nonconforming development that adversely affects public coastal views along the corridor, and work toward enhancement of a scenic corridor that drivers at lower speeds (than the proposed 65 mph) could best enjoy. 20

2. Explore with local decision-makers ways to permanently fund and incorporate significantly improved public transportation that would reduce the traffic on the corridor that is presently represented by single-occupant business and commuter vehicles. 21

3. Explore land exchange or funding opportunities to help willing occupants of properties generating dangerous cross traffic on the Eureka – Arcata Highway 101 corridor to relocate their businesses locally if desired. This approach could provide opportunities to open up scenic views of Humboldt Bay along the Safety Corridor, improve public coastal access along the route of the Coastal Trail, provide attractive coastal visitor-serving amenities, possibly including the much-discussed light rail commuter/tourist link between the coastal cities (which should also be evaluated as a parallel means of relieving traffic volumes on Highway 255, Old Arcata Road, and Highway 101 generally – particularly if combined with significant improvements to collector public transportation within the affected and outlying areas). Substantial coastal wetland habitat enhancement opportunities might also be realized if any of these opportunities were implemented. 22

2.0 Global Warming

The DEIR does not adequately evaluate the contributions of the build-alternatives to global warming. All three build-alternatives would increase the corridor speed up to a posted 65 mph (from the present 50 mph), increasing the greenhouse gas emissions per vehicle mile traveled. Fuel efficiency is typically optimized when vehicles travel in the 45-55 mph range (this varies somewhat by vehicle model), but declines rapidly when vehicles exceed 60 mph, with a steep drop-off in efficiency as wind shear and other factors take increasing effect at 65 mph--plus. 2

The energy evaluation in the DEIR only counts distance traveled; by this method of analysis, Alternative 3 results in lower than existing distance traveled, which the DEIR equates with saved energy. Setting aside whether Alternative 3 *in fact* would reduce miles traveled (as compared to baseline – existing conditions – this is not likely the case), the document fails to accurately assess the energy impacts of the preferred alternative because the DEIR does not evaluate the fuel efficiency losses that would be caused by the proposed increase in the speed limit of the Eureka – Arcata corridor. 2 23

As noted in the alternatives discussion above, intersection improvements through phased signalization could increase efficiency and safety further, provided that posted speed limits do not exceed 50 mph. In some sections, such as from Eureka Slough Bridges to Airport Road, it might be beneficial to reduce speed further, perhaps to 35-45 mph for that short stretch to avoid delivering traffic to a first light on the corridor at higher speeds. Small speed adjustments downward from the present 50 mph limit, intelligent traffic technology, dedicated enforcement, phased installation of intersection lights, installation of a guard-rail separated bicycle/pedestrian pathway along the outside of the corridor, and increased public transportation opportunities would all encourage safer multi-modal use of the corridor, and collectively would reduce greenhouse gas emissions and thus the carbon footprint of the corridor, as compared to any of the build-alternatives identified in the DEIR. 12 14, 15, 24

The DEIR should evaluate the greenhouse gas emissions associated with construction (i.e., vehicles and machinery), materials (e.g., concrete production is a significant source of carbon dioxide emissions), and with the long-term operation of the corridor under the build-alternatives, as compared to other suggested alternatives and the no-build alternative. 25

3.0 Sea Level Rise; Coastal Hazards

Many elements of the build-alternatives would have a lifespan of at least 75 years. This is long enough that the affects of sea level rise on the Eureka-Arcata corridor should be evaluated. The DEIR considers the impacts to wetlands from direct encroachment or fill, but does not discuss or quantify (or define mitigation for) the loss of wetlands that will result in the future if the existing wetlands (i.e., those that would otherwise be unaffected by direct construction) become increasingly inundated and convert from inter-tidal to submerged habitat. Without the ability to expand wetlands landward, the wetland zone will shrink in response to sea level rise due to the limiting effects of the hardscape installed under the build-alternatives. 13 26

The "drowning" of wetlands is an acknowledged impact from sea level rise, and is one of the reasons wetland buffers are typically required for projects. This roadway project would, under any of the build-alternatives, have impacts that reduce the immediate wetland area; there is no buffer left to use for inland migration. The DEIR's position that 26

there would be "no net loss of wetlands" (through mitigation) fails to take into account the impacts from a rising sea level.

There is also the longer-term issue of the viability of the road with a rise in sea level and the potential for adaptation of this road corridor. The DEIR should examine the options for a corridor route or configuration (e.g., causeway components constructed over time, as portions of the highway are replaced) that would have longer-term utility for a possible 1- to 3-foot rise in sea level over 100 years (a conservative estimate). The limited information available in the DEIR and a preliminary field review of the roadway suggest that the road could not be elevated very much without extensive lateral support and soil remediation to prevent subsidence. With even a 1-foot rise in sea level, it is likely that a local storm with strong winds blowing across the bay could set up enough wave activity that the roadway would be inundated at least during a high tide, if not for longer periods. Neither the inundation from overtopping nor inundation from an overall rise in sea level is discussed. 13, 26, 27

The Eureka-Arcata 101 corridor lays within the highest tsunami hazard category mapped on the most recent tsunami hazard map for the area, available at Humboldt State University through the web link listed below. The closure of medians that is incorporated into all of the build-alternatives reduces potential escape routes for tsunami evacuation. This should be evaluated in the final EIR. Safety improvements of this corridor should also include signage for tsunami warning and evacuation routes for northbound and southbound travelers (including bicyclists and pedestrians). 28

http://www.humboldt.edu/~geology/earthquakes/rctwg/hazard/firstpublicdraft3.pdf

4.0 Floodplain Fill

The DEIR states that the preferred alternative (Alternative 3) would require the placement of approximately 392,000 cubic yards of fill within the floodplain, but concludes that this impact is "negligible." This is a significant impact, has broad implications for wetland fill, hazards, flooding, visual impacts, potential erosion and water quality impacts, and increases the diking effect of the floodplain against Humboldt Bay without addressing the implications of sea level rise. 29

The ability of the railroad levee to protect against sea level rise has not been evaluated, and a substantial increase in the revetment and its maintenance over time would likely be required to protect the additional fill proposed. The extent of additional fill of Humboldt Bay and adjacent wetlands that would be required to develop an adequately engineered and sized levee to protect the proposed corridor footprint against sea level rise and flooding has not been evaluated, nor have the substantial associated costs been estimated or included in the costs assigned to the build-alternatives. 26

The DEIR states that Caltrans will evaluate the stability of the existing embankments in the corridor at the "design stage" of the project development. That is not an adequate analysis – the stability of the embankments is a critical factor in evaluating the extent of development that may be necessary. Geotechnical investigations of the corridor have already been undertaken, and the stability analysis should be completed and fully disclosed, along with any measures necessary to ensure adequate stability of the embankments. If the results of the analysis indicate that significant instability issues exist, the extensive remediation or redesign implied suggest that the DEIR should be revised and re-circulated for additional public review and comment. 30

Caltrans must evaluate the stability of the existing embankments in light of potential seismic slope failure and liquefaction. This is particularly important because both the northbound and the southbound embankments appear to be un-engineered fill, typical of construction of that era (the embankments date to the 1950s, before contemporary engineering safety standards were developed). 30

5.0 Cumulative Impacts

The DEIR does not adequately evaluate the impacts that the build-alternatives would have on traffic patterns on Old Arcata Road, Highway 255, and the northerly 101 corridor in Eureka. The DEIR does not disclose other projects "in the pipeline", such as a proposal processed favorably by Caltrans and under consideration by the City of Arcata to shrink Highway 255 from two same-direction traffic lanes down to one through Arcata. This change would affect the traffic capacity of the interrelated corridor, and the changes in traffic patterns should be analyzed cumulatively in the final EIR. 7

The DEIR also fails to adequately evaluate the substantial increase in traffic and related hazards on the Old Arcata Road corridor, thus transferring the problem (without considering impacts and mitigation) to the County. Old Arcata Road is presently a more hazardous corridor than is the Eureka-Arcata 101 Corridor. 9

The DEIR does not evaluate the cumulative impact of the proposed changes, particularly the median closures, on bicycle and pedestrian traffic. The burden of out-of-direction travel that the proposed closures would place on bicycle and pedestrian travelers has not been addressed in the DEIR. Coastal Commissioners attending a tour by Caltrans of the corridor in September of 2006 commented that bicycle and pedestrian access must be fully facilitated within all features of the proposed project, including highway crossings. 31

6.0 Wetlands, Water Quality, Sensitive Habitat

The construction and operation of the build-alternatives could adversely impact sensitive, listed, or special status species, including endangered salmonids and tidewater gobies. The DEIR defers assessment of these impact – as well as the development of mitigation 32

measures – to the subsequent preparation of a Biological Assessment, which Caltrans would then submit to agencies such as U.S. Fish & Wildlife Service, NOAA Fisheries, and the California Dept. of Fish & Game, for review. This deferral renders the DEIR inadequate because the information contained in the Biological Assessment is necessary for the reader of the DEIR to fully understand the project's potential impacts on sensitive resources. The Biological Assessment should be undertaken and the impacts (and requisite mitigation measures) disclosed in the final EIR. Re-circulation of the DEIR with the requisite information may be necessary to ensure that the public is fully informed of the project's potential adverse impacts on sensitive species and has the opportunity to comment on the identified impacts, and also to fulfill the requirements of the California Environmental Quality Act (CEQA).

The DEIR acknowledges that there are likely to be impacts to various sensitive species of wildlife that inhabit the wetland areas, but it doesn't go into any detail concerning the types and quantify of impact (see pages 275, 279-281). More discussion related to specific locations and amount of impact would be useful. Similarly, it is stated that impacts to Lyngbye's sedge would not be significant, but the size of the population at risk and the likely size of impacts is not specified (pages 272-273). The DEIR acknowledges that all tidegates will be replaced, but states that only those gates where it is thought that special status species are present will be equipped with "fish-friendly" tidegates. All the gates should be fish-friendly. The final EIR should also evaluate how the tidegates will be designed and installed to accommodate at least three feet of sea level rise. 33 34

The DEIR discussion of mitigation is mostly general and conceptual, and in some cases, as noted above, defers completely to the preparation of a Biological Assessment at some subsequent time. As stated, the Biological Assessment should be prepared before the DEIR is finalized and should be publicly released for review and comment as part of the DEIR public review process. Otherwise, the DEIR conclusions that all of the projects impacts will be fully mitigated are unsupported. 32

The potential impacts of pile-driving for bridge replacement should be disclosed and a hydroacoustic analysis of the pile-driving on fish populations should be prepared prior to completion of the EIR, and the results should be incorporated into the final EIR. The pile-driving analysis should evaluate bridge designs and pile sizes, among other factors, that would reduce potential barotraumas (the goal is to ensure selection of design alternatives and construction techniques that reduce the level of hydroacoustic impact such that sensitive species are protected). A revised bridge design for the Jacoby Creek crossing (or other bridges that Caltrans may determine need replacement as further review proceeds) that fully spans the creek would reduce impacts to sensitive species during construction. This alternative, which was suggested by Coastal Commission staff previously, was not evaluated in the DEIR. The fully-spanned alternative would remove fill within the slough and improve fish habitat. 35

The bridge design(s) should also be evaluated for impacts that might derive from reduced clearance beneath the bridge due to sea level rise. The DEIR should, as stated, evaluate options to bridge with longer, clear spans. The DEIR should evaluate changes to hydrology and sedimentation rates that would arise with the channel opened up. The DEIR should include detailed topographic maps of the existing inundation zones and the inundations zones that would be produced incrementally by a 1 and 3 foot rise in sea level. As Caltrans does detailed surveys of its roads, the necessary topographic data likely already exists. Caltrans should coordinate with the Commission's coastal engineer and geologist to specify the tidal conditions that should be used as a starting point (MSL, MHHW, MLLW, etc.) and Caltrans should map the current zone of inundation and the future zone of inundation with the 1 and 3 foot rise. The pertinent features, such as bridges, etc., should also be shown in cross section with this mapping data once produced. This information should be published in the FEIR. This information has significant implications for potential impacts to sensitive habitat as sea level rise progresses and intersects the built environment. 26, 36

The DEIR notes (page 266) that Caltrans anticipates that the Coastal Commission will grant credit for "the inclusion of upland and/or riparian areas for preservation, if it can be demonstrated that they contribute to the overall ecologic function of the mitigation project." Commission staff notes that this statement exceeds the guidance given by staff to Caltrans staff in this regard, and that mitigation credit is generally not recommended for preservation (such as for the transfer of existing wetlands from private to public ownership, for example), though partial credit for enhancement of existing wetlands is sometimes considered under unusual circumstances. 37

The DEIR does not evaluate the potential impacts on wildlife migration that are posed by median barriers. Recent construction of concrete median barriers by Caltrans in the Fortuna/Loleta area has significantly increased "road kill" of wildlife. This impact could be reduced or avoided by eliminating the use of solid concrete barriers and replacing such barriers with the thrie-beam style of low metal rail supported by wooden timbers. This wildlife-permeable design should be fully incorporated into project plans for any alternative. An additional benefit of reduced speeds is the reduction in the size and height that may be necessary for such barriers. 38

The DEIR proposes the removal of hundreds of mature trees along the corridor for the purpose of producing a 9-meter (about 30 feet) "clear recovery zone" on each side of the corridor. Reduced maximum speed in the corridor (instead of the proposed increase to 65 mph) may reduce the need for this extensive clear recovery zone and the associated tree removals. Nevertheless, under any alternative (including the no project alternative) Caltrans should avoid removal of trees by installing a wildlife-permeable, crash-tested guard rail along the outermost roadway shoulders available to motorists, so that bicyclists, pedestrians, and trees are separated from motorists. This approach would protect bicycles and pedestrians from vehicles, and would protect vehicles from collisions 39

with trees. The guard-rail barrier would thus avoid the need to remove the trees, which not only comprise a significant visual amenity in the corridor (the alternating trees with open vistas provides visual "rooms" that offer aesthetic interest within the highly scenic corridor, and also serve to slow traffic according to studies of traffic calming landscape features). The trees additionally provide seasonal nesting, roosting, and foraging habitat for sensitive and/or migratory bird species. The loss of these benefits has not been fully evaluated (nor has mitigation been identified) in the DEIR. This should be resolved in the final EIR.

Neither the Water Pollution Control Program nor the Storm Water Pollution Prevention Plan for this project have been prepared yet, as the construction contractor would prepare these documents prior to construction, subject to Caltrans' review and approval. Therefore, the DEIR does not provide detailed information about the project's anticipated water quality impacts, nor about the specific Best Management Practices (BMPs) that will be used to minimize these impacts. 40

Two measures were provided to indicate the potential impact of the project on stormwater runoff and erosion: 1) the estimated area of disturbed soil during construction; and 2) the net increase in paved surface area after construction. 41

The estimated area of disturbed soil during construction is 31 acres (Alternative 1), 47 acres (Alternative 2), or 52 acres (Alternative 3). This is a substantial area of disturbance, and yet the draft EIR does not adequately specify what steps will be taken to minimize the size of the soil impact areas, and to minimize the degree of impact to these areas. 42

The proposed project intends to make use of the site's predominant sheet flow drainage pattern to vegetated slopes and swales to "provide a natural treatment for almost all of the stormwater runoff" (Pg. 170). Therefore, it is essential that the capacity of these areas is protected, by protecting the vegetated slopes and swales from soil compaction due to use of heavy equipment, and from unnecessary removal of vegetation. 43

The draft EIR states that "Vegetation clearing, grubbing, and earthwork will require a combination of BMPs including straw mulch, fiber rolls, or check dams" (Pg. 174). However, we believe it should also be a requirement of the contractor that vegetation clearing, grubbing, and earthwork will be minimized as much as feasible. 44

We recommend that the EIR specify that disturbed soil areas should be revegetated as soon as feasible, using only native plant species, to provide erosion control and enhanced biofiltration capacity. 45

As a second indicator of the potential for increased stormwater runoff and erosion from the proposed project, the net increase in paved surface area after construction was 46

estimated for each alternative (the final EIR should also compare the existing baseline of paved area with the "as proposed" paved area for the build-alternatives and the no-build alternative). An additional 7.2 acres (Alternative 1), 9.6 acres (Alternative 2), or 11.6 acres (Alternative 3) of new paved surface area is anticipated. This 10-16% increase in impervious surface area will result in an increased volume and velocity of stormwater runoff. This may potentially cause channel scouring and bank erosion, and lead to increased sediment and turbidity in the creeks and bay.

In addition, the wetlands that would be lost in the median and shoulder areas that have been described in the DEIR and elsewhere by Caltrans as having "low habitat function and value." Whatever the habitat value of the subject wetlands may be, the wetlands are nonetheless providing an important water quality protection function. The wetlands are serving as biofiltration structures for the highway runoff that would otherwise drain directly into Humboldt Bay and adjacent waters. The permanent loss of up to fifteen acres of wetlands will remove this filtering function, which is providing an important water quality service protective of Humboldt Bay and the sloughs adjacent to the subject roadways. 47

For these reasons, the potential adverse impacts of the build-alternatives on water quality should be weighed in light of the increase in new paved area (11.6 acres proposed in the preferred alternative – Alternative 3) combined with consideration of the loss of existing wetlands (estimated by Caltrans as 15.41 acres of wetlands that would be permanently lost). The loss of the biofiltration benefits of the existing wetlands, combined with the addition of an almost equivalent amount of new impervious surfaces, will have significant impacts on the volume and velocity of runoff from the roadways. The DEIR minimizes the effects of this combination. The final EIR should provide a complete analysis of the water quality effects, including analysis of mitigation measures to restore the runoff storage and biofiltration capacity previously provided by the 15.41 acres of wetlands that would be lost, as well as a complete analysis of the additional biofiltration demands of 11.6 acres of proposed new impervious surface. 48

The Draft EIR states that "Because of the site's flat terrain and predominant sheet flow drainage patterns, the 10% to 16% increase in impervious surface created by the Build Alternatives will not likely create channel scouring or bank failures. The existing drainage surfaces and channels show no signs of erosion or scour problems" (Pg. 172). Nonetheless, to avoid potential erosion or scour problems, the vegetated slopes and swales that provide the project's biofiltration capacity should be protected and enhanced to accommodate this increase in stormwater runoff from the proposed new paved surface areas. This is especially important in the project area because infiltration of runoff may be inhibited, particularly during the rainy season, due to high groundwater elevations, tidal influx, and saturated soils. In addition, despite the DEIR's conclusions, as noted above the proposed project would significantly change the balance of existing wetlands 46, 47, 49

and paved area within the project area. Therefore, these changes should be more fully evaluated in the FEIR.

We also recommend retaining the predominately sheet-flow drainage pattern of the project site as much as feasible, rather than concentrating and collecting stormwater runoff in pipes or ditches. This will reduce the potential for erosion, and will also allow for more infiltration and biofiltration treatment of the stormwater runoff prior to discharge into the receiving waters. 49

7.0 Visual Resources

Staff recommended in at least two meetings with Caltrans staff in 2006 that the project include measures to limit the removal of specimen trees through the use of barrier rails, rather than clearing trees to make a nine-meter (about thirty feet) "clear recovery" zone for the protection of errant vehicles. 39

Staff has also provided extensive comments to Caltrans regarding the aesthetic preference for the thrie-beam guard rail and median barrier design. As discussed above, this choice of design should be deployed throughout the corridor to ensure wildlife permeability as well as to minimize visual intrusions in this highly scenic corridor. 38

The proposed project would have significant adverse impacts on this highly scenic corridor. The Indianola Interchange would introduce a significant urban element and direct barrier to coastal views from many existing public vantage points along the corridor. These impacts would adversely affect community character, impair public coastal views, and the interchange would have growth-inducing impacts that would further contribute to the loss of open space and coastal views within the corridor. The DEIR does not propose that Caltrans acquire and remove the many billboards that intrude into the coastal viewshed of the corridor as partial mitigation (full mitigation of the visual impacts could not be achieved). The final EIR should evaluate the retirement of billboards within the corridor as mitigation for the project's significant, adverse visual impacts. 20, 50

The additional lighting and signage of the corridor would also have visual impacts. To better evaluate these impacts, Caltrans should prepare and include in the final EIR, a visual study of all proposed new features that would be constructed above existing grade. The study should incorporate at-grade photographs of field-staked markers and flags representing the proposed height of the structures (i.e., Indianola Interchange) as viewed from public vantage points within the corridor, and as viewed from a distance. Similarly, sound walls, median barriers, tree removals, placement of over 390,000 cubic yards of fill, and the temporary impacts of multi-year construction should all be fully evaluated, individually and cumulatively, as visual impacts. Adequate mitigation has not 51

been proposed. The final EIR should provide this additional visual analysis as well as proposed measures to mitigate the visual impacts of the proposed project.

8.0 Growth-Inducing Impacts

The DEIR does not adequately address the growth inducing impact that would result from construction of the proposed interchange at Highway 101 and Indianola Cutoff. The general topic of growth inducement is discussed briefly in Section 3.1.2, "Growth," of the DEIR. The fact that construction of the interchange would provide an incentive to more intensive use of the area is acknowledged, but the DEIR nonetheless concludes on pages 81-82 of that "although possible, it is not reasonably foreseeable that any of the project alternatives would likely …indirectly create an incentive to develop large-scale development" and proposes no mitigation for this impact. 52

The area in the vicinity of the Indianola Cutoff/Highway 101 interchange has very significant coastal resource value. The Humboldt Bay Area Plan segment of the Humboldt County LCP designates much of the area around Indianola as a coastal scenic area where all future development must be subordinate to the character of its setting. In addition, with its location roughly at the midway point between the cities of Arcata and Eureka, the area provides a visually important greenbelt between the two cities. The Open space areas form a visual buffer from urban development that helps maintain the distinctness of the two communities and avoids the appearance of urban sprawl. As noted in the DEIR itself, the area also contains extensive farmed wetlands. The importance of maintaining agricultural lands in production is recognized in local plans and in the Coastal Act. In addition, the Coastal Act and the Humboldt County LCP recognize the important habitat value provided by such grazed seasonal wetlands. Intensive development of the area would eliminate or seriously compromise these resource values of the land, and any development such as the interchange project that could induce such development creates very significant impacts on coastal resources. 52

The DEIR acknowledges that as the Eureka-Arcata Highway 101 corridor has high visibility and is the most heavily traveled corridor in the region, large scale retailers have been interested in building within the corridor. The DEIR notes that major retailers such as Walmart have explored the possibility of locating large new commercial development in the Indianola area. The fact that the area is located midway between two of the largest cities in Humboldt County (just two or three miles from the center of each city) and in the midst of a largest area of concentrated development in the County is also likely a major advantage for potential retailers. The DEIR notes that traffic mitigation costs among others was one of the reasons the Walmart proposal never went forward, yet the DEIR provides no further elaboration on those mitigation costs and fails to put in context how significant that constraint to development was in comparison with other factors. At the time, Walmart was told that to mitigate its traffic impacts, the company may have to pay for the development of an interchange at Indianola Cutoff and Highway 101. As 53

evidenced by the DEIR's own discussion of construction costs, the costs of building a highway interchange at the site is many millions of dollars, a huge mitigation cost for a private retailer to absorb. This factor alone may have caused Walmart to look elsewhere and is likely the single biggest constraint on development of high intensity commercial uses in the area. Yet the DEIR concludes that the proposed interchange project has no significant growth inducing impact even though the publicly financed interchange would eliminate this very significant mitigation cost for a retailer considering locating in the area. The DEIR suggests that commercial retailers are not considering the site in part because of a "pattern and trend of occurring in urbanized areas" that would cause them to look in the central areas of Eureka and Fortuna as evidenced in part by the development of the Bayshore Mall. This reasoning contradicts the earlier statements noted above of how attractive the site is for commercial development because of its location along the major highway in the area between the largest centers of population and is inaccurate. The Bayshore Mall had already been developed by the time the Walmart store was proposed in Indianola.

The DEIR also seems to base its conclusion that the growth inducement that would result from construction of the interchange is insignificant and that therefore mitigation is not needed on the fact that any development proposals induced by the interchange project would require certain governmental approvals, and that sewer improvement would have to be constructed. However, the DEIR does not evaluate the relative significance of the constraints on development. The need for rezoning portions of the site and the fact that permits are needed may not be a very significant factor once the interchange is in place. The very fact that traffic impacts would no longer be a problem for large new development may encourage local governments to consider rezoning the site, particularly since some commercially zoned property already exists in the area. Furthermore, the costs to a major retailer of funding sewer improvements may not be as significant a constraint given that the retailer would not also have to face funding the construction of the interchange. 52

The final EIR must include a more thorough analysis of the growth inducing impacts of the project and review mitigation alternatives. The EIR should analyze the magnitude of the constraint on development in the area that the current lack of Route 101/Indianola interchange plays relative to the other constraints mentioned, addressing specific dollar costs and properly weighing the significance of the impact. Potential mitigation measures that should be reviewed include purchasing development rights over some of the lands subject to the growth inducing effect of the interchange project. Such purchase of development rights might also provide potential sites for needed wetland mitigation to address the significant wetland fill impacts of the overall project. 52, 53

9.0 Public Coastal Access and Recreation

A key requirement of the California Coastal Act is stated as follows: "Public access …along the coast shall be provided in new development…" (California Public Resources Code, section 30212(a)). Subsequent direction by the Legislature has refined this concept, identifying the goal of providing a continuous recreational trail system along the State's shoreline. Progress towards this goal is summarized in the report *Completing the California Coastal Trail* (California Coastal Conservancy, 2003). 54

The DEIR for the Eureka-Arcata Route 101 Corridor Improvement project describes the project's relationship to the California Coastal Trail (CCT) concept, particularly with respect to its potential alignment along the 101 corridor. The DEIR states that the CCT might be implemented either on or parallel to the NWP rail corridor, adjacent to the project. The Draft EIR/S includes the appropriate regional map from the *Completing the California Coastal Trail* report. The map displays the following note, indicating a CCT connecting trail along the project corridor: "Improve non-motorized travel between Arcata and Eureka." 55

The text of the *Completing the California Coastal Trail* report also includes a specific recommendation for action, as follows: "Support implementation of the Humboldt Bay Trails Feasibility Study to develop a continuous trail system around the east side of Humboldt Bay." We believe this recommendation should be acknowledged in the DEIR, but we also note that planning exercises focused on that trail alignment have revealed significant constraints to its construction. These may eventually be resolved, but the DEIR should evaluate improvement of the existing (or widened) shoulders, particularly with a guard rail separation from motorized traffic, to increase bicyclist and pedestrian safety and confidence, and to encourage increased multi-modal use of the corridor now. In this way, the shoulder accommodation of bicyclists and pedestrians will serve as a feeder link to the Coastal Trail and help to ensure the eventual project's consistency with the requirements of the Coastal Act. 31 56

With regard to longer term accommodation of the Coastal Trail within the greater boundaries of the Eureka-Arcata corridor:

Commuter vs. recreational trail modes

If designed as a universal access facility, an improved trail link between Arcata and Eureka could potentially serve several user modes: bicycle, pedestrian, wheelchair. Projected non-automotive traffic can be further categorized in terms of commuter or recreational use. Here, the most significant of these, by volume, is likely to be the commuter bicycle mode. 31

As described, the various project "build" alternatives would retain and improve the existing paved shoulders that accommodate bicycle traffic through this corridor. Increased shoulder width would likely (at least somewhat) reduce the motor 31

vehicle/bicycle collision hazard, improve the perception of safety, and thereby result in increased bicycle use for commuting between the two cities. This improvement would be consistent with Coastal Act policies that encourage provision of nonautomotive transportation, and promote measures that minimize energy consumption and vehicle miles traveled.

On the other hand, the proposed improved shoulder width for bicycle commuters raises related issues. Specifically, would the improved bike lanes adequately address Coastal Trail needs? And, would the increased width be at the expense of protected wetland habitats? 57

We believe that, to answer the first question, we need to recognize that the CCT is conceived foremost in terms of its *recreational* value. If it also provides for functional point-to-point transportation, that is an important added virtue. In this instance, the proximity of heavy motor traffic, relatively high speeds, numerous large trucks, and the fact that seaward views are blocked for much of the distance by the elevated railway fill, all detract from the bike lane's recreational value--even with the added shoulder width. From a hiker's point of view, it would be even less enjoyable. 58

Nonetheless, in terms of Coastal Act policies, an improved *commuter* bike lane is a worthy goal. But, we also support a parallel CCT link that is primarily *recreational* in character and function. It should be, insofar as feasible, location within the sight, sound and even the scent of the sea—meaning, as separated as can be from the sight, sound and aroma of automotive traffic. The CCT needs to provide for the needs of hikers, for nature study, for family outings. In other words, we need to plan for parallel trail strands, each optimized to accommodate its respective purpose. For details, see "Principles for Designing the Coastal Trail" contained in the *Completing the California Coastal Trail* report. 54

In the context of the Eureka-Arcata corridor, where might such a recreational alignment be? How could it be implemented with no more than incidental impacts to coastal wetlands? And, how would it relate to the present Route 101 Corridor Improvement project? 54

An interim alignment for the CCT recreational strand

Because it provides an elevated vantage point for the enjoyment of scenic Humboldt Bay views and marine wildlife, reclamation of the existing (but inactive) railway alignment for trail use is an obvious alternative. Of course, this location would still expose recreational users to the sight and sound of traffic on Highway 101, albeit more distantly. And, what happens when and if the rail line is restored to active service? Can the two uses co-exist? 59

Those who support restored railway service emphasize the potential benefits—for getting freight traffic off the highway, for a commuter trolley, for a tourist rail attraction (like the "Skunk" train at Ft. Bragg), or a combination of these options. The advantages of rail for energy efficiency, air quality, and highway congestion relief are oft-cited. Another advantage, noted in Amtrak's Coast Starlight route guide for its Elkhorn Slough segment in Monterey County, is that it provides a relatively non-intrusive mode for wildlife observation and nature education. Preservation of the option for revived rail use is therefore desirable with respect to Coastal Act policies. 59

In the meanwhile, until restored rail use becomes economically feasible, it could serve as the expedient location for a CCT link. This is what was done on the Monterey Peninsula, where pursuant to a Joint Powers Agreement amongst local governments, the former SPRR branch line became the extremely successful Monterey Bay Recreational Trail (now a multimodal strand of the CCT). 59

Pursuant to the terms of this JPA and Coastal Commission approval, asphalt was laid *over* the rails—which are still in place, and must be made available if rail use is revived. In fact, plans are now being made by the regional transportation agency to restore passenger rail to the Monterey Peninsula. It is anticipated that this will entail parallel realignment and fence separation for parts of the recreational trail. In much the same way, the space between the NWP rails can be filled in with boards, gravel or asphalt to provide an interim bed for the CCT. 59

The optimum permanent alignment for the CCT

In the long run, we believe the best location for the CCT recreational link along the easterly shore of Humboldt Bay would be on the seaward face of the railway fill. Ideally, the trail tread elevation would be at least 6 ft. below the top of the railway fill prism. This would ensure that the sight and noise impacts of highway traffic would not intrude on the recreational experience. 56

The trail tread could consist of fill-on-fill where the slope is sufficiently gentle, or fill-behind-bulkhead where fill encroachment on natural wetlands would otherwise be an issue. For wetland margins and crossings, modular wooden boardwalk-on-pier construction would probably be the most economical way to avoid wetland impacts. Once rail service again becomes a reality, fencing would be needed to safely separate the two uses. Interpretive stations, possibly in coordination with Humboldt Bay National Wildlife Refuge and Humboldt State University, would substantially enhance the boardwalk's recreational and educational potential. 56

Conclusion with respect to coastal trail considerations.

In conclusion, the proposed Highway 101 improvements would not materially change this range of nonautomotive (rail and trail) options. We see no harm in utilizing the existing ballast atop the inactive NWP railway fill as the *interim* CCT hiking trail (and possibly recreational bikeway) alignment along the easterly margin of Humboldt Bay. This interim use would be subject to the understanding that such recreational accommodation would be without prejudice to future options for restored rail use. 58,

The improved shoulder width on the highway would complement the recreational trail (both interim and permanent editions), by providing a route more suitable to fast-moving commuter bicyclists. And, in the event that rail service is revived before the optimum alignment for the CCT recreational strand can be realized, the improved commuter route will be available—and may have to be pressed into service as the interim recreational linkage. Therefore, with respect to all expected future trail functions, the proposed shoulder improvements represent an improvement over the existing situation. 58

Responses to California Coastal Commission:

NOTE: Caltrans responses to the December 2008 letter from the Coastal Commission can be found in the December 2008 comment section.

1. Comment noted. Prior to the Coastal Development Permit application, Caltrans staff will coordinate with Coastal staff to resolve issues discussed in this letter.

2. The Draft Environmental Impact Report/Study (EIR/S) did discuss raising the speed limit within the Route 101 Eureka-Arcata Corridor. A 65 mph speed limit post project is legally allowed for the facility type and raising the speed limit to 65 mph was considered for the following reasons:

- Uncontrolled left turn moves would be eliminated;
- Uncontrolled crossing moves at the Bracut intersection would be removed;
- All substandard length acceleration and deceleration lanes would be extended;
- The 65 mph post project speed limit of the expressway segment of the corridor would match the 65 mph speed limit of the remaining freeway segment of the Eureka-Arcata Route 101 corridor.

For Alternatives 1A, 3, and Modified Alternative 3A, which include partial or full signalization at Airport Road, lower speeds would be determined during the final project design at locations where traffic is approaching the signal at Airport Road.

After subsequent consideration, however, the 65 mph posted speed limit proposal has been dropped. However, while safety and operational improvements will be made to the at grade intersections, the expressway will retain the six locations within the project limits with right on

and off merging. Therefore the raising the speed limit to 65mph (the maximum legally allowed for the facility) was dropped from consideration. The current posted speed limit of 50 mph south of Gannon Slough Bridges and north of the Freshwater Slough Bridges would remain at 50 mph but under California law is subject to change pending the outcome of engineering and prevailing traffic speed surveys required to be conducted every seven years or extended for three years (after the seven year period) if conditions remain substantially unchanged. The California Vehicle Code section 22354 Decrease of State Highway Speed Limits, subsection (a) states:

> Whenever the Department of Transportation determines upon the basis of an engineering and traffic survey that the limit of 65 miles per hour is more than is reasonable or safe upon any portion of a state highway where the limit of 65 miles is applicable, the department may determine and declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30 or 25 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie speed limit shall be effective when appropriate signs giving notice thereof are erected upon the highway.

Under the California Vehicle Code, speed limits cannot be posted too far below the measured 85th percentile speeds. Otherwise a speed trap is set up, which is contrary to the California Vehicle Code. (Source CVC, Section 40802.)

One advantage of posting a speed limit of at least 50 mph on Route 101 is to attract and maintain through traffic traveling between Eureka and Arcata and discouraging the use of the two alternate roads linking the two cities: State Route 255 (55 mph posted speed limit) and Old Arcata Road have residential communities adjacent to the roads and are not designed for high traffic volumes.

3. Comment noted. However it should be noted that "maintenance" as used in the CCC letter suggests basically pavement related maintenance improvements, which is not entirely correct. In the Final EIR/S, the phrase resurface, restore, and rehabilitate is used to describe major maintenance improvements which include replacing the Route 101 southbound Jacoby Creek Bridge and various safety improvements. For these reasons, the RRR work was combined with the Route 101 access closure project.

4. Caltrans staff did prepare a preliminary design of Alternative 1A which includes signalization at Airport Road and three turnarounds to replace the function of a grade separation at Route 101 and Indianola Cutoff. Alternative 1A is evaluated in the Final EIR/S. This alternative was not selected as the preferred alternative for various reasons. While Alternative 1A would provide better access compared, construction of Alternative 1A would result in the following adverse environmental effects:

- Alternative 1A would have 7.2 acres of total permanent coastal wetland impacts. Although Alternative 1A would have less impact than grade separation alternatives, Alternative 1A does not serve all modes of travel as safely and efficiently as a grade separation would.
- Out-of-direction travel and delay resulting from access restrictions for bicyclists.
- Visual impacts would be more adverse compared to other proposed alternatives as approximately 30 mature eucalyptus trees along the southbound lanes would need to be removed.

5. Increased highway enforcement was obtained through an Office of Transportation Safety grant that the California Highway Patrol applied for and was granted. There are many competing needs for these grants and therefore they are difficult to obtain and cannot be counted on for addressing long term safety and operational issues. Other than applying for these grants on a regular basis there is no other mechanism for Caltrans to fund increased enforcement. Even if funding for increased enforcement were obtained, the possibility of severe collisions from left turn and crossing moves remains.

According to the Eureka Arcata Safety Corridor Seventh/Eighth Year Report the prevailing speed was measured at 56 mph (posted speed limit 50 mph) and in past years was measured at 54 or 55 mph. Prevailing speeds are increasing based on eight years of traffic engineering measurements and yet with Safety Corridor in place, the collision rate is increasing above statewide averages at Mid-City Motor World for five out of seven years for total collisions, and four out of seven years for fatal and injury collisions. For Indianola Cutoff, the collision rate was above statewide averages for six out of seven years for total collisions, and seven out of seven years for fatal and injury collisions. This demonstrates that the safety corridor is not an acceptable long term solution for this segment of highway. For more information see Group Responses I-A and I-C.

6. Caltrans staff evaluated and considered many project alternatives. Alternatives that did not meet the project need and purpose or were not feasible or would result in unacceptable impacts were dropped from further consideration.

None of the Build Alternatives would substantially impact coastal resources. All of the Build Alternatives consist of improvements to expand the existing roadway alignment without altering public coastal access or coastal vistas. Measures to minimize wetland and tree impacts within the coastal zone, such as obtaining exceptions to highway design standards for reduced lane and shoulder widths and side slopes at the proposed grade separation, have been incorporated as well as mitigating wetland impacts both on-site and off-site. For more information see 404 alternative analyses in Volume I Section 3.3.2 Wetland and Other Waters and Appendix E.

7. The traffic study summarizes results from the traffic forecast model, which predicts traffic volumes based on the travel interrelationship of the state route and the local road network between Eureka and Arcata. Route 101 serves locations beyond Eureka and Arcata, such as McKinleyville. However, the traffic forecast model uses local and regional (including and beyond Eureka and Arcata) traffic volumes to forecast projected traffic volumes on Route 101, State Route 255, and Old Arcata Road.

Old Arcata Road is a County of Humboldt road that was substantially improved since the approval of the Draft EIR/S in 2007. However, an adverse effect to the Freshwater Road/Old Arcata Road intersection would occur from Alternative 1. If Alternative 1 were constructed, this effect would be unavoidable and cannot be completely offset.

Caltrans is not responsible for Old Arcata Road, but to address potential adverse effects to Old Arcata Road and access restrictions, Alternatives 1A, 2, 3, and 3A were designed and would not adversely affect Old Arcata Road. Route 101, which serves regional and intra-state commerce,

would continue to be a more direct, faster highway compared to Old Arcata Road. None of the project alternatives would adversely affect State Route 255 or Route 101 in the northern portion of the Eureka urban core since the project would not add vehicle carrying capacity or divert traffic to these locations.

In terms of cumulative traffic impacts, the traffic forecast model takes into account planned and future development by factoring in a growth rate over time. Caltrans is aware of the City of Arcata proposal to improve the Route 255 around the 101/255 interchange location. This project has been evaluated by Caltrans staff and would be compatible with any of the Build Alternatives. The City will construct this project under an encroachment permit issued by Caltrans.

8. Caltrans staff acknowledges that the local and regional transportation systems are interconnected and problems and solutions often overlap. Route 101, while an interregional route, also serves a great number of regional commuters as shown from in the traffic volumes in the project location. However, the proposed project's specific project need and purpose is to improve safety and operations at the existing at grade intersections and implementing major roadway maintenance activities between Eureka and Arcata. Improvements at other mentioned locations are beyond the scope of this specific project purpose and need. Caltrans works with other local and regional public agencies on other projects, such as the project to improve Old Arcata Road; possible traffic calming improvements on Route 255; and improvements for pedestrians and bicyclists on Route 101 within the Eureka urban area.

9. Old Arcata Road is a local road under County's jurisdiction (not a state highway). However, Caltrans has evaluated how potential changes to Route 101 could impact Old Arcata Road. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would not adversely impact Old Arcata Road. In fact, Modified Alternative 3A is expected to improve overall traffic conditions on Route 101 between Eureka and Arcata: this should be an incentive to choose Route 101 over Old Arcata Road and State Route 255. Choosing to travel on Old Arcata Road instead of Route 101 after the Route 101 medians are closed would not likely save travel time between Eureka and Arcata for the following reasons:

1. Modified Alternative 3A includes a half signal at Airport Road and an Indianola Cutoff grade separation: these two intersections are currently among the most heavily traveled intersections within the Route 101 corridor between Eureka and Arcata. Also, the proposed Indianola Cutoff grade separation would be approximately midway between Eureka and Arcata making it a convenient and safe turnaround location. These two improvements would prevent a substantial amount of out of direction travel.
2. Route 101 has a higher posted speed limit than Old Arcata Road.
3. On Old Arcata Road, there are speed bumps, traffic circles, and a reduced speed limit between the Jacoby Creek Road and the Route 101/255 interchange in Arcata. These traffic calming elements would discourage using this segment of Old Arcata Road instead of Route 101.
4. Using Old Arcata Road would require traveling out of direction compared to staying on Route 101 and turning around at the Route 101/255 interchange. In other words,

Route 101 is a more direct and shorter north – south route between Eureka and Arcata compared to Old Arcata Road.

For the above reasons, any increase in traffic on Old Arcata Road from Route 101 after construction of Modified Alternative 3A would not be substantial.

Caltrans staff acknowledges that local, regional, and state highways require comprehensive planning. In fact, this proposed Eureka-Arcata Route 101 Corridor Improvement project was programmed through the regional transportation process.

10. Although the project cost for the 6.4 mile long stretch of roadway may appear high, about half the cost is needed for long term roadway maintenance. A high proportion of the remaining cost would offset the effect of closing the medians. More specifically the proposed Route 101/Indianola Cutoff grade separation would help minimize out-of-direction travel and thereby avoid and minimize traffic potentially diverted to Old Arcata Road. The project need and purpose of enhancing safety, traffic operations, and providing long term maintenance are interrelated and are evaluated comprehensively.

11. See Group Responses I-D, II-A, and II-E.

12. Caltrans staff acknowledges the trend of increasing single passenger motor vehicle trips contribute to development sprawl and greenhouse gas emissions. However, the proposed project is needed to enhance safety and construct major maintenance improvements. The project would not add traffic carrying capacity to Route 101 nor would it increase the posted speed limit (see response to comment 2). In addition, improving highway efficiency by minimizing traffic congestion and delay can result in substantial greenhouse gas emissions benefits as well as reducing travel delay cost. For example, if the prevailing speed on Route 101 is 50 mph, this speed would be close to the optimal speed to minimize greenhouse gas production. Finally, Modified Alternative 3A identified as the Preferred Alternative in the Final EIR/S includes a grade separation and half signal to minimize out-of-direction travel and thus would minimize greenhouse gas emissions after crossing and uncontrolled left turn moves are eliminated.

Chapter 4 of the Draft EIR/S included a discussion of climate change and greenhouse gas production in terms of statewide planning efforts, but not specifically regarding the proposed project. In addition at the time the Draft EIR/S was prepared, specific state or federal regulatory methodology for climate change impact analysis did not exist. The Final EIR/S includes a project specific analysis of greenhouse gas emissions. See response 25 for a summary of the analysis.

13. Future sea level resulting from climate change is discussed in three parts:

a. Until planning scenarios are set by the State, project specific adaptation strategies for this project cannot be proposed. For existing Route 101 at the local and regional level, sea level rise adaptation plans for climate change will be developed in a collaborative manner with other key stakeholders, such as North Coast Railroad Authority (NCRA), the Cities of Arcata and Eureka, U. S. Fish and Wildlife Service**, Humboldt Bay Harbor,** Recreation and **Conservation District,** and the County of Humboldt, to address future growth, demand and vulnerability issues. Conversely, any unilateral measures to address sea level rise can

have substantial implications for local and federal agency partners since transportation and land uses are interconnected and interdependent.

With comprehensive interagency planning and public participation, sea level rise impacts to Route 101 will be addressed though facility modifications when they become necessary. There are many options for operational procedures or future facility modifications to consider at present and in the coming decades there could be more options as technology evolves. In addition to the possibility of unforeseen future options, there could be unforeseen changes to both the human and physical environment that could further influence sea level rise adaptation option decisions.

For the above reasons, it would be premature to propose specific sea level adaptation options to protect the existing Route 101 roadway or evaluate potential impacts as part of the Eureka-Arcata Route 101 Corridor Improvement project.

However, Caltrans will comply to the maximum extent feasible, with the Sea Level Planning Federal Coastal Consistency condition.

b. The proposed Route 101 corridor roadway improvements. The need and purpose of this project is to address immediate safety and roadway rehabilitation concerns of the Route 101 corridor between Eureka and Arcata. Delaying the project to identify and incorporate sea level adaptation options and evaluating the potential impacts of these options would add several years to the process and result in much higher rehabilitation costs. In addition, most of the roadway improvements such as paving are expected to have a 20 year service life. Substantial sea level rise consequences are unlikely to occur within 25 years.

c. Proposed Route 101 corridor roadway structures. All of the Build Alternatives include replacing the southbound Jacoby Creek Bridge. Alternatives 2, 3, and Modified 3A include constructing a new grade separation structure at Route 101 and Indianola. These two structures would have a service life expectation of 75 years and will be designed to predicted sea level rise by the year 2100.

A report from the California Climate Change Center, entitled *The Impacts of Sea-Level Rise on the California Coast* predicts a 3.3 to 4.6 feet rise by the year 2100. For a 75 year bridge design life, it appears that the deck surface of the replaced bridge would fall within the expected range of sea-level rise. Within the 75 year design life of the bridge, traffic volumes are also expected to increase to where a project may be needed to increase the capacity of Route 101 between Eureka and Arcata, by adding lanes. As sea level rise and increasing traffic volumes become apparent, it is likely a project would be initiated to add width to the southbound Jacoby Creek Bridge and Gannon Slough Bridge, and replace the northbound Jacoby Creek and Gannon Slough Bridges, where elevations of the bridges could be adjusted concurrently. It should be noted that any future need to raise the elevation of the proposed replacement of the Jacoby Creek Bridge can be readily accommodated without a substantial cost.

As stated in the Consistency Certification conditions, the District 1, Climate Change Vulnerability Assessment and Pilot Study prepared by GHD (December 2014). Several strategies were identified, but additional collaboration is necessary between stakeholders before a longterm strategy is implemented. In the interim, the new infrastructure components will be designed in a way so that future SLR planning efforts will not be impeded.

14. See Grouped Response II-C for a discussion of signalizing intersections.

15. See Grouped Response II-D for a discussion of Intelligent Transportation Systems.

16. Signalization on Route 101 at other intersections between Eureka and Arcata has been reviewed and will not meet the project purpose and need because signals at those locations would create other unacceptable operational and environmental impacts. However, the half signal at Airport Road would be feasible because the intersection is the southernmost intersection and closest to the Eureka urban core, where the posted speed limit is lower. Furthermore, for Modified Alternative 3A the half signal would only stop the northbound traffic (from Eureka).

17. A protected (Class I) trail for non-motorized transit would not meet the project need and purpose and would increase wetland impact. Currently, Route 101 between Eureka and Arcata meets Class III bikeway standards. The proposed project would not adversely affect public coastal access. In fact, the proposed Preferred Alternative would improve bicyclist access and safety by:

- The Redwood Community Action Agency Humboldt Bay Area Bike Map designates the existing Route 101 intersections at Mid-City Motor World, Indianola Cutoff, Bracut, and Bayside Cutoff as "Difficult Intersections – Use caution in these areas." Traffic volume is projected to increase in the future which would exacerbate intersection conditions for all transit modes. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would eliminate uncontrolled vehicle crossing movements at these Route 101 median openings;

- Constructing a grade separation at Indianola Cutoff, approximately midway between Eureka and Arcata, to provide safe access and crossing Route 101 for motorists, bicyclists, and pedestrians;

- The proposed project also includes replacing the southbound Route 101 Jacoby Creek Bridge with a wider bridge that would include bicycle railing installed on the outside barrier and would have an 8-feet wide separated area for bicyclists and pedestrians.

Also see Group Responses I-D and II-G.

18. See Group Response III-B-2.

19. Comment noted. Caltrans will work collaboratively with local, regional, and agencies, including the Northcoast Railroad, on sea level rise issues. However, for this proposed project,

improvements are needed to address Route 101 safety and operational issues of at-grade intersection as well as preservation of the existing highway infrastructure. Impacts from climate change have been considered where new infrastructure is proposed such as the southbound Jacoby Creek Bridge and the Indianola Cutoff grade separation.

20. Section 3.40(B)(5) of the County of Humboldt Bay Area Plan states in part the following:

> "The Humboldt County Board of Supervisors shall initiate the preparation of a Scenic Route Study pursuant to the adopted Scenic Highways Element of the Humboldt County General Plan for the portion of Highway 101 between Eureka and Arcata and that portion south of Fields Landing, inclusively.
>
> The Scenic Route Study shall be prepared by the County Planning Department in cooperation with the California Department of Transportation."

Caltrans investigated removing specific billboards within the clear recovery zone and determined the cost to buy out the billboards was prohibitive. The existing billboards are outside of the Caltrans right-of-way.

21. See Group Response I-D.

22. Caltrans staff has already conducted an informal survey looking for willing business owners and have not found any willing to relocate. Route 101 between Eureka and Arcata is a heavily travelled segment of highway for the County and for that reason has high visibility and relatively convenient access.

23. The Final EIR/S includes estimates of energy consumption of all Build Alternatives using the No Build Alternative as the baseline condition in the year 2031. There are many variables that could alter energy consumption estimates such as average vehicles speeds and future fuel efficiency of vehicles. However the projected estimates are useful for relative comparisons between alternatives. The distance traveled is the most important factor determining energy consumption.

24. In terms of greenhouse gas production, it should be noted that adding additional signals within the Route 101 Eureka-Arcata Corridor would result in traffic queues at every signalized intersection. Consequently during peak travel periods there would be far more vehicles stopping, idling, and accelerating. In addition, prevailing speeds would be less than 50 mph. These conditions would result in more greenhouse gas production than without signals since the optimal constant speed of 50 mph results in the least amount of greenhouse gas exhaust. Finally long traffic queues of idling motor vehicles along with vehicles making left-turns across the through lanes would degrade bicycling conditions.

25. The calculation of greenhouse gas production during construction activities is not required by CEQA or NEPA. Project construction is a one time event spanning two to three years and is required for highway safety enhancement and long term maintenance. Caltrans is currently working on methods to reduce greenhouse gases (GHG) resulting from concrete production and other construction related activities.

In terms of GHG production after project construction, the project is based on the need to enhance safety, traffic operations, and provide long term roadway maintenance improvements. The project does not increase highway carrying capacity.

CO_2 is one of the primary greenhouse gases resulting from engine combustion and can be used as a representational metric for GHG impact assessment. CO_2 emissions were modeled for Alternatives 1, 1A, 2, 3, Modified 3A, and the No Build alternative using emission factors from EMFAC2007 and the projected vehicle miles traveled (VMTs) per day in the year 2031 for each of the alternatives. Modified Alternative 3A would have a 1% increase in GHG production compared to the No Build Alternative.

Caltrans and the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program that was published in December 2006.

The four strategies set forth by FHWA to lessen climate change impacts do correlate with efforts that the State has undertaken and is undertaking to deal with transportation and climate change; the strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and reduction in the growth of vehicle hours traveled.

26. Caltrans staff acknowledges the importance of planning for sea level rise. Although sea level rise can be anticipated, how local, regional, state, and federal agencies and governments will respond to sea level rise is difficult to predict. The project would not preclude or be incompatible with future improvements to address sea level rise. It is possible there are sea level rise adaptation options and technology that are not currently viable but will be in the future.

Regarding sea level rise and wetland impacts, Route 101 between Eureka and Arcata is an existing facility and the proposed project would be improved to address immediate needs that would result in wetland fill of relatively low value/function wetland within the Humboldt Bay watershed. The existing Route 101 roadway, along with the railroad bed, are continuous features adjacent to Humboldt Bay extending between Eureka and Arcata. An existing system of culverts, bridges, ditches, and sloughs provide bay tide and drainage between the bay and areas inland of Route 101. The proposed project consists of minor roadway improvements and would perpetuate the existing drainage system. For this reason, the proposed project would not isolate or prevent wetland from expanding inland in response to sea level rise.

27. Caltrans staff acknowledges that even a small rise in sea level with strong storms and high tidal conditions could substantially affect both local roads and State highways. However, the subject EIR/S is not the appropriate document for a discussion of possible sea rise adaptation strategies. Such strategies are being coordinated statewide as well as locally and regionally by various agencies and governments. However, the project need and purpose describes an immediate need to enhance safety and operation at intersections and implement long term roadway maintenance for the Route 101 corridor between Eureka and Arcata.

28. Section 3.2.3. Geology, Soils, Seismic, and Topography in Chapter 3 of the Final EIR/S has been revised to include additional tsunami information. Tsunami warning signs are now posted in both directions on Route 101. Route 101 between Eureka and Arcata could serve as a vital tsunami evacuation route since Route 101 leads to safe, higher ground in both directions on Route 101. The proposed elimination of uncontrolled left turn moves improve evacuation travel on Route 101 since left turns can interrupt and delay traffic flow.

29. The fill needed for the proposed grade separation will not have a significant impact. The following is an explanation by topic:

Wetland. The wetland impact would mostly occur in the Route 101 median which is generally of low value and function. Both the temporary and permanent wetland impact will be fully compensated.

Hazards. The slopes required for the grade separation will be engineered for proper soil compaction, slope, and drainage. There are hundreds of similar grade separations and interchanges in California that do not pose potential hazards such as liquefaction or sudden slope failure.

Flooding. Basically the Route 101 median functions as one continuous floodplain that extends for miles in either direction from the proposed grade separation location. Consequently adding fill material to construct the grade separation represents a negligible volume to the entire floodplain. The grade separation would be designed with appropriate drainage features to perpetuate the existing drainage patterns.

Visual. The proposed grade separation would change the visual setting of the immediate area and would partially obstruct views of Humboldt Bay for travelers westbound on Indianola Cutoff. However, at the grade separation the bay view would improve for travelers on both northbound and southbound Route 101. Moreover, the change would not be substantial since the Indianola area is already developed and the grade separation would have very gradual elevation rise and descent extending approximately a half mile: for this reason, the proposed grade separation would not resemble most urban interchanges such as the Route 101/299 freeway interchange in Arcata. Once the grade separation is constructed it would be landscaped to blend in with the surrounding area.

Water quality and erosion. The slopes of the proposed grade separation will be properly graded, vegetated and incorporate drainage features to avoid erosion and affecting the water quality of surrounding receiving waters.

Diking effect. The proposed grade separation and the supporting fill material would not connect to any existing dike and drainage features designed as part of the grade separation would perpetuate the existing drainage patterns.

30. The evaluation of existing roadway embankments was misstated in the Draft EIR/S and is not repeated in the Final EIR/S. The slope stability of the existing roadway embankments do not require evaluation since the slope face heights are relatively low (less than 15 feet) and do not have a history of slope failure within the project limits.

The project design is not expected to substantially change based on preliminary studies; substantial slope instability or high liquefaction potential requiring remediation or redesign are not anticipated. New roadway and grade separation fill slopes will be designed to meet accepted design standards.

31. Before addressing the project effects on bicyclists and pedestrians, the existing Route 101 situation needs to be explained:

- Currently bicyclists turning left or crossing Route 101 at the existing medians must cross multiple traffic lanes and wait in unprotected medians while avoiding motor vehicles that are also using the same median to complete crossing and left turn moves from the same and other directions. It is likely many bicyclists and pedestrians are discouraged from using the existing medians for this reason alone.

- Most commuting bicyclists tend to ride between Eureka and Arcata and not cross or turn left across Route 101 while traveling on Route 101 because most residences and jobs are located within these two cities. Recreational bicyclists on Route 101 are also not likely to cross or turn left on Route 101 since there are no improved public coastal/bay access points from Route 101 between Eureka and Arcata. For these reasons, and because of the aforementioned safety concerns, bicyclists and pedestrians are seldom seen using the medians to cross or turn left.

- There are no sidewalks on Route 101 between Eureka and Arcata. Also both sides of Route 101 between Eureka and Arcata are undeveloped. For these reasons, there are few pedestrians traveling on Route 101.

After the proposed Preferred Alternative (Modified Alternative 3A) is constructed, uncontrolled left-turn movements would be eliminated; a half signal at Airport Road and a grade separation at Indianola Cutoff would provide safer crossings and left-turns than the existing uncontrolled medians. In addition, the Indianola Cutoff is located approximately midway between Eureka and Arcata, which provides a logical turn around location. It is acknowledged that Modified Alternative 3A would eliminate four of six existing median openings for bicyclists to use resulting in a small proportion of bicyclists traveling out of direction; however, the overall benefits would outweigh the drawbacks. As traffic volumes increase in the future especially during peak travel periods, the proposed improvements of Modified Alternative 3A would have increasing benefit.

Overall, there are trade offs to consider and weigh; no one alternative will completely resolve all issues for all motorists and non-motorists; even with an unlimited budget, frontage roads and bicycle lanes could be constructed, but would require filling wetlands and potentially adversely affecting the adjacent wildlife refuges. Modified Alternative 3A would provide a substantial safety benefit for the vast majority of both motorized non-motorized transit while balancing cost and wetland impact considerations.

32. Potential project impacts to listed and sensitive species were evaluated in the Draft EIR/S in accordance with state and federal environmental policies and regulations. The U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Aeronautics Administration (NOAA) Fisheries generally do not evaluate Biological Assessments (BAs) during the Draft EIR/S phase

in which there are multiple project alternatives; instead they usually request the submittal of a BA after a preferred alternative is selected. During the preparation of the Final EIR/S, BAs were submitted to both the USFWS and NOAA – Fisheries in accordance with the Section 7 of the U. S. Endangered Species Act consultation process. A Biological Opinion (BO) was issued on November 22, 2010, from the USFWS, which included measures to avoid and minimize harm to the tidewater goby during construction. The BO concluded that the proposed project is not likely to jeopardize the continued existence of the goby and is not likely to destroy or adversely modify critical habitat.

A letter of concurrence from NOAA Fisheries was issued on January 22, 2011. NOAA Fisheries completed the Federal Endangered Species Act with a letter summarizing the informal consultation process instead of issuing a BO. The letter concluded the proposed project may affect, but is not likely to adversely affect threatened Coho salmon, Chinook salmon, steelhead, green sturgeon, or their designated critical habitats. In addition, NOAA Fisheries concluded the potential project would adversely affect Essential Fish Habitat for Chinook and Coho salmon; however the project effects would be minor.

33. Special status species that could potentially be affected by project construction consist of the Brown Pelican, Pacific eulachon and longfin smelt; however it is unlikely these species would be present during construction activities. See response to comment 32 for information regarding threatened and endangered species.

The southbound Jacoby Creek Bridge replacement work would impact approximately 1,680 square feet of Lyngbye's sedge along Jacoby Creek. However, coordination with California Department of Fish and Game has determined that impacts to this species due to the bridge replacement would not be substantial if appropriate minimization measures are implemented. These minimization measures include the placement of protective ½ to 2-inches thick metal/wood/rubber sheets on top of the stands of Lyngbye's sedge where equipment access is required. These pads will be large enough to prevent the equipment tracks/wheels from rutting and compressing the soil and uprooting or destroying the sedges. The disturbed sedge is expected to fully recover within a few seasons. With the exception of Lyngbye's sedge, the proposed project would avoid impacts to sensitive plant species.

34. Caltrans staff consulted with U.S. Fish and Wildlife Service, the National Oceanic and Aeronautics Administration – Fisheries Service, and the California Department of Fish and Game regarding the proposed tide gates. At locations where there are currently no fish present and no fish would likely be present in the future, it was decided that fish passable tide gates would not be necessary. The table below shows the location of the proposed tide gates. Note that tide gates with adjustable doors are fish passable.

	PM/dir	Location	Existing	Proposed
TIDE GATES	80.0/NB	1. Jacobs Ave	18" round gate	1- standard or tideflex
	80.88/NB	2. Airport Ave	double 5'x5' gates	1- standard or tideflex, 1- top-hinge w/adjustable door
	81.13/NB	3. Simpson Sawmill	48"x 36" gate	1- standard or tideflex
	83.6/NB	4. Brainard Slough	24" round gate	1- top-hinge w/adjustable door
	84.26/SB	5. Old Jacoby Creek	5'x5' gate	1- top-hinge w/adjustable door
	84.93/NB	6. Gannon Slough	triple 5'x6' gates	1- top-hinge w/adjustable door, 2- standard or tideflex

In terms of future sea level rise, the proposed tide gates will be designed and installed at the same locations for the existing tide conditions because the existing tide gates need to be replaced in the immediate future. As mentioned in response 26, future sea level rise adaptation strategies and options will not likely be decided on by affected public agencies for many years.

35. Since the Draft EIR/S was approved, Caltrans has redesigned the replacement of the southbound Jacoby Creek Bridge as a single span bridge and consequently pile driving in the creek channel will be avoided. In addition, impact pile driving will not be used during construction outside of the channel.

36. The proposed southbound Jacoby Creek Bridge would be a single span bridge slightly higher than the existing bridge, and has been designed to withstand sea level rise projected in *The Impacts of Sea-Level Rise on the California Coast* by the California Climate Change Center, which predicts a 3.3 to 4.6 feet rise by the year 2100. Consequently, no further bridge designs are warranted.

37. Since the approval of the Draft EIR/S in 2007, the conceptual mitigation plan has been revised to emphasize wetland restoration. Note that wetland preservation and enhancement are proposed as mitigation for temporary wetland impacts.

38. Since the Draft EIR/S was approved in 2007, the proposal for concrete median barrier has been dropped.

39. Since the Draft EIR/S Caltrans has eliminated the majority of the proposed eucaplytus tree removal. In addition to the technical review by staff biologists and landscape architects, on December 7, 2007 Caltrans staff reviewed the trees in the corridor with Michele McKeegan and Ron Kuhnel representing the civic organization Keep Eureka Beautiful and revised plans accordingly. Refer to the plan sheets in Appendix A for tree removal locations.

Caltrans recognizes the value of the tree landscape planted in the corridor, however, public safety has the highest priority and mature trees are generally unyielding fixed objects in the event of a vehicle collision. Caltrans will incorporate all feasible and practicable means to avoid and minimize tree removal. The trees within the clear recovery zone on the east side of the roadway were evaluated individually for scenic value. Based on scenic quality, size, and distance to the roadway, some trees within the clear recovery zone will remain. Guardrail is an option to protect certain trees, however, guardrail would add another visual element; the length required would extend far beyond the trunks of the trees. In addition, the guardrail itself is a fixed object that needs to be minimized in the clear recovery zone.

40. This project is still in the preliminary design stages and committing to specific Best Management Practices (BMPs) to protect water quality would be premature. The DEIR/S and FEIR/S include conceptual evaluation and measures to minimize or avoid substantial harm. Although there are sensitive resources throughout the proposed area of construction, the topography and roadway characteristics are not unusual. BMPs will be much more specific during the resource agency permit application process when the project design is further refined.

41. Calculating ground areas that would be disturbed during construction and estimating the net gain of water impervious ground surface (usually from paving or a new roadway structure) are the standard practices for reporting potential erosion/water quality effects in accordance with the California Regional Water Quality Control Board.

42. At the initial project planning stages, the soil disturbance area to construct the project was much higher. In an effort to minimize wetland impact and soil disturbance, Caltrans reduced the initial project scope through design refinements and elimination of project features, which resulted in an overall impact reduction.

Short term soil disturbance effects will be avoided or minimized through implementation measures contained in the Caltrans construction standard specifications, construction contract special provisions, public resource agency permit requirements, and the Storm Water Pollution Prevention Plan (SWPPP). Construction related impacts are addressed in the SWPPP prepared by the contractor as required by contract specifications and the Caltrans Statewide NPDES Permit Order No. 99-06-DWQ.

A project specific SWPPP with Water Pollution Control Drawings showing locations and scheduling of Best Management Practice (BMP) installations will be prepared prior to construction.
Temporary Construction BMPs include soil stabilization, sediment control, wind erosion control, tracking control, non-storm water management, and waste management.

To minimize the potential adverse impacts from sediment (a primary pollutant of concern), permanent BMPs will be installed as appropriate according to the design criteria established in the Caltrans Statewide Storm Water Management Plan (SWMP, May 2003). Planting native vegetation is an example of a permanent BMP that is included in the proposed project.

43. Contaminants generated by traffic, pavement materials, and airborne particles that settle on, and adjacent to the roadway, may be carried by runoff into receiving waters; however, there should be no post project increase in the pollutant loading over the existing condition as the project is not intended to generate an increase in traffic volume. The existing vegetated slopes that provide biofiltration treatment of storm water runoff will be perpetuated. The area climate, soils and slopes provide near ideal conditions to sustain dense vegetation growth for biofiltration treatment. The remaining vegetated slopes and new vegetated slopes after construction will still perform adequate biofiltration for storm water runoff. The project will result in a net increase in biofiltration treatment BMPs by creating new biofiltration BMPs in the vicinity of the Indianola grade separation by realignment of the roadway and removing existing paved median crossings. With the inclusion of BMPs, the proposed project is not likely to degrade water quality from the pre-project condition. Also see responses 44, 45, 46, 47, and 48.

44. All construction contractors and subcontractors are required to adhere to the following in the Caltrans 2010 Standard Specifications which includes the following two sections that minimize vegetation removal:

Section 5-1.36 PROPERTY AND FACILITY PRESERVATION

Preserve property and facilities, including:
1. Adjacent property
2. Department's instrumentation
3. Environmentally Sensitive Areas
4. Lands administered by other agencies
5. Railroads and railroad equipment
6. Roadside vegetation not to be removed

Section 5-1.36B Landscape

If you damage plants not to be removed:
1. Dispose of them unless the Engineer authorizes you to reduce them to chips and spread the chips within the highway at locations designated by the Engineer
2. Replace them

In addition to the Standard Specifications Caltrans Environmental Staff will be monitoring and meeting with the Resident Engineer during construction to minimize vegetation disturbance or removal.

45. The construction contract will include a combination of Best Management Practices during construction with planting native vegetation. In addition, the construction contractor will be directed to restore the roadway slopes as close to original grade as possible where appropriate.

46. An increase in impervious areas would typically cause an increase in the peak flow and higher runoff volumes that could lead to channel scouring and bank erosion. The result could increase sediment and turbidity in receiving waters. Due to the site's flat terrain and predominate sheet flow drainage patterns on to vegetated slopes, the 7% increase in impervious surface created by the project will not likely create channel scouring or bank failures. The project area receiving water bodies are tidal influenced and therefore will not be impacted from hydromodification; thus, a hydromodification analysis or mitigation for hydromodification is not required for this project (confirmed with the NCRWQCB on January 28, 2010).

Any potential adverse effects will be avoided by implementing measures to minimize harm as discussed in responses 40, 41, 42, 43. Modified Alternative 3A would result in an increase of approximately 0.8 acres for the grade separation, an increase of approximately 0.8 acres for the half signal, and an increase of approximately 2.6 acres for the extending acceleration and deceleration lanes. Although up to 5 acres or 7% of new paved (impervious) area would result from constructing Modified Alternative 3A, the new pavement would be spread over several miles of mostly narrow strips adjacent to the existing roadway. For Modified Alternative 3A post-construction vegetated bioswale water quality treatment areas would exceed pre-construction bioswale treatment areas. The existing bioswales that separate the pavement from existing wetlands exceeding 15 feet provides approximately 17.4 acres of treatment. The post construction bioswales that separate the pavement from existing wetlands provides

approximately 18.1 acres of treatment, thus minimizing the impact of the hydromodification of increased paved surfaces.

Any one of the Build Alternatives would result in only a negligible net increase in paved area compared to the overall existing Route 101 roadway.

47. Caltrans evaluated the potential loss of biofiltration and resulting water quality effects. Although several acres of wetland would be permanently affected by any of the Build Alternatives, the remaining wetland would still effectively retain biofiltration properties sufficient to avoid substantial water quality problems. The wetland impacts would occur over several miles of narrow strips adjacent to the roadway. Because of the relatively flat slopes within the project area and negligible increases in sheet flow, no increase in channel scouring is anticipated.

With regulatory control measures currently in place and implementation of BMPs, this project is not likely to adversely impact water quality. Sediment will be the primary constituent of concern during and following construction. During construction, the potential for sediment transport from the project work area and potential for non-storm water releases will be avoided or minimized through the implementation of a project specific SWPPP. After construction, storm water conveyance systems and permanent erosion control measures will be maintained in compliance with the Caltrans SWMP. Because of the predominate sheet flow drainage patterns and abundance of vegetative slopes and swales, combined with a climate to sustain vegetation, existing biofiltration treatment can be perpetuated. These BMPs have proven to be effective for reducing impacts to water quality from storm water runoff to non-significant levels.

48. The combined effect of wetland loss and increase in impervious service were evaluated simultaneously and found not to be substantial for reasons stated in responses 29, 40, 42, 43, 45, 46, and 47. The project area receiving water bodies are tidal influenced and therefore will not be impacted from hydromodification; thus, a hydromodification analysis or mitigation for hydromodification is not required for this project (confirmed with NCRWQCB staff members Mona Dougherty and Jeremiah Puget in a meeting with Caltrans staff on January 28, 2010).

49. Sheet-flow from the roadway will be perpetuated after project construction. None of the Build Alternatives include constructing new curbs, dikes, or ditches that would concentrate and direct run-off except at locations where the accumulated run-off needs to be conveyed with culverts across and underneath the Route 101 roadway.

50. The proposed grade separation would not substantially visually alter the coastal setting for several reasons:

- The existing Route 101/Indianola Cutoff area is already developed including a mini storage; a RV retailer located in a defunct drive in theatre (deteriorating movie screen still in place) a Cash & Carry Grocery store and a church. The setting is not a pristine setting.
- There are no public bay access points within two miles in either direction of the proposed grade separation location from which to view the proposed grade separation.

- The proposed grade separation would not obstruct bay views since other than public roads, there are no public vantage points that would be behind the proposed grade separation. In fact, most of the public views of the bay would be from Route 101 and those bay views would be enhanced by the elevated viewpoint from Route 101.

- The proposed grade separation would connect a rural local two-lane County road (Indianola Cutoff) from only one direction to a four-lane expressway (Route 101 is not a freeway at this location).

- The proposed grade separation would have a very gradual elevation rise and descent extending over approximately a half mile and there are no "fly over" connector ramps: for these reasons, the proposed grade separation would not resemble most urban interchanges such as the Route 101/299 freeway interchange in Arcata. The proposed grade separation is a compact diamond configuration and much smaller than the recently completed Alton Interchange at Route 101/36 in Humboldt. The proposed interchange at Indianola Cutoff would instead be similar in appearance to the Route 101/Kenmar Road interchange in Fortuna. The California Coastal Commission approved a coastal development permit in 2008 for the Route 101 interchange at Alton.

- Once the grade separation is constructed it would be landscaped to blend in with the surrounding area.

Overall, the small-scale grade separation would proportionately match the surrounding commercial and rural setting.

The existing billboards adjacent to Route 101 are not within the Caltrans right-of-way; consequently Caltrans does not have the authority to order billboard removal.

51. A comprehensive visual study was prepared for the project and is summarized in the Final EIR/S. The study does evaluate temporary visual effects such as discussing appearance of the grade separation immediately after construction and after landscape planting establishes. The Final EIR/S will also include visual simulations of the proposed Route 101/Indianola Cutoff grade separation as well as tree removal. The visual simulation of the grade separation would include the placement of the 390,000 cubic yards of fill. The proposed roadway lighting would not change appreciably from the existing roadway lighting. Since the Safety Corridor signage would be removed after the medians are closed, there would be a net reduction of roadway signs. The project does not include any concrete medians or soundwalls. Modified Alternative 3A does include an 8-feet high retaining wall near the industrial area of the Airport Road/Jacobs Avenue intersection; but it would not be highly visible from Route 101. Measures to minimize visual impacts include planting trees and shrubs.

52. Mitigation for improving growth related effects was not included as part of this project because the Route 101/Indianola Cutoff is already developed and the proposed project would not remove the only major obstacle to growth: growth is possible, but not likely as a result of project construction.

53. Construction of any large scale retail business, such as Walmart, would be considered intensification in a location that is currently zoned for commercial use. Caltrans has stated that

intensification of the existing land use is possible with or without the construction of a grade separation. However, a transportation improvement alone would remove the only major constraint to development intensification: in addition to transportation improvements, intensive commercial development in this area would require improved water service, sewer expansion, and coastal permits.

54. Route 101 currently provides public access along Humboldt Bay between Eureka and Arcata for both motorists and bicyclists. Caltrans right-of-way does not currently extend to the bay shoreline and the proposed project does not include any improvements that extend to the shoreline. The North Coast Railroad Authority owns most of the right-of-way between Route 101 and the bay. A separate coastal trail for non-motorized vehicles and pedestrians would not meet the project need. However, Caltrans staff has participated in Humboldt Bay trail meetings and to the maximum extent feasible, designed the proposed project to be compatible with future trail development. In addition, the proposed project would enhance safety for all travelers as well as provide improvements for bicyclists.

55. As discussed in response to comment 31, the proposed project would enhance non-motorized transit along the Route 101 corridor between Eureka and Arcata while balancing public safety, traffic level-of-service, and access for all transportation modes.

56. ***Completing the California Coastal Trail*** **recommendation has been added to the Final EIR/S. See Group Response II-G.**

57. In 2012 Caltrans restriped the Route 101 roadway to provide consistent 10-feet wide outside shoulders in both directions; the restriping avoided the need to widen the roadway and fill wetland.

58. Bicycling along the Route 101 shoulder would not likely be ideal for most weekend recreational bicyclists, however, on both sides of Route 101, there are no parked vehicles and most of the corridor provides open space, bay, and agricultural views to travelers.

59. The railroad within the Route 101 corridor is owned and managed by the Northcoast Railroad Authority. In general, Caltrans coordinates and supports multi-modal transportation—including rail transit. Caltrans does not have a position or unilateral authority on the use of railroad right-of-way for non-railroad uses. The Humboldt County Association of Governments is the primary regional agency that carries out inter-modal planning and coordination. Caltrans regularly attends HCOAG planning meetings.

STATE OF CALIFORNIA -- THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

December 19, 2008

Kim Floyd, Project Manager
Caltrans, District 1
P.O. Box 3700
Eureka, CA 95502-3700

SUBJECT: Eureka-Arcata 101 Corridor Safety Improvement Project; Public hearing December 3, 2008 & Release of Additional Alternatives Information, Draft EIR

Dear Ms. Floyd:

Thank your for the opportunity to comment on the modified alternatives for the Eureka-Arcata Route 101 Corridor Improvement Project. Commission staff has previously provided comments on the Draft EIR for the Eureka-Arcata 101 Corridor Safety Improvement Project (a copy is attached for convenient reference, Attachment 1). We have discussed the new project alternative identified by Caltrans this fall and attended the Caltrans Project Design Team meeting regarding the project as well. We understand that Caltrans held a public meeting on the new "Michigan Left" (turnaround) alternative December 3, and is accepting additional comments regarding the new information until December 20th.

The presentation of additional alternatives includes only two different alternatives than those discussed in the DEIR/EIS. We reiterate the concern expressed in our comments on the Draft EIR/EIS that an adequate range of project alternatives has not yet been identified or evaluated, which is further discussed below. Commission staff continues to believe that an as-yet unaddressed alternative should be analyzed in the final EIR that would maintain median crossings, but make them safer at peak hours through the use of strategically operated traffic lights, along with retaining a 50 mph speed limit (or less in some portions of the corridor, to reduce collision potential). We believe this alternative may better address the overlapping needs of motorists, bicyclists and pedestrians. 1 2

In addition, the information publicized about the additional alternatives presented also appears to amend the "No Build" alternative to include median closures. The DEIR does not include an analysis of the impacts that would arise from closure of medians in a No-Build Alternative. Such action would be a different project under CEQA, would raise a range of issues under the Coastal Act (impacts to coastal access, hazards, energy/greenhouse gas emissions, visual resources, wetlands and sensitive habitats, including wildlife corridors, etc.) Commission staff notes that the brochure prepared for 3

Caltrans for the December 3, 2008 hearing erroneously states under "No Build" Alternative, on page 1 of the brochure.

> *"...No Build: No modifications to the existing alignment or access for this project. Other safety-related projects (most likely median closures) would continue as necessary. The "No Build" alternative does not satisfy the purpose and need of the project."* (Caltrans brochure, December 3, 2008, page 1) [emphasis added]

We understand that many of the project elements in both the previously identified alternatives and the new alternatives are being designed to gain STAA truck route status in the Eureka-Arcata corridor. STAA improvements have not been identified as part of the project purpose and require analysis for individual and cumulative impacts. Upsizing the turnarounds, acceleration and deceleration lanes, and closing medians for the sake of operational improvements that are key to gaining STAA truck route status in the Eureka-Arcata section of Highway 101 may affect the feasibility of providing safe, efficient access to the corridor for bicyclists and pedestrians. The DEIR should be amended to address the impacts of designing the project to accommodate STAA truck route status. 4

We also want to point out that there have been significant changes in the context within which this project arises since the release of the Draft EIR in 2007, and these changes need to be taken into account in Caltrans' response to comments received on the DEIR/EIS before finalizing the document.

- **Release by the North Coast Railroad Authority (NCRA) of draft Rails-with-Trails Guidelines.**

  The NCRA Guidelines (see also a copy of the Coastal Commission staff letter of comment, Attachment 2), if adopted, create significant feasibility concerns for the location of any rail-with-trail project in the NCRA right-of-way. How does this relate to the Draft EIR for the Eureka-Arcata 101 Corridor? Caltrans has consistently pointed to the NCRA corridor as the preferred option for a separated bike/pedestrian path and has discounted the need to provide a separated bike/pedestrian path or a crash-rail separated corridor for bicyclists and pedestrians within the 101 corridor project. For example, although the Draft EIR contains minimal explanation of the proposed project's impact on coastal access, Page 99 of the Caltrans Draft EIR states with regard to development of a Class I (separated by rail or distance) bikeway and pedestrian facility, which Caltrans concedes would become part of the California Coastal Trail if constructed: 5

  > *"... The Humboldt County Association of Governments in association with other public agencies and organizations, has been meeting to discuss the*

> *feasibility of a separate multi-use trail between Eureka and Arcata. The primary options include locating the trail on, or adjacent to, the existing North Coast Railroad bed (parallel and west of the existing Route 101 roadway.)* (DEIR page 99, emphasis added)

Commission staff further notes that the Humboldt Bay Bicycle Commuters Association held a public forum regarding bicyclist safety on December 8, 2008. It was widely reported in the months previous to that meeting that local bicycle commuter Greg Jennings was struck and killed while riding his bicycle on the shoulder of Highway 299 between Arcata and his home in Blue Lake, on August 25, 2008. Mr. Jennings was an experienced commuter, wearing full safety gear, riding on the far right of the shoulder, on a clear day, during daylight. He was struck by a car that crossed the median and ran into him in the paved shoulder, throwing Mr. Jennings over 170 feet and killing him instantly according to the California Highway Patrol. Mr. Jennings' death illustrates the need for a separated bicycle/pedestrian corridor, separating non-motorized vehicle users from traffic. 6

Considering the feasibility issues raised by NCRA in the draft Trails-with-Rails Guidelines noted above, in combination with the demonstrated hazards present for bicycles (and pedestrians) when sharing the undifferentiated paved road shoulder, Commission staff continues to request that Caltrans not finalize the DEIR until opportunities for providing a separated bike-pedestrian path or a guard-rail separated paved bicycle/pedestrian corridor that is safe and efficient for non-motorized travelers within the transportation corridor between Eureka and Arcata has been fully explored and evaluated. 7

- **Eucalyptus Windrows Identified by Community as Heritage/Historic Landscape**

Another change in context that needs to be considered in Caltrans' response to DEIR/EIS comments is that the community has identified the eucalyptus windrows within the corridor as having Historic Landscape status. Numerous speakers identified significant concern in this regard at the December 3, 2008 public meeting for this project held by Caltrans. Caltrans staff in District 1 should consult the guidelines of Caltrans and others, such as "General Guidelines for Identifying and Evaluating Historic Landscapes," published by the Environmental Program, California Department of Transportation (Sacramento) dated February, 1999. Commission staff recommends that Caltrans incorporate such analysis, and preservation plans if historic landscape status is attached to the windrow, in the final EIR. Re-circulation of such an amendment document would help to address the significant public concern that the status of the windrow, and its importance to community character and heritage, has been overlooked so far. 8

Thank you for the opportunity to offer these additional comments. Given the short window of comment opportunity, we have not addressed other concerns that continue from our previous comment letter, which stands as is, of course. Please contact Melanie Faust of our Eureka office if you have questions.

Sincerely,

Robert S. Merrill
North Coast District Manager

Attachments:

Attachment 1: Coastal Commission staff letter of comment, dated September 28, 2007, to Caltrans regarding the Draft EIR for the Eureka-Arcata 101 Corridor Safety Improvements

Attachment 2: Coastal Commission staff letter of comment, dated December 15, 2008, to North Coast Railroad Authority regarding the NCRA's draft Rail-With-Trail guidelines

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Responses to California Coastal Commission:

1. Options to only control traffic during peak periods were analyzed in the Caltrans Value Analysis process during the early environmental document preparation phase. In the case of keeping the medians open with traffic control, left turn moves (the single most important collision factor), would remain at all median crossings. Without closing medians, the potential for severe broadside collisions could still occur and the project need and purpose would not be met; consequently alternatives that did not close the medians were dropped from further consideration. Alternatives 1A, 3, and Modified Alternative 3A include at least half signalization at Airport Road. Partial or full signalization only at Airport Road would be feasible in terms of traffic safety and operations because it is near the south end of the Route 101 Eureka-Arcata corridor.

2. Please refer to responses to the 2007 Coastal Commission letter.

3. The No Build has not been amended since the Draft Environmental Impact Report/Statement (EIR/S) was approved and circulated to the public in 2007. As stated clearly in the brochure, the No Build Alternative does not include any "actions." The brochure states that other actions would continue (separate from the proposed project) such as routine maintenance activities, and if warranted, safety enhancements such as median closures.

4. Currently Route 101 between Eureka and Arcata already meet standards for Surface Transportation Assistance Act (STAA) trucks. Also STAA trucks currently travel the Eureka-Arcata Route 101 Corridor since STAA trucks are allowed to travel on Route 101 between Eureka and the Oregon coast. Since the proposed project would not change the existing Route 101 STAA truck access, an analysis of STAA trucks is not required in the EIR/S.

5. The proposed project would not adversely affect public coastal access; consequently the need to compensate for public coastal access impacts by constructing a separated, non-motorized trail is not proposed as part of the proposed project. For this reason the NCRA Guidelines would not affect the proposed project or trigger the need to revise the EIR/S.

6. Caltrans staff acknowledges that a separated trail for non-motorized transit would enhance safety for bicyclists. Caltrans will continue to work with other public agencies on the coastal trail in fulfillment of the Federal Coastal Consistency condition.

7. A protected (Class I) trail for non-motorized transit would not meet the project need and purpose and would increase wetland impact. Currently, Route 101 between Eureka and Arcata meets Class III bikeway standards. The proposed project would not adversely affect public coastal access.

8. Much of the eucalyptus tree removal concern has been addressed by redesigning the project to realign the Route 101 southbound lanes to avoid eucalyptus tree takes on the west side of Route 101; however only Alternative 1A, not the Preferred Alternative, would remove Eucalyptus trees on the west side of the roadway.

A qualified architectural historian evaluated and discussed in detail the eucalyptus tree row west of Route 101 for their potential as historic resources, and concluded, as concurred by State Historic Preservation Officer, that the trees did not stand alone as eligible for the National or California Register, or as part of a historic landscape. It is Caltrans' finding that the trees still do not meet the criteria for National or California Register eligibility, either alone, or as part of a historic landscape. The possibility of the trees contributing to a historic corridor has been negated by the lack of integrity the corridor otherwise possesses in relation to its period of significance.

Many comments stated that the road and its adjacent items (trees) should have been considered as a historic (cultural) landscape. Caltrans did consider the trees in this context, in accordance with the criteria set forth in National Register Bulletin 18 (Guidelines to Evaluate and Nominate Designed Historic Landscapes), which states:

> *A designed historic landscape is defined as a landscape that has a significance as a work of art; was consciously designed and laid out by a master gardener,*

> *landscape architect, architect or horticulturist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition; has historical association with a significant person, trend, event, etc. in landscape architecture; a significant relationship to the theory or practice of landscape architecture.*

The potential for this stretch of roadway to be considered a historic (cultural) landscape was considered and Caltrans determined that it does not meet any of the criteria to be considered an eligible historic landscape. As the results of Caltrans cultural resources studies for the proposed project concluded, the roadway along Humboldt Bay has been substantially altered as result of the widening of the road from a two-lane road (its historic context) to a four-lane road with interior median. This change effectively compromised the roadway's historical integrity in that it no longer retains the engineering and design features that it possessed when originally designed and built. Thus, Caltrans determined that the roadway cannot be considered a historic landscape.

State of California — The Resources Agency

Memorandum

To: Ms. Kim Floyd, Project Manager
Department of Transportation - District 1
Post Office Box 3700
Eureka, California 95502 - 3700

Date: September 28, 2007

From: GARY B. STACEY, Regional Manager
for Northern Region
Department of Fish and Game
601 Locust Street
Redding, California 96001

Subject: Eureka – Arcata Corridor Improvement Project – Draft EIR/EIS SCH # 2001092035

The Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Report/Statement (DEIR/S) for the above-referenced project. The project proposes a number of improvements to the Route 101 corridor from just north of the Eureka Slough Bridge in Eureka, to the 11th Street Overcrossing in Arcata. Three construction alternatives and a no-build alternative are analyzed in the DEIR/S. Alternative 1 would result in the following improvements within the project limits: 1

- Extend or establish right-side acceleration and deceleration lanes at Cole Avenue, Mid-City Motor World, the Simpson sawmill, Indianola Cutoff, Bracut, and Bayside Cutoff; existing Route 101 median crossings at these locations would be permanently closed.
- Install thrie-beam median safety barrier and a 5-foot wide asphalt concrete paved weed barrier within the Route 101 median between Eureka Slough and Airport Road.
- Replace the existing curb and asphalt-concrete shoulder with 8-foot paved shoulders on ramps at the Route 101/255 interchange and South G Street in Arcata.
- Replace the southbound Route 101 Bridge over Jacoby Creek.
- Widen the Route 101 northbound Jacoby Creek and Gannon Slough Bridges, install standard bridge rail with a bicycle railing on the outside. 2
- Add or replace roadway lighting at Cole Avenue, Indianola Cutoff, Bracut, Bayside Cutoff, South G Street, and the Route 101/255 interchange.
- Replace all existing tide gates adjacent to Route 101 within the project limits.
- Remove existing trees within the corridor that are within the 30-foot clear recovery zone.
- Replace thrie-beam median barrier with median paving and a concrete safety barrier from South G Street to the 11th Street overcrossing in Arcata. 3
- Remove existing "Safety Corridor" signage and increase the posted speed limit on Route 101 to 65 mph north of Mid-City Motor World. 4

Alternative 2 would include all the elements of Alternative 1, with the exception that a compact diamond interchange would be constructed at Indianola Cutoff. Alternative 3 would include all of the elements of Alternative 2, with the exception that Airport Road

would be re-aligned and a signalized intersection provided with Route 101. In addition, a continuous northbound lane would be added from Cole Avenue to Mid-City Motor World to minimize traffic backups on Route 101 caused by the signalized Airport Road intersection. Alternative 7, the No-Build Alternative, would retain the current highway configuration within the project limits. The reduced speed limit, flashing warning lights and daytime headlight signage associated with the safety corridor would remain in place under this alternative.

The Department offers the following comments on the project pursuant to Section 15086 of the California Environmental Quality Act (CEQA) Guidelines in our role as a responsible agency.

Wildlife Habitat

Route 101 within the project limits is constructed at the interface between the estuarine tidal wetlands of Humboldt Bay to the west, and the palustrine emergent wetlands that occupy areas of diked former tidelands to the east. The DEIR/S characterizes the habitat within the project study area (Pages 222 and 233) as dominated by ruderal grassland, consisting mostly of non-native grasses and forbs along the shoulders of the highway and in the median. While non-native species are present within portions of the right-of-way, areas of tidal and freshwater wetlands are also extensive and provide suitable habitat for a wide variety of native plants and animals. In particular, wetlands and sloughs within the right-of-way are regularly used as foraging habitat by wading birds such as great blue herons, egrets, and black crowned night herons. Raptors such as northern harriers, kestrels and white tailed kites also forage in the upland habitats along the highway. Because of the sensitive location of the existing highway, it is important that impacts to wildlife habitat be minimized to the greatest extent possible. 5

The Department concurs with the general avoidance and minimization measures outlined on Page 230 of the DEIS/R. Delineation of Environmentally Sensitive Areas (ESAs), both on the plans and in the field, will be particularly important in limiting the area impacted by construction activities. In our experience, construction monitoring by a qualified biologist is also essential to minimize habitat impacts. Impacts to nesting bird species can be minimized by conducting clearing and grubbing activities outside the nesting season as proposed on Page 230. The DEIR/S is inconsistent in its discussion of measures to avoid impacts to nesting swallows during construction. On Page 230, the document indicates that measures to avoid impacts to swallows nesting on the Jacoby Creek Bridges and the northbound Gannon Slough Bridge will be taken "if appropriate." A more definite commitment to this measure is made on Page 285, stating that "measures such as exclusionary netting or nest removal every 2-3 days will be implemented during the breeding season." The DEIR/S should clearly state that take of occupied nests will be avoided during construction. 6

Coastal Wetlands

Coastal wetlands, including tidal marsh, tidal sloughs and diked former tidelands, occur on both sides of the existing highway as well as within the median. Because of the location of the existing highway, only the No-Build Alternative would completely avoid impacts to coastal wetlands. Permanent wetland losses associated with the three construction alternatives range from 3.89 acres for Alternative 1 to 15.41 acres for Alternative 3. In addition, temporary wetland losses ranging from 5.32 acres to 9.39 acres for Alternatives 1 and 3 respectively will result from construction access, equipment staging, and temporary detours. 7

The DEIR/S presents a conceptual mitigation plan which discusses five alternative strategies to providing on-site (within the Humboldt Bay Area Costal Zone) or off-site (outside the Humboldt Bay Area Coastal Zone) compensatory mitigation for unavoidable wetland impacts. These strategies include 1) on-site restoration or enhancement of tidelands, 2) on-site establishment, rehabilitation or enhancement of freshwater wetlands, 3) off-site restoration or enhancement of tidelands, 4) preservation of existing wetlands either on- or off-site, and 5) off-site establishment, rehabilitation or enhancement of freshwater wetlands. 8

The Department's wetland policy outlines a hierarchical approach to compensatory mitigation in descending order of preference: 9

- In-kind and On-site
- In-kind and Off-site
- Out-of-kind and On-site
- Out-of-kind and Off-site

The policy indicates a clear preference for mitigation which provides replacement wetlands of the same type as those that are impacted, regardless of whether mitigation occurs on- or off-site. The Department may deviate from this policy only when it determines that, from a regional perspective, the proposed mitigation will better serve the long-term interests of wetland resource protection.

Based on the information presented in the DEIR/S, the Department cannot determine that the wetland impacts associated with the project will be mitigated to a level of less-than-significant. We are prepared to review and provide additional input on a more specific proposal when it becomes available. In the interim, the Department believes that the relative lack of suitable upland habitats for conversion to wetlands may make it difficult 8

to achieve a 1:1 replacement of wetland acreage losses associated with Alternatives 2 and 3. We therefore encourage a mitigation approach that utilizes a combination of wetland creation, rehabilitation, enhancement and preservation to provide an overall net increase in wetland habitat values within the Humboldt Bay Area Coastal Zone.

Special-Status Plant Species

The DEIR/S indicates that three special-status plant species are present within the project survey area. Lyngbye's sedge (*Carex lyngbyei*) was identified at the mouth of Jacoby Creek. Populations of Humboldt Bay owl's-clover (*Castilleja ambigua* ssp. *humboldtiensis*) and Point Reyes bird's beak (*Cordylanthus maritimus* ssp. *palustris*) were observed at two locations along Eureka Slough, west of the right-of-way. An additional population of Humboldt Bay owl's-clover was recorded within the right-of-way, north of Gannon Slough.

The Department concurs that, with the avoidance and minimization measures identified on Page 273 of the DEIR/S, replacement of the Jacoby Creek Bridge will not substantially reduce the occupied habitat or numbers of Lyngbye's sedge in the project area. Project impacts on this species are therefore not expected to be significant.

The DEIR/S concludes that direct impacts to Humboldt Bay owl's-clover will be avoided by constructing ESA fencing around the population north of Gannon Slough. This population is shown east of the highway on Plan Sheet 21 in Appendix A. However, additional plants exist south of Gannon Slough that are not shown on the project plans. Observations by Department staff during project field reviews indicate that approximately 150-200 plants occur within the right-of-way at this location. Many of these plants are in close proximity to the metal beam guard rail at the northbound Gannon Slough Bridge and are within the area that will be subject to direct impacts during bridge widening and guard rail replacement. The discussion in the DEIR/S should be revised to include an evaluation of impacts and potential mitigation for the loss of plants and habitat in this part of the right-of-way. 2

During the field reviews it was apparent that the Gannon Slough owl's-clover population is subject to ongoing disturbance as part of the current right-of-way management prescription. Most of the population is mowed at various times during the growing season. The effects of this management regime on the population are unknown. As part of the Route 101 Corridor Improvement Project, the Department recommends that operational impacts associated with right-of-way maintenance be evaluated. A management prescription that achieves maintenance goals while maintaining populations of Humboldt Bay owl's-clover and other special status plants should be developed. Options that should be considered include 1) reducing the amount of the right-of-way that is mowed, 2) avoiding special status plant populations during mowing, or 3) altering the timing right-of-way mowing to occur after the owl's-clover has flowered and set seed. 10

Locations of the two Point Reyes bird's beak populations referenced on Page 272 of the DEIR/S are not indicated on the project maps provided in the document. It is therefore not possible to evaluate the potential for impacts in relation to project features. No data or analysis is presented to support the conclusion on Page 273 that the project will have no adverse effects on this species. The DEIR/S should be revised to include this analysis. 11

Fay Slough Wildlife Area

The Department owns and manages the 484-acre Fay Slough Wildlife Area immediately east of Route 101 between Mid-City Motor World and Indianola Cutoff. The wildlife area was acquired to protect important coastal wetland and diked former tideland habitats for wetland-associated wildlife, while providing recreational opportunities for the public. The Route 101 Slough between the highway and the wildlife area provides a primary source of fresh water for managing over 200 acres of habitat for water birds. The only water control structures within the Route 101 Slough are standard risers with flashboards. The Department is concerned that an increase in the salinity of the Route 101 Slough in the vicinity of the water control structures will adversely affect management of the wildlife area. Habitat restoration on the wildlife area is funded in part through North American Wetland Conservation Act (NAWCA) grants which are predicated on the establishment and enhancement of fresh water wetland habitats on the wildlife area. 12

On Page 237, the DEIR/S states that the northern section of the Route 101 Slough will be connected to Humboldt Bay as part of the project. This work was initially proposed as a means of increasing salinities in the slough to control cattail (*Typha* spp.) densities, improve habitat for tidewater gobies and increase channel capacity for the conveyance of flood flows through the system. It is our understanding that a tidal connection at the northern end of the Route 101 Slough is no longer under consideration in conjunction with the project. This section of the DEIS/R needs to be clarified to reflect the removal of this connection from the project description. 13

Jacoby Creek Bridges

With the exception of the No-Build option, all project alternatives will replace the southbound Jacoby Creek Bridge and widen the northbound structure. The Route 101 bridges and the railroad crossing immediately downstream currently constrict flood flows on Jacoby Creek, resulting in channel aggradation and backwater flooding upstream. The DEIR/S indicates that a three span structure similar to the existing bridge will be used for the new southbound bridge. On Page 253, the document indicates that a single span structure was considered for this location but ultimately dropped due to geometric constraints and the need to elevate the roadway approaches by approximately 4 feet. The current proposal will likely increase the existing bridge span to 84 feet. However, it is 14

unclear whether the new design will result in increased channel capacity. Nor does the DEIR/S indicate the return frequency of the discharge that the new structure will be designed to pass.

While the Department understands the constraints presented by the vertical alignment of the existing highway, as well as the current railroad crossing and the northbound structure, it would be beneficial to future riparian and floodplain functions if additional channel capacity could be provided with the new structure. Providing additional capacity would prevent the new structure from becoming a bottleneck when the other bridges are eventually replaced. This is particularly important in light of the projected sea level rise of up to 3 feet in the next century. Given the useful life of a new highway bridge, a rise in sea level of 18 inches or more is entirely possible during the lifespan of this structure. 14, 15

Threatened and Endangered Species

Work in or adjacent to waterways may result in adverse effects on resident and anadromous fish species within the project area. The DEIR/S correctly indicates that tidewater goby (*Eucyclogobius newberryi*), Northern California steelhead (*Oncorhynchus mykiss*), coastal cutthroat trout (*O. clarkii clarkii*), California Coastal Chinook salmon (*O. tshawytscha*) and Southern Oregon-Northern California Coast coho salmon (*O. kisutch*) are known to occur in several of the waterways within the project area.

The tidewater goby is federally listed as endangered and is a California Species of Special Concern. According to US Fish and Wildlife Service personnel, this species is present behind tidegates in Gannon Slough, in the Route 101 Slough, in Rocky Gulch, Jacoby Creek and possibly in roadside ditches along the highway. Northern California steelhead is federally listed as threatened and occurs within the Eureka Slough/Freshwater Creek complex as well as within Jacoby Creek, Rocky Gulch and Gannon Slough/Campbell Creek within the project area. Coastal cutthroat trout is a California Species of Special Concern and can be found in many of these same drainages within the project limits. Coho salmon in the project area are both State and federally listed as threatened. Department records indicate that coho are known to use Eureka and Fay Sloughs as well as Jacoby Creek, Rocky Gulch and Gannon Slough.

Replacement of the southbound Jacoby Creek Bridge, widening of the northbound structure and widening of both bridges over Gannon Slough will require work in or immediately adjacent to the channel. Activities associated with bridge widening and replacement (e.g. pile driving, construction of coffer dams, temporary dewatering of work areas, etc.) have the potential to take listed fish species. Pile driving in the wetted channel or on the banks can produce sound pressure levels (SPLs) in the water column that cause 16

injury or mortality to tidewater gobies and juvenile salmonids. Although the proposed 18-inch diameter piles are relatively small, substrate characteristics may influence the percussive sound levels generated. Recent experience with two temporary H-piles at Ten Mile River in Mendocino County produced peak SPLs in excess of 190 dB when driven into substrate underlain by bedrock. For this reason, the Department recommends that peak SPLs and sound exposure levels (SELs) be monitored during all pile driving within 50 feet of a waterway where tidewater gobies or juvenile salmonids may be present. Monitoring may be discontinued if data from a representative number of piles shows that peak SPLs and SELs are below the level that would be likely to injure fish.

The DEIR/S recommends a number of measures to avoid, minimize and mitigate potential impacts to special status fish on Pages 284 and 285. In addition to these, the Department recommends that pile driving and dewatering work be timed to coincide with the period when juvenile fish are least likely to be present in the system, generally from September 1 through October 15. A qualified fisheries biologist should also be present to capture and relocate fish that may be present during the dewatering of coffer dams or portions of the stream channel where work will occur. 16

Caltrans should also consider opportunities to restore fish habitat within the existing right-of-way. Campbell Creek, a tributary to Gannon Slough, flows through the Route 101/255 interchange within the project limits. This stream provides habitat for coastal cutthroat trout and coastal steelhead and could provide rearing habitat for juvenile coho salmon once restoration work is completed. The stream channel within the interchange is choked with aquatic vegetation and the culverts beneath the on- and off-ramps may be partial barriers to the movement of fish. The channel within the interchange could be restored and revegetated with native trees and shrubs that would shade out vegetation currently choking the channel. Reaches of the creek both upstream and downstream from the interchange have been restored leaving the reach within the interchange as the last stretch of the creek to be improved. 17

Based on the information presented in the DEIR/S, the project is likely to result in "take" of coho salmon during construction. We therefore recommend that Caltrans apply to the Department to obtain incidental take authorization pursuant to Fish and Game Code (FGC) Section 2081(b) or a consistency determination pursuant to FGC Section 2080.1. In either case, the Department must determine that the take of coho salmon has been both minimized and fully mitigated before it can issue take authorization. The Department recommends that Caltrans consider the recovery tasks recommended in the 2004 ***Recovery Strategy for California Coho Salmon*** in developing measures to achieve full mitigation. Department staff is prepared to work with Caltrans and NOAA Fisheries concurrently to insure that the federal biological opinion and incidental take statement are consistent with the requirements of the California Endangered Species Act. 18

Tidegates

The project proposes to replace tidegates at 6 locations within the project limits. "Fish-friendly" tidegates with an auxiliary door for fish passage would be installed at four locations: 1) the confluence of the Route 101 Slough and Eureka Slough, 2) Brainard Slough, 3) Old Jacoby Creek, and 4) Gannon Slough. The Department supports the use of fish-friendly tidegates to improve fish passage at these locations. Recent work by the Department's Anadromous Fisheries Resource Assessment and Monitoring Program, Native Stocks Assessment Project and others is beginning to show the importance of tidal sloughs and channels within the estuary to salmonids and other estuarine species such as tidewater goby. Young-of-the-year coho salmon have been observed using the freshwater portions of tidal sloughs as rearing habitat for considerable periods during the summer months. Fish that rear in these portions of the estuary are frequently larger than those rearing upstream in typical stream habitat; these fish may thus have higher survival rates in the ocean. Estuarine habitats may also provide protected areas for yearling coho and other salmonids during winter high flow periods. The ***Recovery Strategy for California Coho Salmon*** identifies restoring access to these portions of the estuary as a high priority recovery task in both the range-wide recommendations and the specific recommendations for the Eureka Plain Hydrologic Sub-Area.

Because restoring fish access to sloughs within the project area involves establishing a muted tidal cycle, it will be necessary to use an adaptive management approach which balances fish passage with the effects of increased tidal influence on resources upstream. As an example, the lower reaches of the Route 101 Slough support a well-developed stand of eel grass. It will be necessary to adjust the operation of the tidegates at Eureka Slough to maintain suitable salinities and water depths for eel grass in this portion of the slough. Further upstream, it is important that salinities be managed to avoid adverse effects on federally funded wetland restoration projects at the Fay Slough Wildlife Area. We recommend that Caltrans coordinate closely with staff from the Department, U.S. Fish and Wildlife Service, and NOAA Fisheries to insure that tidegates are designed, installed and operated to accommodate the needs of fish populations while maintaining other existing resource values. Data from recent projects at Rocky Gulch and Gannon Slough should be useful in guiding the installation and management of tidegates within the project limits.

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Thank you for the opportunity to provide comments on this project. For questions or additional information, contact Staff Environmental Scientist Craig Martz at (530) 225-2281 or via E-mail at cmartz@dfg.ca.gov.

cc: See Page Nine

cc: Messrs. Mark Stopher, Craig Martz,
Eric Haney and Bruce Webb
Department of Fish and Game
601 Locust Street
Redding, California 96001

Messrs. Jeff Dayton, Gordon Leppig,
and Scott Bauer
Mss. Vicki Frey, Michelle Gilroy,
and Karen Kovacs
Department of Fish and Game
219 Second Street
Eureka, California 95501

Mr. Michael Wallace
Department of Fish and Game
5341 Ericson Way
Arcata, California 95521

Mr. David Ammerman
US Army Corps of Engineers
Post Office Box 4863
Eureka, California 95502

Ms. Irma Lagomarsino
USDOC - NOAA
National Marine Fisheries Service
1655 Heindon Road
Arcata, California 95521

Mr. Ray Bosch
US Fish and Wildlife Service
1655 Heindon Road
Arcata, California 95521

Ms. Melanie Faust
California Coastal Commission
710 E Street, Suite 200
Eureka, California 95501

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Responses to California Department of Fish and Wildlife *(formerly California Department of Fish and Game)* :

1. The Final Environmental Impact Report/Statement (EIR/S) includes a total of five Build Alternatives: Alternatives 1, 1A, 2, 3, and Modified 3A. See Chapter 2 of the Final EIR/S for details.

2. The northbound Jacoby Creek and Gannon Slough Bridges are no longer proposed to be widened and construction activities within these watercourses will be avoided. All Build Alternatives still include replacing the bridge rail on these two bridges; this work will be accomplished from the bridge decks.

3. Concrete median barrier has been dropped from the project since the Draft EIR/S was approved. Thrie beam metal guardrail is now proposed at locations where concrete median barrier was proposed.

4. The proposal to immediately raise the posted speed limit after project construction for any of the proposed Build Alternatives has been dropped. See Group Response III-A-1 for more information. Also please refer to Group Response I-A regarding the Safety Corridor.

5. Caltrans staff concurs high habitat value exists within the Biological Study Area (BSA) and the area immediately adjacent to the BSA.

6. To minimize impacts to cliff and barn swallows in compliance with the Migratory Bird Treaty Act, measures such as exclusionary netting or nest removal every 2-3 days will be implemented during the breeding season (March 1 – September 1).

7. Both U.S. Army Corps of Engineers jurisdictional wetlands and single parameter wetland impact areas have been refined in Section 3.3.2, Chapter 3 of the Final EIR/S.

8. Since the draft EIR/S was approved in 2007, Caltrans has met with participating public resource agencies and refined the conceptual mitigation plan (CMP). The updated CMP, which includes specific mitigation sites, is included in the Final EIR/S as Appendix J.

9. Comment noted. Caltrans generally concurs with the Department of Fish & Game wetland policy.

10. The Caltrans's landscape crews are likely avoiding the Owls-clover since it grows only where the substrate is subject to tidal influence. The landscape crew does not currently mow areas inundated with tidal waters adjacent to Route 101 between Eureka and Arcata. The current mowing area at this location is termed a "safety pass" which is about 12-feet wide strip outward from the edge of travel way. This is mainly for site distance where traffic merges onto, or off of, Route 101, and to reduce the potential for fire from stranded vehicles pulled over on the roadway.

11. Impacts to Point Reyes bird beak will be completely avoided by project construction since no work is planned at, or near the Eureka Slough where the plants are located.

12. The proposed Route 101 improvements includes replacing tide gates. Caltrans is coordinating with resource agencies to design and install tide gates that will avoid altering the salinity of Fay Slough.

13. The section pertaining to connecting Humboldt Bay and the Route 101 Slough in the Draft EIR/S is not included in the Final EIR/S.

14. Since the Draft EIR/S was approved, Caltrans has redesigned the replacement of the southbound Jacoby Creek Bridge as a single span bridge and consequently pile driving in the creek channel will be avoided. After the proposed new bridge is in place, the existing bridge and its piles would be removed from Jacoby Creek, which would result in less aggradation and backwater flooding compared to the existing situation.

15. The existing Jacoby Creek Bridge has a deck (vehicle travel) surface elevation of 11.7 feet above the existing sea level. The proposed replacement bridge at Jacoby Creek is 13.0. The highest tides are currently approximately elevation 8.7[1] feet. This affords a total of 4.3 feet of sea level change before the deck of the Jacoby Creek Bridge could be covered with sea-water at high tide. The bridge will be designed to accommodate inundation from tidal action to the deck surface without damage.

16. As stated previously, driving bridge piles in Jacoby Creek will be avoided. Caltrans staff coordinated with U.S. Fish & Wildlife staff to avoid and minimize effects to the tidewater goby during removal of the existing southbound Jacoby Creek Bridge. See Appendix I for the Biological Opinion issued by the U.S. Fish & Wildlife for more information.

17. Caltrans currently cannot accommodate the clearing the drainage channels within the Route 101/255 interchange. Caltrans has been directed to stay out of those channels by the local Department of Fish and Game office: this has been confirmed by Warden Jackie Krug, February 21, 2008.

The Route 101/255 interchange includes several vehicle merging locations for vehicles entering and exiting Route 101, and therefore planting more trees is problematic from a traffic safety perspective.

18. Because pile driving will be avoided as discussed previously, incidental take of Coho salmon will be avoided during construction. The National Oceanic Atmospheric Administration – Fisheries Service issued a letter in lieu of a Biological Opinion addressing potential effects to Coho and other listed species for other proposed construction work. (See Appendix I.)

19. Caltrans staff has, and will continue to work with resource agency staff to appropriately design and install the tide gates.

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[1] The 8.7 feet elevation is based on the North American Vertical Datum of 1988 (NAVD 88), which is the vertical control datum established for vertical control surveying in the United States based upon the General Adjustment of the North American Datum of 1988.

Linda S. Adams
Secretary for
Environmental Protection

Department of Toxic Substances Control

Maureen F. Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

August 20, 2007

Mr. Rod Parsons, Chief
Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, California 95502-3700

Dear Mr. Parsons:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Eureka-Arcata Route 101 Corridor Improvement Project (SCH# 2001092035) located in Humboldt County, California. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a potential Responsible Agency, DTSC is submitting comments to ensure that the California Environmental Quality Act (CEQA) documentation prepared for this project adequately addresses any remediation of hazardous substances releases that might be required as part of the project. 1

Section 3.2.4 of the Draft EIS/EIR discusses the presence of areas with high concentrations of lead within the project area. The contaminated soil has been impacted by aerially-deposited lead (ADL). The ADL source is the historic use of automotive gasoline with lead additive. Sampling done as part of a preliminary site investigation indicated that, within most of the project limits, shallow soil (top six-inches of soil) that is removed will need to be hauled to a permitted hazardous waste facility or may be reused on the project if a variance is secured from DTSC. DTSC recommends that the soil that is to be excavated be tested to determine if the soil is a Resource Conservation and Recovery Act (RCRA) hazardous waste. If it is determined to be RCRA hazardous waste, then the waste must be handled as RCRA hazardous waste and can only be disposed at a permitted hazardous waste landfill after meeting the requirements of the Land Disposal Restrictions. If the soil is non-RCRA hazardous waste, as determined by exceedences of the Total Threshold Limit Concentration (TTLC) or Soluble Threshold Limit Concentration (STLC), then California Health and Safety Code (H&SC) section 25123.3, which addresses the handling and storage of non-RCRA hazardous waste, may apply to the project.

Mr. Rod Parsons
August 20, 2007
Page 2

All the project alternatives, except the No-Build option, include the need for excavation of contaminated soil. The EIS/EIR should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should there be an accident at the Site. 2

Please contact Patrick Lee at (510) 540-3847 if you have any questions. Thank you in advance for your cooperation in this matter.

Sincerely,

Mark Piros

Mark Piros, P.E., Unit Chief 2
Northern California - Coastal Cleanup
Operations Branch

Responses to Department of Toxic Substances Control:

1. Caltrans soil testing indicated the aerially deposited lead did not approach RCRA levels. The test results indicate that within most of the project area limits, if the shallow soil (top 6 inches) material were to be removed separately, it may be reused on the project in compliance with the constraints of the California Department of Toxic Substances Control (DTSC) variance issued to Caltrans in 2009. See Section 3.2.5 Hazardous Waste/Materials in Chapter 3 of the Final Environmental Impact Report/Statement (EIR/S) for more information.

2. See Section 3.2.6 Air Quality in Chapter 3 of the Final EIR/S for a discussion of air quality impact analysis of both dust and exhaust emissions in terms of applicable air quality regulations. See Section 3.2.7 Noise in Chapter 3 of the Final EIR/S for a discussion of construction noise. See Section 3.2.8 Energy in Chapter 3 of the Final EIR/S for a discussion of transporting excavated material and energy consumption. See Section 3.2.2 Water Quality in Chapter 3 of the Final EIR/S for a discussion of accident prevention and contingency planning.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Geodetic Survey
Silver Spring, Maryland 20910-3282

September 13, 2007

Mr. Rod Parsons
Chief, Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Dear Mr. Parsons,

We have provided comments on the DEIS regarding the Eureka-Arcata Rte 101 Corridor Improvement Project, Proposed Roadway Improvements on Rte 101 between the Eureka Slough Bridge & 11th St Overcrossing in Arcata, Humbolt Co, CA (20070275).

The DEIS has been reviewed within the areas of the National Oceanic and Atmospheric Administration, National Geodetic Survey's (NGS) geodetic responsibility, expertise, and in terms of the impact of the proposed actions on NGS activities and projects.

If there are any planned activities which will disturb or destroy geodetic control monuments, NGS requires notification not less than 90 days in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any required relocation(s). 1

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the homepage of NGS at the following Internet address: http://www.ngs.noaa.gov. After entering this website, please access the topic "Products and Services" then "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the NGS database for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

We hope our comments will assist you. Thank you for giving NGS the opportunity to review your DEIS.

Sincerely,

Christopher W. Harm
Program Analyst
NOAA's National Geodetic Survey
Office of the Director
1315 East-West Highway
SSMC3 8729, NOAA, N/NGS
Silver Spring, Maryland 20910

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Response to National Oceanic Atmospheric Administration:

The project design engineer received this letter and acknowledged the need to avoid disturbing geodetic control monuments.

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0001
PH (916) 319-2001
FAX (916) 319-2101
DISTRICT OFFICES:
50 D STREET, SUITE 456
SANTA ROSA, CA 95404
PH (707) 576-2526
FAX (707) 576-2297
311 N. STATE STREET
UKIAH, CA 95482
PH (707) 463-5770
FAX (707) 463-5773
235 4TH STREET, SUITE C
EUREKA, CA 95501
PH (707) 445-7014
FAX (707) 445-6607

Assembly
California Legislature

PATTY BERG
ASSEMBLYMEMBER, FIRST DISTRICT

COMMITTEES:
AGING & LONG-TERM CARE, CHAIR
BUDGET SUB #1,
HEALTH & HUMAN SERVICES, CHAIR
BUDGET
HEALTH
INSURANCE

October 10, 2007

Mr. Charles Fielder, Director District 1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Re: Eureka - Arcata Route 101 Corridor Safety Improvement Project

Dear Mr. Fielder,

I am writing to express my concerns regarding the proposed Eureka - Arcata Route 101 Corridor Safety Improvement Project. Over the past few months I have heard from many concerned citizens who are opposed to the alternatives being considered in the Draft Environmental Impact Statement (DEIS).

- I believe in order to achieve true safety objectives along the corridor; a bicycle and pedestrian trail must be included. 1
- Keep Eureka Beautiful has expressed concerns about the removal of 300 mature eucalyptus trees. Though not native to the area, these trees do have visual and historical significance. I believe only the trees that pose a safety hazard should be removed. 2
- I am pleased that Alternative 3 includes traffic signals and a realignment for Airport Road, but am concerned that an interchange at Route 101/Indianola Cutoff might encourage unwanted growth and create environmental challenges. 3

As District 1 Director, you have been known for your visionary leadership. I urge you to review all of the public comments and revise the alternatives in the DEIS alternatives to make this project widely supported by our community. If I can provide any further information, please do not hesitate to contact my Eureka District Office at (707) 445-7014.

Respectfully,

Patty Berg

PATTY BERG
Assemblywoman, 1st District

Cc: Humboldt County Association of Governments

Responses to Assemblywoman Berg

1. Please see Grouped Responses I-D, II-G, and II-H.

2. Please see Grouped Response III-B-2.

3. Please see Grouped Response III-B-5.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

September 28, 2007

Mr. Mitchell Higa
Environmental Management Branch
California Department of Transportation – District 1
P.O. Box 3700
Eureka, California 95502-3700

Subject: Draft Environmental Impact Statement for the Eureka – Arcata Route 101 Corridor Improvement Project, Humboldt County, California (CEQ #20070275)

Dear Mr. Higa:

The Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. EPA has previously provided feedback on this project through the *National Environmental Policy Act/Clean Water Act Section 404 Integration Process Memorandum of Understanding, 2006 (NEPA/404 MOU)*. Our detailed comments are enclosed.

The State of California has assumed responsibilities under NEPA for this project pursuant to the *Memorandum of Understanding Between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program.*

EPA is supportive of the efforts made by the project development team to minimize impacts to wetlands and waters and other resources through the alternatives development process. However, we have some concerns about community impacts, noise, and air quality. We also encourage Caltrans to coordinate with management of the Murray Field Airport to ensure coordination of projects and proper analysis and mitigation of cumulative impacts. EPA has rated this document EC-2, *Environmental Concerns, Insufficient Information*. Please see the attached *Rating Factors* for a description of our rating system.

We appreciate the opportunity to review this DEIS and look forward to future coordination on the project. The next steps in the NEPA/404 MOU process are agreement on the 1) Least Environmentally Damaging Practicable Alternative (LEDPA), the only alternative that is permittable pursuant to the Clean Water Act (CWA) Section 404(b)(1) Guidelines, and 2) the conceptual mitigation plan. When the Final EIS is released for public review, please send two copies to the address above (mail code: CED-2). If you have any questions, please contact Carolyn Mulvihill of my staff at 415-947-3554 or mulvihill.carolyn@epa.gov.

Sincerely,

for Nova Blazej, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Lahn Phan, Federal Highway Administration
Ray Bosch, U.S. Fish and Wildlife Service
Chuck Glasgow, NOAA Fisheries
Carol Heidsiek, U.S. Army Corps of Engineers

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE EUREKA – ARCATA ROUTE 101 CORRIDOR IMPROVEMENT PROJECT, SEPTEMBER 28, 2007

Wetlands and Other Waters of the United States

This project will require an Individual Section 404 Permit from the U.S. Army Corps of Engineers (ACOE) and identification of the Least Environmentally Damaging Practicable Alternative (LEDPA), pursuant to Clean Water Act Section 401(b)(1) Guidelines. Continued coordination with EPA, ACOE, and other Federal regulatory agencies through the *National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Surface Transportation Projects Memorandum of Understanding (NEPA/404 MOU)* will help to insure that these Guidelines are followed. 1

The next steps in the *NEPA/404 MOU* process are agreement on the LEDPA, and then agreement on the conceptual mitigation plan. EPA anticipates that Caltrans will request agreement on Alternative 3 as the LEDPA. We recognize that Alternative 3 is estimated to impact more acreage of wetlands, and Alternatives 1 and 2 are projected to result in increased energy use and environmental justice concerns. These, and other environmental impacts identified in the Draft Environmental Impact Statement (DEIS), will be considered in the future *NEPA/404 MOU* request for agreement on the LEDPA 2

We commend Caltrans for having initiated early interagency discussions regarding compensatory mitigation and look forward to continued discussions. EPA learned in recent project development team meetings that Caltrans is considering additional options for mitigation for impacts to wetlands that are not described in the DEIS. EPA supports the early consideration of mitigation sites and notes the need to agree on the LEDPA prior to confirmation of specific mitigation parcels. We are also available to review draft work products or to meet with you to ensure that the final mitigation plan satisfies commitments and addresses all pertinent issues once the LEDPA has been determined. 2

Recommendations:

- Engage EPA, ACOE, and other resource agencies in the identification of the LEDPA before publication of the FEIS, as outlined in the *NEPA/404 MOU*.
- Once the LEDPA is determined, identify in the FEIS the proposal for mitigating for unavoidable impacts to waters of the United States. Include a thorough discussion of the proposed mitigation plan and coordination with any existing established restoration efforts.

Coordination with Murray Field Airport and Federal Aviation Administration

Although the project is in close proximity to Murray Field Airport, the DEIS did not indicate that project managers had coordinated with management of the Murray Field Airport or the Federal Aviation Administration (FAA). In discussions with Caltrans, EPA learned that project managers communicated with Humboldt County staff regarding the 3

1

airport's flight patterns and air space requirements. However, the airport is a Federally obligated General Aviation Airport, included in the National Plan of Integrated Airport Systems, and the airport sponsor, Humboldt County, has received Federal Airport Improvement Program grants. Therefore, Caltrans and the airport manager must consult with FAA prior to any land disposition, which is proposed in Alternative 3.

In addition, EPA learned during discussions with FAA that the airport is proposing to construct a deer exclusion fence around the perimeter of their property and an environmental assessment is currently being prepared for the fencing project. The fencing project should be coordinated with the Eureka-Arcata 101 Corridor Improvement project, and included in the cumulative impact analyses. 4

Recommendations:

- Contact Jacquelyn Hulsey, Airport Manager of Murray Field Airport, to begin necessary consultation with FAA for possible land acquisition. Document consultation in the FEIS.
- Identify specific design modifications to alternatives that may be needed as a result of coordination with FAA.
- Include information about the proposed deer exclusion fence in the cumulative impact analyses in the FEIS. Provide alternative design modifications and additional mitigation if warranted.

Community Impacts/Traffic

Page 76 of the document, in the section titled *Division of Established Communities*, states, "None of the project alternatives would displace any homes or businesses from the study area, so they would not divide or disrupt an existing community." Disruption of communities could occur as a result of other impacts besides displacement, including increased traffic on roads that run through the communities, such as Route 255 and Old Arcata Road. On page 115, in the section titled *Project Effects on Local Roads and Intersections*, the document states that Alternative 1 is estimated to increase traffic volumes by 50% in year 2031 on Old Arcata Road, which passes through the community of Bayside. If this alternative is chosen, mitigation for this increase in traffic, such as signage, reduced speed limit, or other measures, should be implemented to lessen adverse effects to residents that live along the road as well as to community members who use the road and services along it. The document mentions specifically that a public elementary school, a post office, and other businesses are accessed immediately from Old Arcata Road. 5

In addition, it is unclear how the text at the top of page 117 regarding increases in traffic on Route 255 relates to the percentages stated in Table 3-15. Please clarify this information, explain how and why each of the alternatives would impact traffic on Route 255, and identify mitigation measures for these impacts. 6

Recommendations:

- If Alternative 1 is chosen as the Preferred Alternative in the FEIS, include measures to mitigate the impacts to the community of increased traffic along Old Arcata Road. Quantify and document the benefits achieved from any proposed mitigation measures for Alternative 1 (percent of traffic volumes reduced, community impacts reduced, etc.) 5
- Clarify the information on page 117 regarding increases in traffic on Route 255. Present the impacts associated with each alternative in a comparable table and provide mitigation measures for these impacts. Quantify the benefits achieved by each mitigation measure proposed. 6

Air Quality

The *Hazardous Waste/Materials* section states that shallow soil in the project area contains hazardous waste levels of lead. This fact should be discussed in the *Air Quality* section, including the possibility of lead exposure to workers and community members as a result of earthmoving during construction. 7

The *Hydrology and Floodplain* section states that the proposed interchange at Indianola Cutoff would require placing approximately 300,000 cubic meters of fill. Truck activity required to bring this material to the project site could be significant, especially depending upon where the fill will be acquired. Information on air impacts related to trucking of fill should be included in the *Construction Effects* section and mitigation measures should be identified. 8

Recommendations:

- Discuss impacts to air quality from potential airborne lead due to earthmoving during construction, and identify sensitive receptors such as children and the elderly who may be impacted. Provide mitigation measures for lead exposure during construction and quantify the impacts that are reduced from the mitigation measures proposed 9
- If not currently included in the analysis presented in the DEIS, include air impacts and mitigation measures related to acquisition and transportation of fill required for the project, including a discussion of the impacts that will be avoided by specific mitigation measures. 10

Floodplain

It is unclear from the *Hydrology and Floodplain* section whether the addition of significant amounts of fill, such as that required for the interchange at Indianola Cutoff, and other changes to the landscape associated with the project would have no floodplain impacts. While the DEIS states that encroachment into the floodplain would be a small percentage of the floodplain area, more data on elevations in the area and visual 11

illustration should be provided to support the determination that the project would have no floodplain impacts.

Recommendation:

- Include a map of the project area with elevations and an illustration of the floodplain, as well as information on the elevation of project elements (lanes, median, etc) so that the "no impact" determination can be verified.

Noise

In the section on *Construction Noise*, the document states that "The majority of construction would occur near the Indianola Cutoff under Alternative 2." There is no discussion of additional construction noise under Alternative 3, which would occur in the vicinity of Airport Road and the Lazy J Trailer Ranch. The impacts to residents of this area should be analyzed, and mitigation for any adverse impacts to sensitive receivers should be provided. 12

Section 3.3.4 on impacts to *Animal Species* states that measures to minimize construction noise effects on wildlife are included in Section 3.2.6, however no mitigation measures are specified in that section. Page 293 references Section 3.2.7 for information on noise minimization, but that is the *Energy* section. 13

Recommendations:

- Analyze construction noise impacts resulting from construction of Alternative 3. If adverse impacts are found in this analysis, provide mitigation measures and identify the reduction in impacts related to proposed measures.
- Include measures to mitigate the effects of construction noise on wildlife, either in the *Noise* section or the *Animal Species* section.

Travel Mode Choice

Humboldt County's Regional Transportation Plan identifies pedestrian and bicycle improvements as projects having general long-term priority. Based on this and the RTP's overall emphasis on providing travel mode choice, EPA encourages Caltrans to include safety features, such as signage warning drivers that bicyclists and pedestrians use the shoulder, and pedestrian infrastructure where appropriate, in the improvement project. 14

Recommendation:

- Include safety features for bicyclists and pedestrians, such as signage and pedestrian infrastructure, in the project.

Project Need and Purpose Chapter

EPA provides the following recommendations for the *Project Need and Purpose* Chapter regarding discrepancies and areas where clarification is needed:

- Correct the discrepancy between the years referenced for collision data on page 1 and Table 1-1. Identify which years of collision data are included in Table 1-1 and include consistent values throughout the chapter. 15
- Provide a thorough description of the Safety Corridor and corresponding collision data (currently in Table 1-3) when it is first referenced on page 2. 16
- Define what the numbers in bold represent in Table 1-1 as there is currently no key to indicate if the bolded numbers have additional meaning and importance. 17
- Include a detailed map to illustrate the current local street/driveway access locations and median crossings described on page 13. 18
- Add a reference for the "review of safety corridors on other highways within the State" discussed on page 15. Identify when and where the study was conducted and by whom. 19
- Correct the error in the bottom row of Table 1-3 on page 16, which states a collision rate of 10.47 and corresponding percentage of 1163%. 20

Additional Editorial Comments

The following are additional editorial comments:

- Page 319: EPA participated in Project Development Team meetings, so please add EPA to the list of agencies in this section. 21
- Page 171: "California EPA" should be USEPA.

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

Responses to EPA:

1. Caltrans and the FHWA are using the April 2006 NEPA/404 Integration Process MOU for guidance.

2. See Appendix E – NEPA/404 Integration Process, which has been updated.

3. After consultation with County Aviation staff as well as Caltrans Aeronautics staff regarding the use of the airport for the signalization improvement, the full signalization element of Alternative 3 was determined not feasible and dropped from the project. Consequently, the proposal to relocate the Airport Road/Jacobs Avenue/Route 101 intersection on any portion of airport property has been dropped.

4. Fence installation around the airport property is not expected to affect any of the Build Alternatives.

5. Mitigation would not be feasible if Alternative 1 were constructed; signage as suggested and speed bumps are already in place at the public school on Old Arcata Road. However, constructing Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would have a negligible effect on Old Arcata Road.

6. (The top of page 115 and not page 117 in the Draft EIR/S discusses State Route 255.) An approximate 30% increase in traffic volume occurred soon after the Safety Corridor on Route 101 was implemented. The Safety Corridor included a reduction in the posted speed limit and many drivers who normally use Route 101 between Eureka and Arcata began diverting to State Route 255 since the posted speed limit is slightly higher (55 miles per hour compared to 50 miles per hour within the Safety Corridor). Table 3-9 (formerly Table 3-15) does not relate to the 30% traffic volume on Route 255 since this table compares the Build Alternatives and pre-Safety Corridor conditions. The text in Chapter 3 has been expanded for clarification. None of the Build Alternatives would result in substantial traffic diversion from Route 101 to State Route 255 and mitigation is not required.

7. The test results indicate that within most of the project area limits, if the shallow soil (top 6 inches) material were to be removed separately, it may be reused on the project in compliance with the constraints of the California Department of Toxic Substances Control (DTSC) variance issued to Caltrans. See Section 3.2.5 Hazardous Waste in Chapter 3 for more information.

8. As stated in Section 3.2.6 Air Quality in Chapter 3 of the Final EIR/S, the projected is located in an area of air quality standard attainment. Although it is possible that during project construction, trucks could transport fill material for the grade separation at Indianola Cutoff from an air quality region that is not in air quality attainment; however the cost to transport 270,000 cubic yards of material from beyond the air quality region would be extremely high and unrealistic. In addition, the transport of fill material is a one-time occurrence and would ultimately be offset by reducing the out-of-direction vehicle travel from constructing the grade separation.

9. As mentioned in comment 11, testing indicated that the soil does not have levels approaching Resource Conservation and Recovery ACT (RCRA) waste levels. In addition, there is only one residence (Bayside Cutoff) directly adjacent to the area of project construction. The following nonstandard special provision will be included in the construction contract to deal dust that may be impacted by lead. *"Excavation, and handling of materials containing lead shall result in no visible dust migration. The contractor shall have a water truck or tank on the job site at all times while clearing and grubbing, and performing earthwork operations in work areas containing lead."* Measures to minimize and avoid exposure to aerially deposited lead have been added to Section 3.2.5 Air Quality in Chapter 3.

10. Impacts to air quality from construction and measures to reduce these impacts are discussed in Section 3.2.6.

11. A floodplain mapping has been added to Section 3.2.1 Hydrology and Floodplain in Chapter 3 of the Final EIR/S.

12. Although construction would occur at Airport Road and Route 101 near the mobile home park, there would be no construction that would exceed the ambient traffic noise for constructing any of the Build Alternatives. The residents will be notified in advance of any construction activities near this intersection.

13. The text pertaining to wildlife and construction noise in Section 3.3.4 – Animal Species, has been revised. An analysis of construction noise effects on wildlife included identifying all sensitive biological resources and the types of construction noise anticipated. The project biologist concluded that construction noise effects will be avoided with measures to minimize harm as described in Section 3.2.6 – Noise in Chapter 3.

14. Subsequent to the Draft EIR/S public circulation, signs alerting motorists to bicyclists have been placed in both directions on Route 101 between Eureka and Arcata. Also as a separate project, rumble strips alerting both bicyclists and motorists of motor vehicles entering the outside shoulder will be constructed prior to approval of the Final EIR/S. The proposed project now includes re-striping the lanes to provide 10-foot wide outside shoulders throughout the project construction limits that would benefit both bicyclists and pedestrians. Finally refer to Group Response III-A-1 regarding the post-construction speed limit.

15. Collision year discrepancies in the FEIR/S have been corrected.

16. A brief Safety Corridor description has been added to Section 1.1 Project Need with a reference that a detailed description may be found in Section 1.3 Project Background.

17. The numbers that are in bold in Table 1-1 indicate that locations where the collision rates exceed the State average and therefore are of concern. Additional explanatory text has been added to the table.

18. Figure S-3 – Route 101 Existing Open Medians has been added to the summary. The index of plan sheets in Appendix A shows the location of all local street/driveway Route 101 median

crossings on one map. The plan sheets in Appendix A show the current local street and access locations on Route 101 in detail.

19. See Section 3.1.6 Transportation in Chapter 3 of the Final EIR/S.

20. Table 1-3 has been replaced by Table 1-4 in the Final EIR/S. Table 1-4 includes similar high collision data at the South G Street off-ramp, but this is not an error. The collision numbers are high because they are reported as collisions per million miles over a 3 year period. Consequently, just one collision during this period would be relatively high number in terms of collisions per million vehicles.

21. The Final EIR/S includes the two corrections.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, CA 95521-5582
Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To:
File #: 1-14-2002-1078.5

SEP 28 2007

Kim Floyd
Eureka-Arcata Corridor Project Manager
California Department of Transportation – District 1
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Fish and Wildlife Service Comments on the Draft EIS/EIR for the Eureka-Arcata Route 101 Corridor Improvement Project

Dear Ms Floyd:

This letter is in reply to your written request, dated June 29, 2007 (received July 2, 2007), requesting comments on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) for the California Department of Transportation's (Caltrans') proposed Eureka/Arcata Corridor Improvement Project (01-Hum-101-PM 79.9/86.3; EA 01 – 363300) (the Project). Your Project proposes to combine the long-term State Transportation Improvement Program (STIP) U.S. 101 Corridor Improvement Project with a State Highway Operation and Protection Program (SHOPP) highway rehabilitation project to improve safety and upgrade facilities along Highway 101 between the communities of Eureka and Arcata, Humboldt County, California. Caltrans' Draft EIS/EIR identifies three action alternatives and one no-build alternative. Under Alternative 1, Caltrans proposes to improve safety along this highway corridor by closing median crossings, extending acceleration and deceleration lanes, replacing or upgrading bridges at Gannon Slough and Jacoby Creek, and installing median barriers and guardrails. Under Alternative 2, Caltrans proposed to construct an interchange at Indianola Road, in addition to the work described for Alternative 1. Under Alternative 3, Caltrans proposes to install a signalized intersection at Airport Road, in addition to the work described for Alternatives 1 and 2. The no-build alternative would not implement any improvements to the existing facility. 1

Our comments are based on information you provided in your June 29, 2007, correspondence and its enclosed Draft EIS/EIR; information distributed during several interagency meetings at the Caltrans District 1 office; and first-hand observations during field visits to the proposed project

area. We submit our comments to Caltrans under authority of the Fish and Wildlife Coordination Act (FWCA); the Endangered Species Act of 1973, as amended (ESA); and the 1994 National Environmental Policy Act/Clean Water Act Section 404 Integration Process Memorandum of Understanding (NEPA/404 MOU). Our comments focus on the potential effects of the Project on fish and wildlife resources, and on wetlands, but in general do not discuss effects to other resources or issues. We have identified our specific comments by section and page number in the Draft EIS/EIR for your reference.

General Comments

Staff of the Arcata Fish and Wildlife Office are assisting Caltrans Headquarters staff in reviewing guidance being prepared by consultants for Caltrans, on the subject of wildlife corridors and passage of terrestrial wildlife across roads. We encourage Caltrans to incorporate information provided by this effort, as appropriate, in the design and implementation of infrastructure of this Project. This information may have applicability in the design of culverts and median barriers that have the potential to alter wildlife use along the corridor. 2

Specific Comments

Chapter 1 Need and Purpose

Section 1.4 Required Approvals and Permits

Page 24: The discussion of the requirements of the Federal Highway Administration (FHWA) and its applicant Caltrans to consult with the Fish and Wildlife Service (Service) and the National Marine Fisheries Service (NOAA Fisheries) (collectively, the Services) under section 7 of ESA needs clarification. FHWA is required to consult with the Services when any action permitted, funded, or carried out by the Federal agency "may affect" a listed species. Should FHWA determine that their proposed action may affect, "but is not likely to adversely affect" listed species, the agency must obtain written concurrence from the Services, as appropriate based on the species that may be affected. Only in the event that FHWA determines that their proposed action may *adversely* affect a listed species do the Services prepare a biological opinion which addresses those adverse effects and any incidental take likely to result from them. 3

Chapter 3 Affected Environment

Section 3.1.7 Visual/Aesthetics

Page 149: The document describes several safety concerns posed by the non-native eucalyptus (*Eucalyptus globulus*) trees lining Route 101 within the study area. These safety concerns include seeds, branches or entire trees falling into the highway posing a hazard to motorists and bicyclists, and traffic control needed to prune them. The Need and Purpose for the Project (page 4

8) also identifies the need to remove large eucalyptus trees within 1.2 meters of the guard rail, as the tree trunks reduce its energy absorbing effectiveness, creating an additional hazard. The Service is unaware of substantive bird use of the trees, as they provide few sites where birds could effectively nest or roost out of the at-time strong prevailing winds along the bay. We also consider use of trees by birds at this close distance to the travel lanes to be detrimental, since the risk of direct mortality of birds from vehicular strikes may exceed any habitat benefits to them. Some birds may be adversely affected or killed by sap or sticky pollen ingested while attempting to forage on the flowers (Stallcup 1997, Williams 2002), and likely does not provide a substantial source of nutrition (Brice et al. 1999). Further, the presence of eucalyptus trees along and within wetlands degrades wetland functions and values through the release of compounds that inhibit the growth of native wetland vegetation. Hence, the Service would not be opposed to the removal of eucalyptus trees along the route of this Project, including those not already identified for removal to construct the new acceleration/deceleration lane on the west side of the highway.

Section 3.3.1 Natural Communities

Page 223: The Natural Communities/Environmental Consequences section does not describe the anticipated impacts to natural communities in sufficient detail for the reader to determine the relative merits and drawbacks of the three action alternatives. Little mention is made of individual species or species groups, such as egrets, raptors, or water birds, such that the reader could evaluate the effects attributable to each action alternative. We request that this section provide additional discussion of the likely effects to wildlife species and natural communities sufficient to provide a clear differentiation among alternatives as to their relative benefits or drawbacks, or to clearly support a conclusion that no significant differences exist among their respective potential effects. What effects to wildlife are expected from the additional 100-foot-wide bridge proposed for construction across the 101 channel under Alternative 3? What effects to fish passage are anticipated under each action alternative? What effects does Caltrans expect to elk and deer which are described as part of the natural community in the Project area? We encourage Caltrans to provide a more specific description of these effects, as applicable under each alternative. Finally, the occupancy of the BSA by some species included in this section and in section 3.3.4 (Animal Species, page 274), especially Roosevelt Elk (*Cervus elaphus*) and fisher (*Martes pennanti*) , are questionable. We request clarification of the sources of information used to determine wildlife species which may occupy the BSA. 5 6 7 8 9

Migratory shorebirds commonly roost at sites located just off the shoulder of Route 101 and into Humboldt Bay, as well as within adjacent wetlands east of the highway. Although shorebird roost sites have not been found to be a limiting factor along Humboldt Bay, it is still important that Caltrans identify disturbance potential during construction and future highway use for these species. Some regularly used roosts may no longer be used by shorebirds due to disturbance, or there may be short term disruptions in use during construction. We suggest you contact Dr. Mark Colwell at the Wildlife Department at Humboldt State University, as he is a recognized expert in this field, especially in regards to the local circumstances. 10

Pages 223 through 229: These pages contain a detailed description of the design and construction of the bridges, replacement of tidegates, extension of acceleration and deceleration lanes, closing of medians, construction of an interchange at Indianola Cutoff, and creation of a signalized intersection at Airport Road. We recommend that this entire discussion be moved to Chapter 2 Project Alternatives. This discussion provides the detail of what the Project proposes to do, when various aspects of the Project will be completed, and how features of the Project will meet safety and level-of-service objectives. Most of these Project features are not solely applicable to the alternative-specific impacts to the natural environment. Hence, they do not belong in the discussion of the Affected Environment. 11

Pages 225 and 226: This description of tidegates differs somewhat with what has been discussed among the agencies. We assume Caltrans will use Tideflex or similar style tidegates where fish passage is not an issue; we continue to support Caltrans in that design feature. There has also been some discussion of not using a tidegate with an auxiliary door at the Brainard Slough site, since an opening of that size may result in excessive water flowing into private lands above that tidegate. There may also be little utility in providing fish passage there, as the affected channel provides little fish habitat. Also, the tidegate replacement example provided on page 226 does not reflect earlier discussion between Caltrans and the Services as to location of hinges to provide greatest benefit to fish resources. We request that Caltrans continue to work with the Service, NOAA Fisheries, and CDFG in the final design, placement, and management of these tidegates to best promote the conservation of tidewater gobies (*Eucyclogobius newberryi*), coho salmon (*Oncorhynchus kisutch*) , and other aquatic resources in water affected by these tidegates. 12

Section 3.3.2 Wetlands and Other Waters of the United States

Page 237: The last paragraph on this page suggests that the Project will establish tidal influence at the north end of the 101 channel, converting it to Estuarine Intertidal Unconsolidated Shore Wetland, by connecting the channel to Humboldt Bay. No such connection to Humboldt Bay is described elsewhere in the Project description, or elsewhere in this section. Please include a description of this connection, and its intended function, in the Chapter 2 Project Alternatives, in sufficient detail to allow the reader to evaluate its effect across alternatives, as appropriate. 13

Page 248: The last paragraph on this page states that the ditch east of Route 101 (the 101 channel) is outside the Biological Study Area (BSA). Yet, in other places in the document (e.g., page 220) indicates that the channel is within the BSA. Further, the figures provided in the Plan Sheets 1-29 in Appendix A indicate that only some portions of the 101 channel are within the BSA. This channel consists of a single, continuous body of water with tributaries, and changes to any portion of the channel or its water control are likely to affect all parts of the channel. We request that Caltrans modify the BSA to include all portions of the channel, including all contiguous, tributary channels that may occur outside of the Caltrans right-of-way, in the final analysis of effects. Activities that Caltrans proposes to conduct as part of this Project, such as 14

replacing the tidegates and increasing the area of impervious surface within the right-of-way, have the potential for adverse effects throughout the contiguous waterways. Therefore, the analysis of effects to tidewater gobies, water quality, and natural communities should extend into these potentially affected waters.

Page 248: We are concerned that the document does not appear to address anticipated sea level rise due to global warming, which may influence the expected life span of the new southbound Jacoby Creek Bridge and the Indianola Interchange. Specifically, we are concerned that Caltrans may not be considering anticipated sea level changes that would significantly constrain future possibilities for restoration in adjacent former tidelands. The need to provide future levee protection to new highway infrastructure constructed below anticipated future tide levels may inhibit future restoration activities. 15

Page 253: We appreciate the detailed description of the effects to wetlands and the discussion of the Conceptual Wetland Mitigation Plan. The detailed discussion of the effects of the action alternatives and the available mitigation strategies is well presented and thorough. Since the Service will continue to have dialogue with Caltrans and other agencies on this issue, we will reserve our formal comments on this aspect of the Project at this time, and continue to work with Caltrans on mitigation planning in the near future. 16

Section 3.3.3 Special Status Plant Species

Page 272: We are concerned that individual specimens of the candidate Humboldt Bay owl's-clover cannot be protected at their location at Gannon Slough. Several plants have been found along the northbound lanes between the guardrail and the adjacent wetland habitats, making full protection of these plants, as described in this paragraph, extremely difficult. We encourage Caltrans to initiate measures to locate these specimens at the proper season, and consider measures to move or otherwise mitigate as needed, for those that cannot be avoided. We have similar concerns for patches of Lyngbye' sedge that occur along the banks of Jacoby Creek, where activities to construct the new southbound bridge will require work along the immediate bank. Although protection measures will have some success, loss of some individuals due to crushing, shading, and soil compaction seem inevitable. 17

Section 3.3.5 Threatened and Endangered Species

Page 279: The second paragraph on this page states that critical habitat for the tidewater goby (*Eucyclogobius newberryi*) has not been designated. This statement needs some clarification. The Service designated critical habitat in 1998 for the tidewater goby, but only in San Diego and Orange Counties, California. Therefore, no currently designated tidewater goby critical habitat will be affected by the Project. However, the Service is currently considering revisions to the designation of critical habitat (U.S. Fish and Wildlife Service 2006). As part of this revision, the Service has proposed that the 101 channel be included. We anticipate this revision will be 18

published in a final rule prior to implementation of this Project. Effects to the species and its critical habitat, including proposed revisions, are being addressed in ongoing formal consultation between the Service, FHWA, and Caltrans.

Page 281: In this draft document, the subsection on Other Special Status Species is included within section 3.3.5 Threatened and Endangered Species. This organization seems inconsistent, since these other special status species have no legal relation to species listed under ESA. We recommend that this subsection and it's analysis of effects for these species be moved to a separate independent section, as was done for special status plant species in section 3.3.3, page 269. 19

Page 284: Substantial controversy surrounds the level at which sound levels within the water have the potential to cause injury to fish. The Draft EIS/EIR relies on information suggesting that adverse effects to fish, including barotrauma, occur at noise levels approaching 208 dB re:1μPa_{peak}. Other evidence suggests that adverse effects may occur at levels as low as 190 dB re:1$\mu Pa_{peak,}$, and possibly lower yet in situations where multiple strikes occur. The Service will continue to work with Caltrans on this issue through section 7 consultation to determine appropriate noise levels for the conditions that occur at this Project, and to determine appropriate minimization measures. 20

Thank you for the opportunity to provide comments on the Draft EIR/EIS for the Route 101 Eureka/Arcata Corridor Project. Please direct any questions or requests for additional information to Service biologist Ray Bosch at (707) 822-7201 or via email at ray_bosch@fws.gov.

Sincerely,

Michael M. Long
Field Supervisor

cc:
California Department of Transportation, Eureka, California (Attn: Mitch Higa)
Federal Highway Administration, Sacramento (Attn: Lahn Phan)
California Department of Fish and Game, Redding (Attn: Craig Martz)
California Department of Fish and Game, Eureka (Attn: Karen Kovacs)
Army Corps of Engineers, Eureka (Attn: Carol Heidsiek)
NOAA Fisheries, Arcata (Attn: Irma Lagomarsino)
NOAA Fisheries, Arcata (Attn: Diane Ashton)
Environmental Protection Agency, San Francisco (Attn: Mike Monroe)
USFWS, Humboldt Bay National Wildlife Refuge, Loleta (Attn: Eric Nelson)
Department of Wildlife, Humboldt State University, Arcata (Attn: Dr. Mark Colwell)

Kim Floyd
Eureka/Arcata Corridor Improvement Project

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Brice, A.T., K. H. Dahl, and C.R. Grau. 1989. Pollen digestibility by hummingbirds and psittacines. Condor: 91:681-688.

U.S. Fish and Wildlife Service. 2006. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Tidewater Goby (*Eucyclogobius newberryi*); Proposed Rule. 71 FR 68914-68995.

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Stallcup, R. 1997. Deadly Eucalyptus. Point Reyes Bird Observatory, Observer 108.
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Responses to U. S. Fish and Wildlife Service:

1. Subsequent to the 2007 public circulation of the Draft Environmental Impact Report/Statement (EIR/S), the proposed project now includes two modified alternatives: Alternative 1A and Modified 3A.

2. Caltrans District biologists are coordinating with Caltrans Headquarters biologists on this project. All feasible means will be incorporated to avoid and minimize wildlife corridor effects and wildlife crossing the highway for both the project design and construction activities.

3. The Section 7 text has been corrected.

4. Comment noted. The proposal to remove the Eucalyptus trees on the west (bay) side of the highway has been dropped.

5. Section 3.3.1 Natural Communities in Chapter 3 of the Final EIR/S has been revised and expanded. Note that there are now five build alternatives and that in terms of areas of disturbance and effects to wildlife, all five would have similar effects to wildlife: many of the proposed improvements are common to all build alternatives and all alternatives basically expand the existing roadway facility.

6. The proposed bridge at Airport Road is part of Alternative 3. This alternative has not been identified as the Preferred Alternative, so the bridge will not be constructed as part of the project.

7. Fish passage discussion in Section 3.3.1 Natural Communities in Chapter 3 of the Final EIR/S has been revised and expanded.

8. Section 3.3.4 Animal Species in Chapter 3 of the Final EIR/S has been revised and expanded.

9. The findings in Section 3.3 Biological Environment in Chapter 3 of the Final EIR/S are based on field surveys documented in the chapter as well as the references listed in Chapter 9 References in the Final EIR/S.

10. All Build Alternatives would have minimal effects to the use of the project area by wildlife. Due to current high traffic levels, construction activity is not expected to contribute any substantial increase in disturbance to birds nesting adjacent to the project area. To further minimize noise effects on wildlife, Caltrans will implement standard construction practices, which include noise minimization measures. In addition, a qualified biologist will be present as needed to monitor construction activities in sensitive biological resource areas to ensure adherence to permit conditions and avoidance and minimization requirements. See Section 3.3 for more discussion of biological impacts.

11. The detailed construction text has been relocated to Chapter 2.

12. Chapter 2 of the Final EIR/S includes a revised and expanded discussion of the proposed tide gate replacement work.

13. Text regarding connecting the Route 101 channel to Humboldt Bay has been removed. During the early project development process, this connection was considered, but eventually dropped from consideration as part of the project.

14. The 101 Slough is entirely within the existing State right-of-way and the BSA.

15. Chapter 4 in the Final EIR/S has been extensively revised to include a more detailed greenhouse gas and sea level rise discussion. Augmenting or protecting the existing levee system is not included in the proposed project.

16. With feedback from the U.S. Fish and Wildlife Service and other resource agencies, the Conceptual Mitigation Plan was revised and is summarized in the Final EIR/S.

17. The Humboldt Bay owl's clover was found in the BSA on the bank of Gannon Slough. This area will be an Environmentally Sensitive Area and fenced prior to project construction to avoid impact to these plants.

The southbound Jacoby Creek Bridge replacement work would impact approximately 1,680 square feet of Lyngbye's sedge along Jacoby Creek. However, coordination with CDFG has determined that impacts to this species due to the bridge replacement would not be substantial if appropriate minimization measures are implemented. These minimization measures include the placement of protective ½ to 2-inches thick metal/wood/rubber sheets on top of the stands of Lyngbye's sedge where equipment access is required, these pads will be large enough to prevent the equipment tracks/wheels from rutting and compressing the soil and uprooting or destroying the sedges. The disturbed sedge is expected to fully recover within a few seasons.

18. Section 3.3.5 Threatened and Endangered Species in Chapter 3 of the Final EIR/S has been revised and includes updated tidewater goby critical habitat discussion.

19. The discussion of species of special concern is now located in the Section 3.3.4 Animal Species in Chapter 3 of the Final EIR/S.

20. Since the circulation of the Draft EIR/S in 2007, Caltrans is now proposing to construct bridge improvements without driving any new piles in the water. Consequently, barotrauma is no longer an issue with this project.

Appendix B – Local Agency Comments

City of ARCATA

City Manager	Environmental Services	Police	Recreation
(707) 822-5953	822-8184	822-2428	822-7091
Community Development	Finance	Public Works	Transportation
822-5955	822-5951	822-5957	822-3775

736 F Street
Arcata, CA 95521

September 25, 2007

Rod Parsons, Chief Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

RE: DEIR for the Eureka to Arcata Safety Corridor Improvements

Dear Mr. Parsons:

After considerable review by City citizen committees and commissions, public input and staff review of the Draft EIR for the Eureka to Arcata Safety Corridor Improvements, the City Council of City of Arcata submit the following comments for consideration.

By a unanimous vote the City Council does not support any of the alternatives that are reviewed in the Draft EIR and specifically requests to see alternatives that consider in full the following:

- A holistic review of all three transportation corridors between Eureka and Arcata; the Hwy 101, Old Arcata Road and Hwy 255. Alterations as significant as those suggested in the current DEIR alternative would have large consequences on both Old Arcata Road and Hwy 255 that need to be analyzed. 1

- The Current "no build" alternative calls for resurfacing, restoring and rehabilitating. The repair of road surface, bridges affected tide-gates and acceleration/deceleration lanes should be completed as part of the State's regular highway management plan and should not be considered a "build project". 2

- Specific focus should be given to the Hwy 255 and Hwy 101 interchange. This overpass in its current configuration creates a large barrier for non-motorized transportation in and out of Arcata. The DEIR document cites on page 7 that the Route 101/255 interchange ramps do not meet current standards for width, length or safety. This is not a adequate pedestrian/bicycle facility as there is little more than a 30" wide walkway and no ADA accessibility. The City requests that Caltrans investigate a conversion to a roundabout interchange on the 255/101 interchange and possible abandonment of the four hook ramps and accel/decel lanes under the 255 bridge. This would be a significant improvement for bicyclist and pedestrians at the intersections as well as allow for reducing the travel lanes to one in each direction on the 255 3

bridge deck and installation of bike lanes with safe and useable sidewalks on the bridge deck as well. This would also meld well with the City's proposed Hwy 255 Gateway Project that is specifically designed to improve and encourage use by bicycles and pedestrians.

- All new alternatives should consider the Hwy 101 corridor between Arcata and Eureka as a multi-modal corridor. The corridor has regular and abundant usage by bicycles, pedestrians, and other means of non-motorized transportation commuting between the two communities. All new alternatives should also de-emphasize the auto and include an increase in bus and rapid transit analysis. 4

- All new alternatives should consider the affects of sea level rise by repairing and raising where necessary the existing levee's (rail prism) that will protect the investment made during this project. 5

- The safety corridor designation has proven successful and should be re-designated. The current speed limit of 50mph should be retained within the corridor. 6

- The speed limit of Hwy 255 should be lowered to match that of the safety corridor to ensure that the re-designation of the safety corridor does not increase traffic along Hwy 255. 7

- The new alternatives should address all the cultural resources of the Hwy 101 corridor and the adjacent routs of Old Arcata Road and Hwy 255 including historical resources. There are significant cultural resources that were not identified in the DEIR. 8

- The Council would support new alternatives that included the proposed traffic light at Airport Road, but requests to see new alternate designs for the Indianola cut-off. 9

- The Council does not support the use of concrete barriers in the middle or along the sides of the corridor. 10

- New alternatives should include an analysis and solutions to address traffic impacts through Eureka. 11

- The City would like to encourage Caltrans to work with the local agencies including the Cities of Arcata and Eureka and County of Humboldt in submitting a regional application to make the safety corridor a designated Scenic Highway. 12

The City Council received substantial input from three of its citizen advisory committees. Two Committee recommendations are attached in their complete form but the Council wishes to highlight their support for the following:

Transportation Safety Committee

- There is not a clear projection of the estimated level of service (LOS) Table 1-2 DEIR impacts on the 255 ramps from the alternatives. Clearly any increase in volume related to people using the clover leaf as a U-turn to go southbound on Hwy 101 will increase traffic speeds and 13

volumes having a negative safety impact for all modes of travel and specifically pedestrians and bicyclists across the bridge deck.

- The DEIR points out on page 9 that one of the major purposes of the project is to improve safety at intersections but the project proposes to do minimal safety at the northern terminus of the project which will only see an increase in use. Table 1-1 demonstrates that several of the locations adjacent to the 255 interchange are above the State average for safety but there are no significant proposed improvements. 14

- It has been discussed that the project is not adequately funded and that the local share of the State Transportation Improvement Fund (STIP) would be needed to construct the project. As a regional project inter-regional funds (ITIP) or other programs could be used so that local STIP funds that are needed for projects within the City's and County road networks for rehabilitation, access, safety and capacity improvements are retained for such uses. 15

- Some of the calculations which project a near 50% increase in vehicular traffic by 2031 needs clarification as do some of the calculations in the accident/collision tables. 16

- The Transportation Safety Committee does not see the need to increase the speed limit on the corridor due to safety issues, fuel economy efficiency, and safety/comfort for bicycle and pedestrian use of the shoulders. Continued use of a reduced speed limit can be justified when an engineering analysis states that it is necessary and prudent to keep it lower based on the conditions i.e. at-grade intersections, direct roadway access and significant use of the shoulders. 6

Wetland and Creeks Committee

- The General Plan 2020 Policy Rc-2 Streams seeks to enhance, maintain and restore the biological integrity of entire stream courses and their associated riparian habitats, as natural features in the City's' landscape. The proposed project alternatives will impact Jacoby Creek and Gannon Slough and associated fish and wildlife species utilizing these areas. The DEIR lists impacts and mitigation for habitat loss to specific species, Coastal Cutthroat Trout and Tidewater goby, while failing to address those same potential impacts to other species (pg. 280-82) Coho salmon or Chinook salmon. The DEIR also suggests that replacing tide gates will minimize impacts to listed fish species. While it may mitigate for impacts it will not be a measure that can minimize impacts. (Pg. 286). 17

- The Jurisdictional Wetlands Section (pg. 234) includes a paragraph (paragraph 5, line 2) which refers to "ditches in and around the Route 255 interchange)". These ditches are Campbell Creek and its tributary. Mitigation can be provided at the Campbell Creek cloverleaf by assessing and upgrading the existing culverts for fish passage and improving riparian habitat in this reach. The tributary to Campbell that runs adjacent to the Uniontown Shopping Center and through the cloverleaf can also be assessed and improved in the same way. 18

- The Arcata General Plan 2020 Resource Conservation and Management Policy RC-3 – Wetlands Management includes protecting existing wetlands areas and their functional capacities and values, maintaining a standard of "no net loss" in area and value, restoring degraded wetland areas, enhancing wetlands functions, and creating additional wetland areas to 19

replace historical losses. The DEIR fails to address no net loss in acreage. It also fails to provide specific information on proposed mitigations with respect to acres and wetland types to be created, restored or enhanced. Caltrans should delineate both wetlands to be impacted and mitigation areas where wetlands will be created, discuss the proposed mitigation ratio, define success criteria and monitoring protocols. The Committee does not support mitigation credit for enhancement of existing wetlands should wetland impacts occur as a result of this project.

- Visual and habitat impacts resulting from proposed tree removal should include identified mitigation as well as monitoring protocols and success criteria. Of particular concern is the loss of Cypress and Monterey pines as these trees provide habitat for Red tailed and Red shouldered hawks. 20

- The DEIR should address proposed follow up monitoring for all mitigation strategies. 21

Energy Committee

- Increased speeds on this highway corridor will make it less safe for bicycle travel, thereby discouraging this alternative mode of transportation. Alternative 3 does not offer a balanced approach toward meeting our transportation needs on the North Coast. 6, 22

- The preferred alternative being proposed by Caltrans is inconsistent with many of the City's goals and existing planning documents, including the Arcata General Plan 2020, the Arcata Pedestrian and Bicycle Master Plan, and the City of Arcata Community Greenhouse Gas Reduction Plan. All of these documents call for an emphasis on alternative modes of transportation and set forth the goals of reducing single occupant vehicle trips and vehicle miles traveled. These goals can best be served by creating a balanced multimodal transportation system. 23

- The need for the proposed project is questionable. It is based on exaggerated projections of future traffic volumes and an assumption that the effectiveness of the current Safety Corridor cannot be maintained. We suggest that continued enforcement of the 50 mph speed limit will keep speeds down and will maintain the current safety benefits. 24

In closing the City would like to formally request that Caltrans expand the EIR process to include new alternatives that address the concerns of the Arcata Community. 25

Sincerely,

Harmony Groves

Harmony Groves
City of Arcata, Mayor

Responses to City of Arcata

1. The planning and design of the proposed project does include an evaluation of each Build Alternative on the three highways as well as local roads as a transportation system between Eureka and Arcata. The computer traffic forecast model includes the three interrelated highways and predicts future traffic volumes of each alternative on the three highways. For additional information, see the revised Section 3.1.6 Traffic and Transportation in Chapter 3 of the Final EIR/S. Also see Group Responses I-E.

2. The No Build Alternative does not include any new development other than minor, routine and repair maintenance work on an as needed basis. The roadway resurface, restore, and rehabilitate (RRR) work included in the proposed project is considered major, long term maintenance and improvements.

There were several trade-offs that were carefully considered prior to the decision to combine the State Highway Improvement Program (STIP) safety enhancement work with the RRR work (part of the State Highway Operations and Protection Program). Ultimately, because the two major projects shared common elements and both are needed, it was decided that these considerations justified combining the two projects.

3. Replacing the Route 101/State Route 255 interchange in Arcata would not be cost effective and would not meet the project need and purpose. On the east side of the interchange, the existing roundabout functions adequately for traffic exiting and accessing Route 101. On the west side of the interchange, a substantial area of right-of-way acquisition would be required for a roundabout. The collision rates at this interchange and ramps have not been determined to be a safety concern. The proposed project will be compatible with the City of Arcata gateway proposal to enhance non-motorized access at this location.

4. The planning and design of the proposed project does take into consideration all transportation modes on the three highways between Eureka and Arcata. All of the proposed highway improvements would benefit all transportation users. Section 3.1.6 Traffic and Transportation in Chapter 3 of the Final EIR/S has been revised to address these issues in greater detail. Also see Group Responses I-D, II-A, II-E, and II-G.

5. Sea level rise is addressed in Chapter 4 of the Final EIR/S. Improving/raising the existing levees to protect the Route 101 roadway is not included in the proposed project.

6. The proposal to immediately raise the posted speed limit for any of the proposed Build Alternatives has been dropped. The posted speed limit will remain 65 mph north of the Jacoby Creek Bridges. Please refer to Group Response I-A regarding the Safety Corridor.

7. Improvements to State Route 255 are not included in the proposed project. However, Caltrans is currently evaluating traffic calming improvements on State Route 255 through Manila. Also see Group Response I-E.

8. Cultural resources were identified and evaluated within the limits of the proposed project of the Route 101 corridor. Cultural resources along State Route 255 and Old Arcata Road were not addressed because there are no improvements proposed at these two roadways. See section 3.1.8 Cultural Resources in Chapter 3 of the Final Environmental Impact Report/Statement (EIR/S) for more information.

9. There are no plans to propose signalization at the Route 101/Indianola Cutoff. See Group Response II-C as well as Section 3.1.6 – Traffic and Transportation in Chapter 3 of the Final EIR/S.

10. The proposal to install concrete median barrier in the Route 101 median has been dropped since the Draft EIR/S was circulated to the public. The existing metal beam guardrail in Arcata City limits will remain after project construction.

11. Route 101 improvements within the City of Eureka urban core would not meet the project need and purpose of enhancing safety and traffic operations and rehabilitating the roadway between Eureka and Arcata. The Route 101 between Eureka and Arcata is connected to Route 101 within Eureka, but it is a different facility type with different issues. Caltrans and the City of Eureka jointly prepare studies and construct projects to address issues on Route 101 (4^{th} and 5^{th} Streets and Broadway) in Eureka.

12. Section 3.40(B)(5) of the County of Humboldt Bay Area Plan states in part the following:

> The Humboldt County Board of Supervisors shall initiate the preparation of a Scenic Route Study pursuant to the adopted Scenic Highways Element of the Humboldt County General Plan for the portion of Highway 101 between Eureka and Arcata and that portion south of Fields Landing, inclusively.
>
> The Scenic Route Study shall be prepared by the County Planning Department in cooperation with the California Department of Transportation.

13. The existing level-of-service (LOS) at the Route 101/255 ramps is A or B. Table 3- 7 in the Final EIR/S indicates a slight increase in projected traffic volumes (except for Alternative 1A) for the year 2031. The projected traffic volume increase would not lower the LOS.

14. While it is true several of the Route 101/255 interchange ramp locations have higher than statewide average collision rates for similar interchange ramps, the Caltrans Traffic Safety unit has determined safety enhancements are not needed. The collision rates for the intersections are based on the number of collisions divided by the traffic volumes, including the cross street and mainline, for specified time intervals. The collision rates for the on and off ramps are based only on the volume of traffic using the specific ramp. The volumes of traffic at the intersections vary, but currently Route 101 mainline volumes are approximately 39,000 vehicles per day. By comparison, the traffic volumes on the ramps at the Route 255 interchange range from 1,500 to 4,800 vehicles per day, which increases the statistical sensitivity of collisions.

15. The Humboldt County Association of Governments (HCAOG) prioritizes and programs the State Transportation Improvement Program (STIP) with a County wide perspective. The Eureka – Arcata Route 101 improvement project was selected for the STIP primarily because of safety concerns on one of the most heavily traveled highway segments in Humboldt County.

16. See Group Response I-B. The tables showing collision rates have been revised.

17. The potential effects to sensitive fish species has been substantially reduced because the scope of work and the proposed construction methods have changed considerably since the Draft EIR/S was circulated to the public in 2007:

- Other than pier removal, construction work below the high water elevation level at Jacoby Creek will be avoided;
- Widening the northbound Gannon Slough Bridge is no longer included in the project;
- Constructing a new crossing over the slough near Airport Road is no longer included in the project.

Caltrans will work with resource agencies to further avoid, minimize, and mitigate any potential adverse effects to sensitive fish species.

18. Caltrans, the City of Arcata, the California Department of Fish and Wildlife have had, and continue to coordinate to improve and enhance fish passage where Campbell Creek flows through the Route 101/255 interchange.

19. The Construction Management Plan includes a proposal to create a wetland mitigation bank that will restore former tidal and degraded habitat adjacent to existing wildlife refuges. Caltrans believes the proposed bank will establish wetland mitigation credits in excess of those needed for the Eureka to Arcata Corridor Improvement Project (project)

20. Tree planting will be monitored for survival/success rate. If necessary, re-planting will be done if necessary.

21. Re-vegetation and wetland enhancement are the two measures to minimize harm that require monitoring. Resource agency permit will include both of these commitments.

22. Alternative 3 is not the proposed Preferred Alternative. Modified Alternative 3A is identified as the Preferred Alternative in the Final EIR/S based on the features of the alternative that best meets the project need and purpose while minimizing environmental harm. See Chapter 2 of the Final EIR/S for a discussion of the Preferred Alternative selection process.

23. Caltrans recognizes the importance of the City of Arcata's planning goals for a balanced transportation system, but respectfully disagrees that this specific project conflicts with any of them for the following reasons:

- The proposed project is designed to enhance safety and traffic operations at intersections as well as construct long term roadway maintenance. Caltrans has a State legislative mandate and responsibility to maintain the existing state highway system and above all else provide safe facilities to the motoring public. Constructing any one of the Build Alternatives would enhance safety for motorists, bus transit, bicyclists, and pedestrians.

- This project is not a major expansion of the highway facility nor is it designed exclusively to benefit motor vehicle transit. The proposed project would not add traffic lanes to increase the vehicle carrying capacity of the existing highway. The proposed project would neither encourage nor discourage single passenger car trips.

- The proposed project is sponsored by the Humboldt County Association of Governments of which the City of Arcata is a member. In addition, the Eureka - Arcata Route 101 Corridor Improvement Project is included in both the Regional Transportation Plan (RTP) and State Transportation Improvement Program (STIP).

- It would not be appropriate, feasible, or logical to include public transit and bicycle improvements for every highway improvement project. In the case of the proposed Eureka – Arcata Corridor Improvement project, constructing a separate trail for non-motorize transit or an expansion of the public transit system would not meet the project need and purpose. However, since the Draft EIR/S was approved in 2007, Caltrans has constructed separate bicycle improvement projects such as installing rumble strips, posting bicycle share the road signs, and re-striping the Route 101 roadway to provide consistent 10-feet wide outside shoulders in both directions between Eureka and Arcata.

- Bicyclist and pedestrian needs were considered in major phases of project planning and design. For example, after the approval of the 2007 Draft EIR/S, the proposed southbound Route 101 Jacoby Creek Bridge was redesigned to include an 8-feet wide barrier separated travel way for bicyclists and pedestrians.

- The proposal to raise the posted speed limit for any of the proposed Build Alternatives has been dropped. See Group Response III-A-1 for more information. Average motor vehicle speeds of approximately 50 mph are optimal for fuel efficiency and minimizing greenhouse gas production. See Chapter 4 of the Final EIR/S for more information regarding climate change and sea level rise.

For more information, refer to the need and purpose discussion in Chapter 1, Section 3.1.6 - Traffic and Transportation in Chapter 3 and Group Responses 1-E and II-E.

24. See Group Responses I-A, I-B, and I-C.

25. Caltrans has demonstrated a willingness to work towards mutually beneficial, cost effective transportation solutions with all stakeholders while minimizing environmental harm. For example, after hearing from many individuals and organizations, it was decided to maintain rather than increase the post speed limit after project construction.

"Doby Class"
<dclass@cityofarcata.org>
12/22/2008 11:25 AM

To "Kim Floyd" <kim_floyd@dot.ca.gov>
cc
Subject Fw: City's Comments to Caltrans 101 EIR

Kim, I gave a brief update on the new alternatives at the last City Council meeting 12/17. There were no substative changes as far as impacts to the City, so we stand by the original comments attached from last September 2007.

I brought up the proposed solid concrete barrier to 11th st. (which is not in favor). I also discussed the HBBC letter which was cc'd to the Council and the Bayside residents who are concerned about bike/ped access should Bayside cut-off be closed. I was also asked about the City's rail/trail project and I said I was sure we would be working together and that the Coastal commission and Conservancy were very interested in the trail as well. 1 2 3

Merry Christmas and
a Healthy and Prosperous new year

Doby[attachment "City of Arcata Comments to 101 Corridor EIR.pdf" deleted by Kim Floyd/D01/Caltrans/CAGov]

Responses to Doby Class, City of Arcata:

1. The proposal to install concrete median barrier in the Route 101 median has been dropped since the Draft EIR/S was circulated to the public. The existing metal beam guardrail in Arcata City limits will remain after project construction.

2. Before addressing the project effects of delay and out-of-direction travel on bicyclists, the existing Route 101 situation needs to be explained:

- Currently bicyclists turning left or crossing Route 101 at the existing medians must cross multiple traffic lanes and wait in unprotected medians while avoiding motor vehicles that are also using the same median to complete crossing and left turn moves from the same and other directions. It is likely many bicyclists and pedestrians are discouraged from using the existing medians for this reason alone.

- Most commuting bicyclists tend to ride between Eureka and Arcata and not cross or turn left across Route 101 while traveling on Route 101 because most residences and jobs are located within these two cities. Recreational bicyclists on Route 101 are also not likely to cross or turn left on Route 101 since there are no public coastal/bay access points between Eureka and Arcata. For these reasons and because of the aforementioned safety concerns, bicyclists and pedestrians are seldom seen using the medians to cross or turn left.

After the proposed Preferred Alternative (Modified Alternative 3A) is constructed, bicyclists would have consistent 10-foot wide outside shoulders in both directions; uncontrolled left-turn movements would be eliminated; a signal at Airport Road and a grade separation at Indianola

Cutoff would provide safer crossings and left-turns than the existing uncontrolled medians. Airport Road and Indianola Cutoff likely have the most demand for crossing and left turns than the other median locations. In addition, the Indianola Cutoff is located approximately midway between Eureka and Arcata, which provides a logical turn around location. It is acknowledged that Modified Alternative 3A would eliminate four of six existing median openings for bicyclists to use resulting in a small proportion of bicyclists traveling out of direction; however, the overall benefits would outweigh the drawbacks. As traffic volumes increase in the future, especially during peak travel periods, the proposed improvements of Modified Alternative 3A would have increasing benefit.

If Modified Alternative 3A were in place, bicycle commuters traveling southbound from Bayside could ride south on the now wider Old Arcata Road south and turn west onto Indianola Cutoff and access Route 101 on a grade separation to continue traveling south to Eureka.

Overall, there are trade offs to consider and weigh; no one alternative will completely resolve all issues for all motorists and non-motorists; even with an unlimited budget, frontage roads and bicycle lanes could be constructed, but would require filling wetlands and potentially adversely affecting the adjacent wildlife refuges. Modified Alternative 3A would provide a substantial safety benefit for the vast majority of both motorized non-motorized transit while balancing cost and wetland impact considerations.

3. See Group Response I-D.

CITY OF EUREKA
MAYOR
531 K Street • Eureka, California 95501-1146 • (707) 441-4200

September 21, 2007

Ms. Kim Floyd, P.E.
Project Manager
California Department of Transportation P.O. Box 3700
Eureka, CA 95502

Subject: Eureka-Arcata Route 101 Corridor Improvement Project
Comments to the Draft Environmental Impact Report/Statement
(DEIR/DEIS)

Dear Ms. Floyd,

The City of Eureka is pleased to provide these comments to the Draft Environmental Impact Report/Statement for the Eureka-Arcata Route 101 Corridor Improvement Project. We hope the final environmental document provides clear, complete and accurate guidance to future decision makers.

Traffic volumes will continue to grow on the 101 Corridor over the next 20 years. The Eureka City Council believes that real safety problems exist today at the Airport and Indianola intersections, and safe access routes need to be created for bicycles and pedestrians. These safety problems can't be solved with a "no build" alternative. Corridor businesses play a critical role in our city's economy by providing local jobs and essential sales tax revenues. We support enhanced accessibility for these businesses – not median closures.

This project will define our northern urban boundary. The Eureka City Council envisions a project that increases safety, improves access for local businesses, and beautifies our city's northern gateway. We urge all of our HCAOG partners to stay the course and we appreciate their continued support for this process.

On behalf of the Eureka City Council,

Virginia Bass

Virginia Bass
Mayor, City of Eureka

Cc: Councilmembers

Attachments: Comments
Councilmember Larry Glass' letter
Humboldt County Aviation Advisory Committee letter

Comments to the Draft Environmental Impact Report/Statement
For The
Eureka-Arcata Route 101 Corridor Improvement Project
By the
City of Eureka

September 21, 2007

1. Traffic Volume Projections

a. The 50% forecasted growth of traffic is not adequately illustrated by the information supplied in the document.
   i. Provide a clearer explanation of the sources of information
   ii. Clearly represent the locations where traffic volumes were counted, especially if information is available at various locations in the corridor.

1

b. Existing and proposed Humboldt County growth plans will significantly impact the Indianola intersection. The recently completed Greater Eureka Area Traffic Model forecast should be incorporated into the document.

2

c. Represent the forecast as a range of values
   i. There seems to be a number of sources of information that result in a range of future traffic volumes.
   ii. A range seems to be more plausible than a specific target.

1

d. In a concise manner, identify how the traffic volume projection affects the design and/or environmental review of the project in relationship to safety and congestion at the crossings and mainline.

3

2. Access to Business

a. The City of Eureka would expect continued if not increased emphasis on the importance of the residents and businesses within the corridor.

4

   i. Safe multi-modal access to the over 400 employees in the corridor must be a priority and should be more clearly articulated.
   ii. The impacts of out-of-direction travel are poorly researched and most certainly underestimated by the document.

5

      1. The basis of the study does not use an area that is representative of the business along the corridor.

6

      2. The 101 CAP survey provides a much more accurate representation of the potential impacts of the alternatives to businesses and residents in the corridor.

7

b. Continued and improved access to Jacobs Avenue and Mid-City Auto is strategically important to the City of Eureka because of its robust benefit to the City's General Fund.

8

3. Removal of Trees

a. The specific needs to remove the trees need to be more fully documented. 9
   i. General reference to 30-foot safety clear zone setbacks is insufficient. 10
      1. Can this removal be phased to coincide with mitigation?
      2. Is this standard consistently and currently applied to all highways/expressways? 11
   ii. There is not sufficient explanation of any alternatives to tree removal that were rejected. 12

b. Identify by a map, which trees need to be removed to provide: 13
   i. Extended acceleration and deceleration lanes
   ii. The Indianola Interchange
   iii. The Airport Traffic Signal
   iv. 30-foot safety clear zones

c. Identify the alternatives to the tree removals and the consequences of those alternatives. 14
   i. Filling of median wetlands
   ii. Loss of median width necessitating installation concrete median barrier
   iii. Elimination of shoulder by installation of guardrail immediately adjacent to the roadway.
      1. Narrowing of the bicycle route.
      2. Narrowing of the breakdown area.
      3. Narrowing of the work area for roadway maintenance.
      4. Places additional obstacles adjacent to the roadway.

4. Traffic Signal at Airport Road

a. In April 2004, the City Council provided guidance to the Mayor and City Engineer in respect to their participation with other members of HCAOG in the preparation of the environmental document. (Please see the attached agenda summary and minute order) This guidance included: 15
   i. Support for the recommendations of the 101 CAP Group
   ii. Accommodation of the needs of the 101 businesses
   iii. Signalization of the Airport Road intersection
   iv. Extension of an urban parkway beyond "V" Street to Airport Road.
   v. Enhancement of the city's gateway with trees and landscaping in the medians.

b. The signalization would address the significant impacts of median closure to the businesses and residents along Jacobs Avenue and within this portion of the corridor and establish the Northern Gateway to the City of Eureka. 15

c. However, the typical cross section included with the environmental document for the area between the Eureka Slough Bridge to Airport Road 15, 16

did not include any landscaping and presented an non-landscaped central median with a thrie-beam:

i. This does not present an urban environment and would not contribute to the safety of the signal.
ii. Enhancing the urban character of this section of roadway will contribute to the safer operation of the signal.
iii. This section of roadway would be an obvious location for mitigation of tree removals.
iv. In any case, the proposed project should preclude neither the extension of the City's urban environment from "V" Street to Airport Road nor the eventual beautification of this section of roadway as the Northern Gateway to the City.

5. Explanation of Eliminated Alternatives

The Council is requesting that a full disclosure of all considered alternatives be included in the environmental document. While it is not necessary to include the full text of reports such as the Value Assessment, a chart identifying each alternative with the reason(s) for rejection would be particularly beneficial. 17

The Council suggests that certain elements of these alternatives might be considered as "enhancements" to one or more of the proposed alternatives. The disclosure should include evidence whether any elements were discovered and in fact already incorporated into the proposed alternatives. 18

Finally, the following alternatives should be presented in their entirety in the DEIR/DEIS:

a. Safety Corridor

i. What needs to be put into place to perpetuate the Safety Corridor? 19
    1. Engineering devices such as:
        a. More signs and radar devices
        b. Improved acceleration and deceleration lanes
        c. Improved lighting at crossings
    2. Enforcement activity on the part of the:
        a. State
        b. County
        c. Cities
    3. Education of the public on the safety problems in the corridor by:
        a. Public information campaigns
        b. Media involvement
ii. Is there significant public support of the currently reduced speeds within the corridor? 20

±

b. Transit

i. Document why the expansion of transit was not found to be feasible. 21

ii. What are the impacts and/or benefits of each alternative on transit usage within the corridor? 22

iii. What is the cost to provide expanded transit opportunities? 23
   1. What types of funding are available for expanded transit, i.e., grants, fares, etc.?
   2. What would be the expected fare per paying passenger?
   3. What would be the resulting expected ridership?

iv. What is the feasibility of a Bus Rapid Transit System on 101 from Fortuna to McKinleyville?

c. Bike and Pedestrian

i. Bicycle safety is an important value to the City, especially in regards to the visitor serving nature of our community and accessibly to recreational opportunities. 24

ii. Therefore, it is appropriate to incorporate the findings of the HCAOG sponsored Eureka-Arcata Trail Feasibility Study into the DEIR/DEIS. 25
   1. Cite the implementation opportunities and obstacles identified in the report.
   2. Do any of the proposed alternatives prevent implementation of any of the trail alternatives in the feasibility study? 26
   3. Can any of the proposed alternatives be expanded to implement any of the trail alternatives in the feasibility study? 27

d. Signalization of all crossings

i. Why was this alternative rejected? 28

ii. How is the Airport Road intersection any different from all the others to warrant signalization?

iii. What conditions need to change before this alternative can be found to be feasible?

e. Alternative Paths

i. Can the alternative paths (Route 255 and Old Arcata Road) be improved to safely carry the additional cumulative and diverted traffic? 29

CITY OF EUREKA
CITY COUNCIL
531 K Street • Eureka, California 95501-1165 • (707) 441-4172

101 corridor comments

Purpose and Need are skewed. This should be a transportation plan with safety rolled into it. 30

The EIR states "If a long-term project were not implemented, median closure would likely still be necessary". This implied that if this project is done the way Cal-trans wants it done they will possibly close the medians without other mitigation is unacceptable. In point of fact any plan that would allow median closer should be "taken off the table" 31

.

The Alternatives Considered but Dropped from Further Consideration portion of this EIR (pages 42-45) is flawed. 17

The logic used to drop alternatives 5 and 6, and PSR Alternative Y2 is not analyzed properly and most of the arguments used to drop these from further consideration are questionable as discussed below. 32

The traffic volumes predicted for Route 101 between Eureka and Arcata are not believable and are at odds with other studies. 1

The EIR states "Continual funding of additional enforcement would require an ongoing financial commitment by HCAOG, Cal-trans Office of Traffic Safety Programs, the state Office of Traffic Safety, or the California Transportation Commission with funding approvals by the State Legislature in many instances". All of these are possible. 33

The argument that "Review of safety corridors across the state has shown their effectiveness is short lived" is not based on sound data and represents speculation at the best. This safety corridor has worked well to-date, and with even minor further improvements could be effective for many more years. 34

.

So Alternative 5, Alternative 6, and PSR Alternative Y2 all deserve to get more serious attention than what is in this EIR All three of these alternatives are feasible, and can be made to meet Purpose and Need. They should be further analyzed and reevaluated. These should be fully explored and brought forward for the public to evaluate. 32

Larry Glass
Eureka City Council
Ward 1

Humboldt County Aviation Advisory Committee

September 6, 2007

Mayor Virginia Bass, and
Members, Eureka City Council
531 K Street
Eureka, CA 95501

35

Subject: Highway 101 Safety Corridor DEIS Comments

Dear Mayor Bass and Members:

The Humboldt County Aviation Advisory Committee, an advisory body to the Board of Supervisors, has reviewed the Caltrans DEIS for the Corridor Improvement Project between Eureka and Arcata. We make these comments to you regarding the possible impacts to future operations of Murray Field, one of the six airports in the County aviation system.

Project Alternative 3 has at least two major impacts on airport operations:

1. The creation of a signalized intersection at Airport Road and Highway 101 introduces a potential conflict between southbound traffic stopped at the signal and arriving aircraft landing over Humboldt Bay on Runway 11. Southbound trucks stopped at the signal and backed up across the extended runway center line introduce a situation not currently present when traffic is constantly moving.
2. Realigning the Airport Road intersection with Highway 101 to the north (east) encroaches on airport property. This has the effect of removing the land from airport use and has the potential to restrict airport operations.

We also see other considerations regarding the DEIS. Removal of trees on the west (north) side of 101, between 101 and the rail tracks, especially those trees nearest the runway, will expose existing power lines to departing aircraft. These trees now act as a natural barrier, encouraging longer straight out departures before beginning right hand turns. Power lines, by themselves, are difficult to see from aircraft in flight.

A careful reading of the DEIS seems to indicate that its preparation was done without consultation with or following guidelines established by Caltrans Division of Aeronautics, regarding potential impacts on the Eureka Murray Airport. Also, there is no indication that any consultation was sought from the Federal Aviation Administration on airport impacts.

Sincerely yours,

Charles F. Goodwin, Jr.

Charles F. Goodwin, Jr.
Chairman

3561 Boeing Avenue
McKinleyville, CA 95519

Responses to City of Eureka:

1. See Group Response I-B.

2. The Greater Eureka Area Travel Model (Travel Demand Model) was used to validate land use and growth assumptions to predict future Route 101 traffic volumes. The Greater Eureka Area Travel Model correlates well with the growth factors used by the Caltrans methodology. See Group Response I-B for more information.

3. Traffic volumes are expected to increase over the next 20 years within the Eureka-Arcata Route 101 corridor. As the traffic volumes increase, the frequency and length of traffic gaps decreases making it more difficult to make left-turns across on-coming traffic. As it becomes more difficult to make left turns, there is a greater potential for traffic to form queues waiting to make turns at intersections. Chapter 1 has been revised and discusses the relation between traffic growth and the project need and purpose.

4. See Group Response I-D.

5. The out-of-direction travel forecast was produced by a standard computer traffic forecast model. This model was validated using existing traffic counts and the existing highway network.

It is unlikely the model underestimated the out-of-direction travel. It is more likely that the out-of-direction travel would gradually decrease over time. For example, as drivers become familiar with closed medians, they would combine trips or change the sequence of trips for time savings and fuel efficiency.

6. The traffic study included the area between the Route 101/State Route 255 interchange in Eureka to the Route 101 11th Street overcrossing in Arcata as well as Old Arcata Road and State Route 255. All businesses adjacent to Route 101 that would be affected by access restrictions between Cole Avenue in Eureka and the Bayside Cutoff are included.

7. The 101 Corridor Access Project (CAP) survey provided useful business revenue and employee information to the independent consultant evaluating the project effects of restricting Route 101 access to businesses and residents. However the survey did not identify or follow a methodology for predicting the potential effects of restricting access. In addition the CAP survey did not take into account projected traffic volumes and the benefits of safety and traffic operation enhancement that would result from the project.

8. Minimizing the effects resulting from Route 101 access restrictions is a high priority. Alternatives 1A and Modified Alternative 3A were developed after the Draft EIR/S was approved to minimize out-of – direction travel.

9. Any fixed object too close to the edge of the traveled way (within 30 feet for freeways and expressways) can pose potential hazards for errant vehicles or vehicles making emergency maneuvers. Removing or shielding fixed objects that are within thirty-feet from the edge of the traveled way, or clear recovery zone, would enhance safety.

10. Caltrans is planning to plant replacement trees prior to tree removal.

11. Tree removal in accordance with the clear recovery advisory is generally uniformly applied to all State highways with some exceptions. For example, on Route 101 within Richardson Grove State Park, an exception was granted to preserve old growth redwood within the clear recovery zone. In addition, the Route 101 segment through the park has a reduced speed limit posted.

12. All Build Alternatives were modified to avoid tree removal on the west (bay) side of Route 101. On the east side, each tree within the clear recovery zone was evaluated in terms of visual value, size, spacing, and other considerations to preserve as many as possible.

13. Appendix A shows the locations of all proposed tree removal. Section 3.1.7 Visual/Aesthetics in Chapter 3 of the Final EIR/S includes a revised tree removal discussion.

14. On the west side of Route 101, all Build Alternatives have been modified to avoid tree removal with negligible loss of wetland, median width, or shoulder/lane width. On the east side there are no feasible alternatives, other than placing guardrail, to tree removal since the trees within the clear recovery zone are randomly spread out over several miles. The drawback with guardrail is that it increases the possibility of vehicle collisions since the guardrail is much longer than an individual tree and diminishes the visual setting.

15. Modified Alternative 3A, the Preferred Alternative, does include a half signal at Airport Road that would allow left turn moves to and from Route 101. Adding landscaping and gateway elements to project is not feasible to do so for the following reasons:

- Visual gateway elements would not meet the project need and purpose of enhancing overall highway safety and traffic operation as well as long term roadway maintenance improvements. However, Caltrans staff will work with City representatives for possible tree and shrub planting locations.
- Any additional development could add more wetland impacts, potentially affect sensitive species, and potentially affect wildlife refuges. Public resource agencies working with Caltrans want impacts to wetlands and sensitive animal and plant species avoided or minimized to maximum extent feasible. Consequently, gateway elements would require extensive careful design to minimize impacts as well as strong support and justification.

16. Tree planting or shrubs is not proposed in the median between the Eureka Slough Bridges and Airport Road because the median is too narrow. Guardrail is required to avoid and minimize head on collisions and vehicles crossing the median to opposing traffic lanes. There are no improvements proposed between V Street and the Eureka Slough Bridges on Route 101. Any urban parkway/gateway proposals can be submitted to Caltrans to be considered as a possible separate project.

17. Caltrans worked with representatives from several local governments, public agencies, and organizations to develop, discuss, evaluate, refine, and finally decide on which alternatives were feasible and would the project need and purpose. See Table 2-3, which is a listing of alternatives no longer considered. This table also includes major reasons for dropping from consideration.

18. In many cases closing the existing Route 101 medians were included in both the alternatives no longer considered and the Build Alternatives evaluated in the Draft EIR/S. In some cases, shoulder widening was included in rejected alternatives but not included in the Build Alternatives evaluated in the Draft EIR/S. In 2012, Caltrans restriped the Route 101 roadway to provide consistent 10-feet wide outside shoulders in both directions.

19. Even if the Safety Corridor can be permanently enhanced, it would not meet the long term project need and purpose. See Group Response I-A.

20. See Group Response III-A-1.

21. See Group Responses I-D, II-A, and II-E.

22. There are no public transit stops within the Route 101 corridor. Currently there is only one bus route within the project construction limits. None of the five Build Alternatives would adversely affect public transit. After construction of any of the Build Alternatives, bus transit would benefit from enhanced roadway safety, roadway maintenance improvements, and better intersection level-of-service.

23. In general, transit cost estimates are not relevant to the proposed project for the reasons given in Group Responses I-D, II-A, and II-E. In order for public transit improvements to substantially reduce the traffic volumes on Route 101, improvements would need to include additional buses and drivers not only on Route 101 but feeder lines, additional park-and-ride lots, and fare subsidies. Group Response II-F does include cost estimates for bus rapid transit.

24. Bicycle safety is also a high priority during the planning and designing of the proposed project. See Group Response I-D for more information.

25. Research for the preparation of traffic studies in the Final EIR/S included the *Humboldt Bay Trail Feasibility Study: Arcata to Eureka Segment.* In addition Caltrans has participated in Humboldt Bay trail meetings sponsored by the Humboldt County Association of Governments.

26. None of the Build Alternatives would prevent the construction of the trail alternatives. In fact, the proposed Route 101 alternatives would generally enhance or compliment the trail alternatives.

27. While it is possible to expand the proposed Route 101 improvement project to include one of the trail alternatives, it is not feasible to do so for the following reasons:

- A Non-motorized transit trail would not meet the project need and purpose of enhancing overall highway safety and traffic operation as well as long term roadway maintenance improvements. Many of the proposed improvements are needed to address recurring problems that could result in more costly repairs if the improvements are delayed further.

- The non-motorized transit groups and individuals as well as rail advocates are diverse and have varying opinions about the best trail alternative. Currently there are varying opinions regarding the future of the existing Northcoast Railroad as well as connectivity and access issues.

- Any additional development such as a non-motorized transit trail would add more wetland impacts, potentially affect sensitive species, and potentially affect wildlife refuges. Public resource agencies working with Caltrans want impacts to wetlands and sensitive animal and plant species avoided or minimized to maximum extent feasible. Consequently, a trail would require extensive careful design to minimize impacts as well as strong support and justification.

28. See Group Response II-C.

29. Route 101 between Eureka and Arcata actually functions to accommodate regional through traffic since there are few residences and it is the most direct, widest route that connects the two cities as well as further destinations. On the other hand, both Old Arcata Road and State Route 255 pass through residential areas and serves local needs. For these reasons there would not be a justification to improve additional traffic on Old Arcata Road and State Route 255.

30. Chapter 1 has been revised to clarify the project need and purpose. Chapter 1 discusses the long-range regional transportation planning process. The Eureka - Arcata Route 101 Corridor Improvement Project is included in both the Regional Transportation Plan (RTP) and State Transportation Improvement Program (STIP).

31. The proposed project was undertaken in consultation with local governments, resource agencies, non-profit organizations, and interested individuals. After consultations and considering all feasible options, it was decided that eliminating uncontrolled left-turns by closing or restricting accesses was the key to eliminating broadside collisions. This was not a unilateral decision on the part of Caltrans.

Caltrans is ultimately responsible for public safety on State highways and public safety takes precedence over all other considerations. Closing one or more medians if there is an increase in serious collisions occurred would be one of the primary options.

32. See Group Response I-A.

33. The process to reinstate increased highway enforcement is political and complex. Even if funding for increased enforcement were obtained, the major condition that allows left-turn movements across opposing traffic lanes would remain. For more information see Group Responses III-A-1 and 2.

34. The data shown for other Safety Corridors is a straightforward presentation of collision data. Every collision involving death, injury, or property damage is reported by the California Highway Patrol and that information is shared with Caltrans.

35. The responses to this same letter are found with responses to County of Humboldt agency letters.

HCAOG

HUMBOLDT COUNTY
ASSOCIATION OF GOVERNMENTS

Members: County of Humboldt • Cities of Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad

September 28, 2007

Charles Fielder, Director
Department of Transportation
Caltrans District 01
P O Box 3700
Eureka, CA 95502-3700

Dear Charlie:

The Humboldt County Association of Governments (HCAOG), as the Regional Transportation Planning Agency (RTPA) for our county, takes this opportunity to convey regional comments generated during the DRAFT Environmental Study (EIS)/Environmental Impact Report (EIR) circulation process for the Eureka-Arcata Corridor Improvement Project. As you know, the Association took action directing staff to provide Caltrans with the public comments generated during their meeting on September 27, 2007.

Please find attached a generalized portrayal of the comments, as well as copies of various other reviewing agencies including several committees, the cities of Eureka, Arcata, and the Board of Supervisors. Several of the reviewers indicate their support for various alternatives included in the Draft EIS/EIR. It was the opinion of Association staff, including recommendations to the Board, that selection of a particular alternative is premature at this point in the environmental process. 1

Generally it appears that employees, employers, and residents in and around the corridor favor concepts that provide safe access and minimize out of direction travel. Many of these commentors favored the DEIS/DEIR third alternative which included interchange concepts at the Indianola Cutoff, and signalization of Airport Road. Others spoke in favor of the no-build alternative seven, while preferring bicycle, pedestrian, and transit related concepts to meet future increases in traffic growth. Speakers commenting on the no-build concepts also preferred the reduced speed safety corridor with added enforcement. Bicycle, pedestrians, and transit advocates were also in support of equity and accessibility considerations. A few commentors also provided positions favoring the retention of landscape features and eucalyptus trees, the benefits of which may result in reduced speed from a narrowed corridor perspective. 2

There have also been suggestions that Caltrans revisit traffic growth projections through 2031, and provide a clearer presentation of all previous alternatives and their rationale for being eliminated through Project Study Report (PSR), Project Development Team (PDT), and/or value engineering review processes. Several of the commentors suggested specific improvements which may have been previously evaluated in prior analysis or studies. 3

The Association is anticipating the Districts formal responses to the various comments generated through public exposure of the DEIS/DEIR for improvements in the Eureka-Arcata Corridor. Feel free to contact our office for discussion or clarification of our comment submittal package. As always, we look forward to working with you and your staff, with specific emphasis on the safety and operation improvements in the high volume U.S. 101 Eureka-Arcata corridor. You can reach me at 444-8208.

Sincerely,

Spencer Clifton
Executive Director

Enclosures

Responses to Humboldt County Association of Governments:

1. The process to select a Preferred Alternative has been a continuous process since the Draft Environmental Impact Report/Statement (Draft EIR/S) was circulated to the public for comments. Alternatives have been modified to address public concerns. Next the modified alternatives have been evaluated for potential environmental impacts and presented to the public as well as public resource agencies. This Final Environmental Impact Report Statement documents the modifications to the project alternatives (Chapter 2), summarizes public comments regarding the alternatives, and documents the identification of Modified Alternative 3A as the Preferred Alternative.

2. The varying opinions of letters submitted to Humboldt County Association of Governments (HCAOG) reflected many of the other written comments received by Caltrans. Each written comment submitted to HCAOG has been addressed in the following pages.

3. See Grouped Response I-B for projected traffic volumes. Chapter 2 has been extensively revised to explain the various alternatives. Also refer to sections I and II of the Grouped Responses regarding the project purpose and need as well as the range of alternatives.

Public Comment
Eureka-Arcata Corridor Improvement Project EIS/EIR
HCAOG Board Meeting 9-27-07

The following commentors spoke at the HCAOG Meeting of September 27, 2007 providing comment on the Eureka-Arcata Corridor Improvement Project EIS/EIR:

Generally employees, employers, and residents in and around the corridor favor concepts that provide safe access and minimize out of direction travel. Many of these commentors favored the DEIS/DEIR Alternative 3 which included interchange concepts at the Indianola Cutoff, and signalization of Airport Road. 1
Karen Butterworth, Trevor Harper, Jay Bahner, Ron Harris, Rick Fox, Charles Blake,
Tim Shreeve, Gary S., Thomas Stewart, Mayor Campbell

Favor of no-build alternative seven, while preferring bicycle, pedestrian, and transit related concepts to meet future increases in traffic growth. Speakers commenting on the no-build concepts also preferred the reduced speed safety corridor with added enforcement. 2
Bicycle, pedestrian, and transit advocates were also in support of equity and accessibility considerations.
Rudy Ramp, Chris Rall, Aaron Antrim

Retention of landscape features and eucalyptus trees. 3
Ron Kuhnel

Suggestion that Caltrans revisit traffic growth projections through 2031, and provide a clearer presentation of all previous alternatives and their rationale for being eliminated through Project Study Report (PSR), Project Development Team (PDT), and/or value engineering review processes. 4
Chris Rall, John Woolley, Larry Glass, Melvin McKinney, Ron Kuhnel, Rondall Snodgrass

Suggestions for specific improvements which may have been evaluated in prior analysis or studies. 4,5
Signalization and alternatives previously considered:
Charles Peel, Larry Glass

Support expressed for consideration of impacts to S.R. 255 and Old Arcata Road Corridor, impacts to interchange at U.S. 101 and S.R. 255 from out of direction travel, and the need for trails prioritization, and safer bike and pedestrian routing. 1,2,6
Supervisor Neely, Supervisor Woolley, Aaron Antrim, Mayor Groves, Councilman Pitino, unnamed Bayside Resident

The following comments were generally made by the HCAOG Board for delivery to Caltrans:

- Ask Caltrans to develop an additional alternative or a consideration that maintains a maximum 50 mph speed limit that includes maintaining the ability to access the freeway at as many locations as can be safely retained. 1,7
- Request that medians remain open until a final decision has been made as to what to do in area (corridor). 2,8
- Add multimodal transportation strategies. 2
- Prioritize Multi-Use Trail. 2

- Examine safety and convenience for all modes of travel. 9
- Perform a complete impact analysis to Highway 255 and Old Arcata Road. 5
- With regard to out of direction travel, comments were received that S.R. 255 needs consideration in EIR from a regional standpoint, including 'dog bone' roundabout concepts at the U.S. 101/S.R. 255 Interchange in Arcata. 6,10
- Include light at Jacobs Avenue (Airport Road). 11
- Address out of direction travel and its impacts for businesses in corridor. 12
- Act now to increase median signage and paint marking of lanes at Indianola and Mid City Motor World. 13

Supervisor Neely, Mayor Groves, Councilman Pitino, Mayor Lin, Councilmember Jones, Mayor Bass, Mayor Farley, Mayor Leonard, Mayor Lin.

Responses to Public Comments:

1. Comment noted. Caltrans concurs that Alternative 3 would provide the best accessibility while achieving safety enhancement. However, Alternative 3 would also result in the highest permanent wetland fill and cost of the build alternatives. Please refer to the discussion in Chapter 2 of the Final Environmental Impact Report/Study (EIR/S) for a discussion of Modified Alternative 3A, which is identified as the Preferred Alternative. Modified Alternative 3A is similar to Alternative 3, but has much less wetland impact and cost than Alternative 3 while achieving almost the same level of access as Alternative 3.

2. The No Build Alternative is not acceptable because it would not meet the project need and purpose of improving safety and traffic operations as well as constructing long-term roadway maintenance and improvements. See Group Responses I-A, I-C, and II-B regarding the Safety Corridor. See Group Responses I-D and II-E regarding bicycle and public transit improvements. See Group Response III-A-3 regarding speed enforcement.

3. See Group Response III-B-2 regarding tree removal.

4. See Grouped Response I-B for projected traffic volumes. Chapter 2 has been extensively revised to explain the various alternatives. Also refer to sections I and II of the Grouped Responses regarding the project purpose and need as well as the range of alternatives.

5. All signalization alternatives except various signalization options at Airport Road have been dropped from further consideration. Chapter 2 of the Final EIR/S includes a detailed discussion of various signalization scenarios. Also see Group Response II-C.

6. The potential project effects to the existing 101/255 interchange, Old Arcata Road and State Route 255 are fully evaluated in the revised Section 3.1.6 of Chapter 3 of the Final EIR/S.

7. See Group Response III-A-1 regarding maintaining the existing posted speed limits after construction.

8. Caltrans has delayed finalizing the EIR/S in order to address public concerns and evaluating modifications to alternatives.

9. Since the Draft Environmental Impact Report/Statement was approved in 2007, the proposed project has been revised to enhance all travel modes including bicycling by:

- Eliminating uncontrolled vehicle crossing movements at Route 101 median openings;
- Constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata to provide safe access and crossing of Route 101;
- Maintain the existing speed limit after construction.

Safety and out of direction travel for all transportation modes both during and after construction are addressed in Section 3.1.6 in Chapter 3. Please also refer to Grouped Responses 1-E and II-E.

10. Currently there is a roundabout on the east side of the Route 101/255 interchange in Arcata. On the west side of the interchange, there are businesses on both sides of the Samoa Highway (State Route 255) that would need to be acquired to construct a roundabout. Land acquisition at this location would be very costly. In addition, a roundabout would conflict with the City of Arcata's proposed traffic calming and non-motorized transit improvements at this location.

11. Modified Alternative 3A, which is identified as the Preferred Alternative in the Final EIR/S, does include a half signal at the Route 101/Jacobs Avenue (Airport Road) intersection. See Chapter 2 in the Final EIR/S for a detailed description of the signal.

12. Sections 3.1.1 and 3.1.6 in Chapter 3 of the Final EIR/S include an analysis of out of direction travel resulting from closing the Route 101 medians.

13. There is no immediate justification for adding signage or lane markings at the Indianola Cutoff and Mid City Motor World intersections.

Eureka-Arcata Corridor DEIR Comments - HCAOG CAC Mtg, Wednesday, September 12, 2007

The following bullets represent comments generated by the Association's Citizen Advisory Committee (CAC) at their meeting of September 12, 2007. There is also a characterization of the general discussion for each specific comment area.

- **Enhanced explanation of Caltrans growth projections.**

  The CAC requested a clearer explanation of the population projections offered in the Draft EIR, with specific reference to differences between Department of Finance calculations, projections, and by extension, growth in traffic projections. This should also include vehicle miles traveled (VMT) projections. 1

- **Caltrans mitigation plan should include Transportation System Management (TSM) concepts with increased enforcement, and the investigation of using cameras to enforce speed infractions.** 2

  The CAC discussed use of TSM and enforcement activities to specifically mitigate increased traffic projections. It was discussed that mitigation planning efforts have not been fully addressed at this time but will be included as consideration in the final document.

- **Provide updated collision data to reflect current conditions resulting from the Safety Corridor interim project.** 3

  The discussion by the CAC included a request for collision data more recent than baseline and prior trends, taking advantage of compilations available from the interim Safety Corridor implementation project.

- **Provide an enhanced multi-modal discussion.**

  It was felt by the CAC that multi-modal perspectives could be used to address or mitigate some of the projected growth, and that the Draft EIR/EIS did not thoroughly explore a multi-modal concept. 2

- **Address safety for bicycle and pedestrian.**

  The draft document did not seem to specifically address the safety needs of bicycle and pedestrian users of the corridor, and focused primarily on the safety needs of motorists. 4

- **Requested an analysis of impact (data) resulting from proposed increases of speed from 50 mph to 65 mph.**

  The Committee expressed an interest and concern regarding the proposed speed increase and its impacts on collision damage or injury. The draft document references the increase in speed limits, but refrains from analyzing this impact. 5

- **Benefits of motorist 'constricted' perspective created by eucalyptus trees.**

  It was noted that Caltrans has previously referenced that constricted perspectives have a speed reducing impact which could apply to the eucalyptus lined portion of the corridor; thereby mitigating speed related incidents. 6

- **Request that Caltrans provide better information on the specific areas where mature vegetation is to be removed and minimize the removal of mature trees and landscaping.** 7

  The CAC felt that the draft document should better depict removal of trees from the eucalyptus corridor and other specific locations northbound and southbound; further seeking to minimize mature tree/landscape identified for removal.

- **Evaluate use of an enhanced transit system to address traffic safety.** 2

  It was discussed and generally felt that an enhanced transit system bore some potential to mitigate traffic increases and the extent to which it might reduce trips in the corridor, and thereby provide a safety benefit which was not adequately evaluated in the draft document.

- **If no-build alternative is selected, request Caltrans consider traffic light at Jacobs Avenue.**

  In the event that a no-build concept were to be selected or generated as the Least Environmentally Damaging Preferred Alternative (LEDPA), a request was made for signalizing at Airport Road as an alternative to impacts of median closure. 8

- **If no-build alternative is selected, request consideration of enhanced/increased mass transit, and continued long term CHP enforcement.**

  In a straw polling of the CAC, one member in attendance supported Alternative 3, and the others expressed preference for the no-build alternative. The group clearly expressed that the no-build alternative was not do-nothing. Support was expressed for transit enhancements, enforcement enhancements, and reduced speeds to mitigate traffic growth and thereby safety. 8

Responses to Citizen Advisory Committee:

1. See Grouped Response I-B for an explanation of the (future) projected population and traffic volumes.

2. See Group Response III-A-3 for a discussion of increased traffic enforcement; Group Response II-D for a discussion of Intelligent Traffic Management Systems; and Group Responses I-D, II-A, and II-E for public transit and transportation system management alternatives.

3. Chapter 1 has been revised to include update vehicle collision data.

4. Since the Draft Environmental Impact Report/Statement was approved in 2007, the proposed project has been revised to enhance all travel modes including bicycling by:

- Eliminating uncontrolled vehicle crossing movements at Route 101 median openings;
- Constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata to provide safe access and crossing of Route 101;

- Maintain the existing speed limit immediately after construction. Refer to Group Response III-A-1 regarding the post-construction speed limit.

Safety and out of direction travel for all transportation modes both during and after construction are addressed in Section 3.1.6 in Chapter 3. Please also refer to Grouped Responses 1-E and II-E.

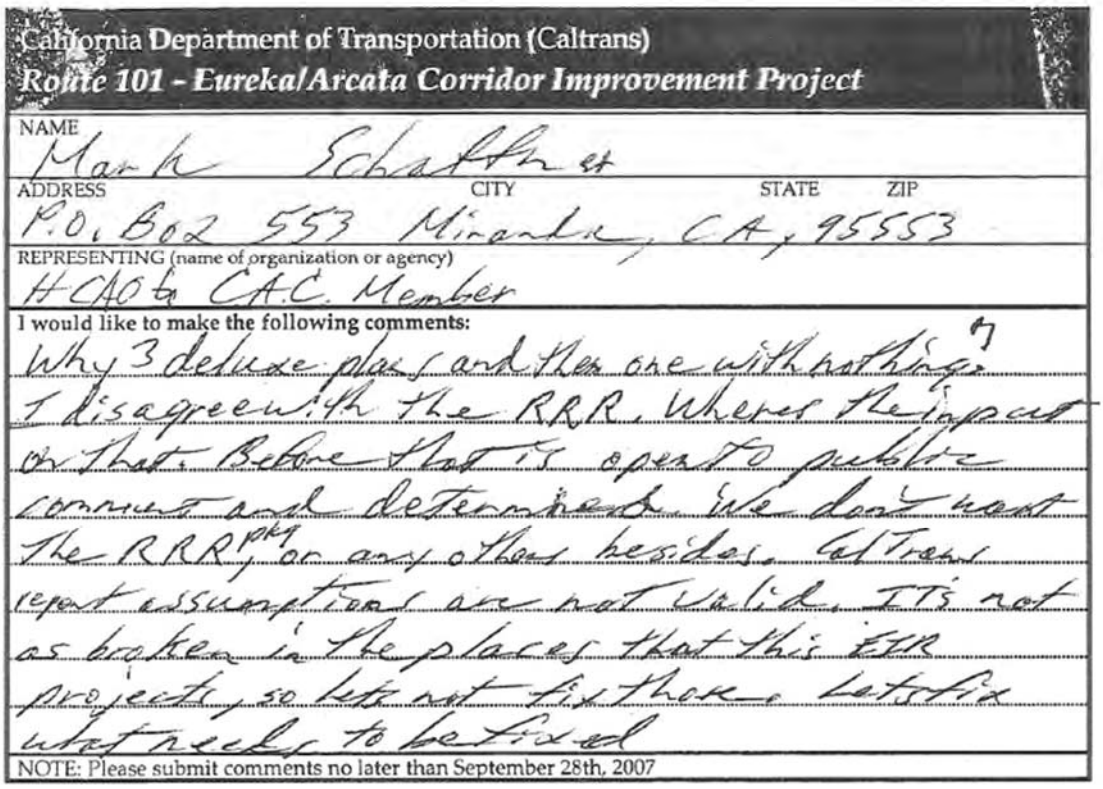
5. See Group Response III-A-1 for more information regarding maintaining the existing posted speed limits.

6. Any "traffic calming" or speed reduction effects of trees or tree rows would be minor. In many large urban areas such as Los Angeles, soundwalls and median barriers restrict driver perspective; however most drivers adjust to the restricted perspective and the prevailing speeds are often higher than the posted speed limit during free flowing traffic conditions. After project construction, the current posted speed limit will remain unchanged and the California Highway Patrol will primarily be responsible for speed enforcement.

7. Section 3.1.7 in Chapter 3 has been revised and updated to describe the proposed tree removal. See the plan sheets in Appendix A for tree removal locations. Also see Group Response III-B-2.

8. Alternative 7, the No Build Alternative, is included in the Final EIR/S only for comparing environmental effects. Alternative 7 would not be formally selected since it does not meet the project need and purpose. If for whatever reason the proposed project is not constructed, a new, separate project would need to be proposed for signalization at Route 101 and Airport Road as well as public transit improvements. There is no approved construction funding for the Eureka – Arcata Route 101 Corridor Improvement project that could be transferred to another transportation project. See Group Response III-A-1 for more information regarding maintaining the existing posted speed limits.

Even though the No-Build Alternative does not include any proposed roadway changes, traffic volumes and speeds are expected to increase in the foreseeable future, which may necessitate closing one or more Route 101 intersection median openings within the corridor. Closing one or more intersection median openings could potentially restrict access to businesses and residences; add out-of-direction travel and delay; increase fuel consumption; and, adversely affect the Level-of-Service of local streets as well as State Route 255. Bicyclists and pedestrians as well as motorized vehicles would be affected if this were to occur. In addition, without improvements, left-turn movements onto Route 101 are predicted to degrade to Level-of-Service F in the year 2031 at the following Route 101 intersections: Airport Road, Mid-City Motor World, California Redwood, Indianola Cutoff, Bracut, and Bayside Cutoff.



California Department of Transportation (Caltrans)
Route 101 - Eureka/Arcata Corridor Improvement Project

NAME
Mark Schaffer et

ADDRESS CITY STATE ZIP
P.O. Box 553 Miranda, CA, 95553

REPRESENTING (name of organization or agency)
HCAO & C.A.C. Member

I would like to make the following comments:
Why 3 deluxe plans and then one with nothing? 1
I disagree with the RRR. Where the impact
on that. Before that is open to public
comment and determined. We don't want 2
the RRR pkg or any other besides. Caltrans
report assumptions are not valid. It's not
as broken in the places that this EIR
projects, so let not fix those. Let's fix
what needs to be fixed 3

NOTE: Please submit comments no later than September 28th, 2007

Response to Mark Schaffer, Citizens Advisory Committee member:

1. During the early project planning stages, many ideas and alternatives were identified and explored as summarized in Chapter 2 of the Final Environmental Impact Report/Statement (EIR/S). After a preliminary evaluation to determine if the alternatives met the project need and purpose and were feasible, all but three of the alternative were dropped from further consideration. The effort and cost to evaluate every alternative would be exceedingly expensive. In addition since the Draft EIR/S was circulated to the public, two modified alternatives were designed and evaluated. Please see Chapter 2 of the Final EIR/S for more information regarding the two modified alternatives.

2. RRR is an abbreviation for (roadway) resurface, restore, and rehabilitate. The proposed RRR improvements, such as paving overlay, are included in all Build Alternatives. The description and need for this work has been revised and is described in detail in Chapters 1 and 2 of the Final EIR/S.

3. Please see Chapter 5 of the Final EIR/S, which summarizes the public involvement process.

27 September 2007

To the California Department of Transportation and Humboldt County Association of Governments,

We are a coalition of North Coast groups representing diverse interests in our community.

The offered Eureka-Arcata 101 Corridor project alternatives neglect to address important safety, access, aesthetic, economic, health, and environmental concerns with cost-effective and appropriate solutions that are important to all of us in one way or another. Some of the issues outlined here are more important to some of us than others, but on one key issue is of critical importance to all of us: ~~the~~. The project alternatives offered in the DEIR do not address a need for multi-modal transportation solutions to more thoroughly address improved safety on the Eureka-Arcata 101 Corridor. The stated "purpose and need" should be revised to reflect this. We urge that an alternative be added to maintain the 50 mph safety corridor, which has proven effective, and include other alternative traffic engineering and transit solutions to reduce traffic congestion and improve safety by means that are not assessed in the DEIR. 1 2

The alternatives offered do not address real needs for cyclist and pedestrian safety and access. Increasing the speed limit and rededicating road shoulder space for acceleration lanes will make bicycling the Eureka-Arcata 101 corridor more dangerous and intimidating, resulting in less commuter cyclist use and more traffic congestion. Higher speeds also mean that emergency uses of 101 shoulders (their primary function) will force cyclists into situations where they have to share traffic lanes with motorists who will have less response time to adjust to the presence of a bicycle. All the "build" alternatives will result in closed at-grade median crossings, reducing access for all users, including bicyclists. Bicyclists entering the highway at some intersections will have to ride out-of-direction for some distance before coming to a legal highway crossing. For example, the median closure at the Bayside Cutoff will require cyclists heading towards Eureka from Bayside to ride back to the Samoa Boulevard overcrossing in Arcata to enter the highway. The proposed project may result in more cyclists negotiating the difficult cloverleaf system of on- and off-ramps at the 101-255 interchange. 3 4

According to section 887 of the Streets and Highways (S&H) Code, Caltrans is required to develop non-motorized transportation facilities approximately paralleling the highway where "traffic safety or capacity of the highway would be increased." A Humboldt Bay Trail would fulfill this requirement, would offer a safe route for cycling between Eureka and Arcata, generate $4.6 million in economic activity per year, and provide $84.7 million per year in health benefits. 5

Building infrastructure for cyclists and pedestrians and improving transit between Eureka and Arcata would offer some key quality of life improvements to attract and retain information, technology, and creativity-based businesses and professionals. Such a development would fit hand-in-glove with the strategy to improve broadband connectivity and develop an information services economy on the North Coast. 6

To support and stimulate economic vitality, Humboldt County must plan for rising energy costs. Increasing the speed limit will lead to significantly reduced fuel efficiency for cars traveling the corridor. Closing the median crossings will force drivers to travel out of their way to turn around points, increasing vehicle miles traveled (VMT). 7

No part of the proposed project provides accessible, equitable transportation options for the third of our population that does not or cannot drive. 8

The project calls for Eucalyptus trees along the corridor to be removed. Caltrans data from before the safety corridor installation shows that the eucalyptus trees slow traffic by an average of 4 miles per hour. These trees could be important as a scenic barrier between the highway and an under-consideration Humboldt Bay Trail. 2, 9

By planning for, and thereby enabling, increased traffic on the Eureka-Arcata 101 corridor, the proposed project would worsen already bad congestion on Eureka's 101 Broadway corridor. Planning for increased traffic volumes that far outstrip projected population growth, and failing to provide options which do not promote automobile dependency, as this project does, will create a self-fulfilling prophecy. Investments in transit, trails, and alternative traffic engineering solutions will prove equally, if not more, effective at achieving our region's needs and goals. 1, 10, 11

Increased investments in public transit would offer many benefits above and beyond the benefits of the proposed project. Transit is equitable, serving non-driving populations; it is more fuel-efficient and minimizes greenhouse gas production; it provides cyclists with additional travel options; it offers more benefits for our local economy; and, importantly, transit investments can reduce traffic congestion and improve corridor safety. Caltrans has been part of implementing transit projects in other areas. 1

Businesses on Jacobs and Airport Avenues have concerns about customers being able to access their establishments from the 101 corridor if median crossings are closed due to traffic increases. We share their concerns for a number of reasons. However, the project DEIR fails to offer a substantiated projection of traffic increases. Additionally, other less expensive bicycle- and pedestrian-friendly alternative traffic engineering solutions such as a Jacobs and Sixth Avenue bridge or Jacobs Avenue traffic light without an Indianola cutoff overcrossing were not considered in the DEIR. Business concerns can and should be addressed by more creative, realistic and cost-effective means than as proposed in the DEIR. 4, 7, 12, 13

We urge you to 1) reconsider the "purpose and need" of the proposed project in the DEIR to address the safety of all users of the corridor more completely by fully considering a more comprehensive multi-modal approach to traffic congestion reduction and corridor safety improvement; and 2) include a project alternative that addresses these needs. 14

We would be happy to meet with your staff to discuss solutions. Please contact Green Wheels, at info@green-wheels.org, to schedule a meeting with our coalition of groups.

Submitted by:

Redwood Alliance Climate Action Project
Green Wheels
Democracy Unlimited of Humboldt County
Healthy Humboldt
Humboldt Baykeeper
HSU Student Nurses Association
Keep Eureka Beautiful
Northcoast Environmental Center
Natural Resources Services Division of Redwood Community Action Agency
Trails Trust of Humboldt Bay

Response to Coalition of North Coast:

1. See Group Responses I-D and II-E for a discussion of bicycle and public transit improvements and project need and purpose.

2. See Group Response III-A-1 for more information regarding maintaining the existing posted speed limits.

3. Bicyclists needs were considered in all phases of project planning and design. Since the Draft Environmental Impact Report/Statement was approved in 2007, the proposed project has been revised to enhance all travel modes including bicycling by:

- Eliminating uncontrolled vehicle crossing movements at Route 101 median openings;
- Restriping the lanes to provide a 10-foot wide outside shoulder throughout the project;
- Constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata to provide safe access and crossing of Route 101;
- Maintain the existing speed limit after construction.

Safety and out of direction travel for all transportation modes both during and after construction are addressed in Section 3.1.6 in Chapter 3. Also see Grouped Response II-G.

4. The 1997 Humboldt Bay Area Bike Map prepared by the Redwood Community Action Agency (RCAA) designates the Route 101 intersections at Mid City Motor World, Indianola Cutoff, and Bayside Cutoff as "Difficult Intersections – Use caution in these areas" for bicyclists. In other words, although bicycle access currently remains open at Route intersections including Bayside Cutoff; however, bicyclists must cross two lanes of traffic to reach the median; once at the median, bicyclists generally wait in an unprotected area for a sufficient traffic gap to cross two lanes of on-coming traffic. While waiting for an opportunity to cross the traffic, bicyclists must be aware of other motor vehicles that may also be entering the median to make left-turn movements from the same or different directions. For these reasons, many bicyclists choose not to use the existing median openings for left turns: this is especially the case during peak traffic periods or after dark.

Modified Alternative 3A would close the median crossing at Bayside Cutoff; however southbound bicyclists could travel southbound on the recently widened Old Arcata Road to Indianola Cutoff, and travel on Indianola Cutoff to access southbound Route 101 at the proposed grade separation. The proposed grade separation provides roadway grade separation and ramps for Route 101 and Indianola Cutoff thereby eliminating conflicting left-turn movements. Indianola Cutoff is approximately midway between Eureka and Arcata, which makes it a practical turnaround location. Modified Alternative 3A also includes a half signal for bicyclists crossing Route 101 at Airport Road and Jacobs Avenue. Finally, the City of Arcata is planning a pedestrian/bicycle path between Bracut and Arcata adjacent to Route 101.

5. The California Streets and Highway Code does provide the latitude for transportation agencies to develop non-motorized facilities, however it is not a requirement. Caltrans and FWHA concur that a bicycle-pedestrian facility would have numerous benefits. However, as mentioned in the Grouped Responses and in Chapter 2, such a facility would not meet the project purpose and need.

6. Caltrans staff agrees that non-motorized transit would have wide spread, far reaching benefits. However, enhancing safety and implementing long term roadway maintenance improvements for all transit modes are the highest priorities as described in Chapter 1 – Project Need and Purpose.

7. Modified Alternative 3A, which the Final EIR/S identifies as the Preferred Alternative, would create out of direction travel; however the computer traffic modeling indicates that fuel consumption would be about the same as the No Build Alternative because the Alternative 3A includes traffic operations improvements that would better accommodate predicted future higher volumes of traffic. See Section 3.2.7 in Chapter 3 for more information.

8. It is acknowledged that a substantial proportion of the population does not drive and would therefore not receive any direct project benefits: however, all individuals benefit directly or indirectly from a safer highway. For example, both young children riding as passengers in cars on Route 101 or elderly people relying on truck deliveries for food and medical supplies would indirectly benefit from the proposed Route 101 improvements.

The Route 101 corridor is currently accessible to bicyclists and public transit. As stated in response 20, HCAOG, the co-sponsor of the proposed project, annually surveys the public for public transit deficiencies as well as prepares the Humboldt County Regional Transportation Plan. HCAOG has not directed Caltrans to expand existing access along the Route 101 corridor.

9. See Group Response III-B-2 for tree removal.

10. See Grouped Response I-B for an explanation of the (future) projected population and traffic volumes.

11. The proposed project does not enable and plan for an increase in traffic in terms of expanding Route 101 to increase the vehicle carrying capacity (i.e. adding additional traffic lanes). The proposed project does provide highway safety enhancement and roadway maintenance improvements that would be needed with, or without an increase in future traffic volumes. Chapter 1 – Project Need and Purpose, includes update vehicle collision data that indicates an increase in collision frequency at certain intersections since the Safety Corridor improvements were made. In addition the proposed project was planned and programmed in a comprehensive, multi-agency regional transportation context and process. See Chapter 2 for more information regarding the transportation planning process.

12. See Grouped Response I-B for an explanation of the (future) projected population and traffic volumes.

13. Both a 6th Street Bridge to Jacobs Avenue and signalization at Airport Road without a grade separation were evaluated. See Chapter 2. The 6th Street Bridge would provide better access to Jacobs Avenue, however it would not meet the project need and purpose; would not benefit southbound Route 101 traffic accessing Airport Road (Jacobs Avenue; and would result in substantial wetland impact. Simply signalizing Route 101 and Airport Road (Jacobs Avenue) without other improvements would not meet the project need and purpose of enhancing safety throughout the corridor and constructing needed roadway improvements.

14. After the Draft EIR/S was circulated to the public in 2007, Caltrans received numerous written comments that shared many of the same concerns. Consequently, Caltrans staff addressed many concerns in the proposed project by modifying the project design to include widening the Route 101 outside shoulders, maintaining the existing speed limits, and maximizing access. Please see Chapter 2 of the Final EIR/S for a description of Modified Alternative 3A, which is identified as the Preferred Alternative. However, public safety as well as the long term integrity of the Route 101 roadway cannot be compromised. Even if the prevailing traffic speeds and volumes are not increasing on Route 101, the proposed project is still needed to eliminate the single most important cause of serious collisions: namely uncontrolled left-turn movements.

Humboldt County Association of Governments
235 4th St
Eureka, Ca 95501

Dear Board of HCAG,

I have sent the following document to the California Department of Transportation regarding improvements on the Arcata to Eureka 101 Corridor.

Thank You for your work

Siddiq Kilkenny

September 26, 2007

Rod Parsons,
attn: Eureka-Arcata 101 Corridor Project,
Environmental Branch E-1,
California Department of Transportation,
P.O. Box 3700,
Eureka, CA 95502 – 3700.

I was astonished by the stunning inadequacy of the EIR presented by Cal Trans to the County of Humboldt. I was equally stunned at the profound lack of creativity and recognition of reality in the limited alternatives proposed. I hope some of these ideas will assist the Cal Trans planners to do a better job of presenting their data and honoring the community of Humboldt. 1

1. **Traffic Projections**
   For the 10 years of 1990 to 2000 the population growth rate in Humboldt County was 6.2%. Population is expected to grow at the same rate in the future. This would mean that the expected population growth from the year 2000 to the year 2031 will be approximately 18%. Yet the Cal Trans EIR predicts that traffic will have increased by 50 % in 2031 2

   The Cal Trans EIR is effectively saying that for every new baby born in Humboldt County their will be 2.7 more cars. Please explain how the traffic projections are in such profound contradiction with population growth. And include how possible moderating influences such as fuel prices and alternative modes of transportation could substantially alter traffic projections for the future. 3

2. **Traffic Volume**
   There is very limited information in EIR that speaks to traffic volume. Please provide more complete data regarding volume. Please include traffic volumes on 101 between Eureka and 4

Arcata both north and south at one hour intervals for each day of the week and each month of the year.

Without the presentation of adequate and complete data the development of any alternatives is stunningly suspect.

3. **Safety Comparisons**
Safety comparisons are made for the corridor as compared to other expressways in California but no comparison is made between sections of roadway from the Arcata Eureka corridor to the corridor from Arcata to McKinleyville or to the corridor south of the 255 intersection and on through Eureka to Herrick. 5

When the "safety corridor" was initially discussed with the Cities of Eureka and Arcata and Humboldt County Board of Supervisors Cal Trans and the California Highway Patrol) used a safety comparisons between the Arcata Eureka 101 corridor and the Arcata to McKinleyville (a true freeway) corridor as evidence that Arcata Eureka corridor was actually safer than the Arcata to McKinleyville corridor.

Please include in the EIR complete accident and safety data for the corridors both immediately north and south of the Arcata Eureka 101 corridor.

Since the safety corridor went into effect in May of 2002 the rate of fatalities has gone to zero and the rate of injury collisions has dropped to slightly above the State average. Humboldt County needs more complete analysis of safety data before changing a system that apparently is working very well. 6

4. **Traffic Delays and Traffic flow**
All traffic moving south on the 101 corridor will hit the significant number of traffic lights in passing into and through Eureka. These traffic lights are geared to move traffic along at 35 miles per hour. By increasing the speed on the 101 corridor between Arcata and Eureka to 65 mph plus, the result will be quicker and larger backups on the highway. Because of backups, it is likely that the overall time of travel from McKinleyville to Eureka is not likely to change. The longer backups coming into Eureka will likely reduce safety. 7

Please include overall traffic safety, traffic flow, and traffic projections considerations for the entire corridor from McKinleyville's Murray road to the southern end of Eureka at Herrick. A more thorough and broad analysis of how currently proposed alternatives will impact traffic safety needs to be articulated. 8

The profound lack of data in the EIR puts into question all the alternatives proposed. The alternatives proposed are exceedingly narrow in their conception, creativity, engineering, and understanding of larger and longer term transportation questions and priorities for the County. 9

5. **New Alternatives must be proposed**

A completely revised EIR must be done that includes significant discussion of **bicycling, light rail transit, bus lanes, and consideration of reducing the speed** on the safety corridor to 45 mph. 10

All alternatives must include proposals to for maintaining the levee, restoring the rail line and providing an exclusive bicycle lane. 11

Thank You

Siddiq Kilkenny
1030 C
Arcata, California 95521

Responses to Siddiq Kilkenny:

Thank you for your interest in this project and taking the time to review the project information and provide comments.

1. Caltrans staff regrets that the Draft Environmental Impact Report/Study (EIR/S) was perceived as inadequate and lacking in creativity. The Final EIR/S includes major revisions to add clarity and support findings.

During the early project planning stages, many innovative and unconventional solutions were brainstormed, discussed and evaluated during the Value Analysis process during the early project design and planning phase (see Chapter 2 of the Final EIR/S). After a preliminary evaluation to determine if the alternatives met the project need and purpose and were feasible, all but three of the alternative were dropped from further consideration. The effort and cost to evaluate every alternative would be exceedingly expensive. In addition since the Draft EIR/S was circulated to the public, two modified alternatives were designed and evaluated. Please see Chapter 2 of the Final EIR/S for more information regarding the two modified alternatives.

Thank you for your suggestions; all comments are carefully considered and in some cases, the project is modified in response to public comment. For example a strong public reaction to Eucalyptus tree removal on the southbound side of Route 101 resulted in Caltrans engineers realigning the southbound traffic lanes to avoid the tree removal. And all comments help Caltrans and FHWA staff understand individual and collective values.

2. Traffic volume projections are focused on travel trends as well as historic growth for each state route and not on County population trends. Consider that many vehicle trips on Route 101 originate from the community of McKinleyville, which has grown much faster in the past 20

years than the County on average and has a high residence to job ratio. See Group Response I-B for more information.

3. Although every newborn child in the County would not directly result in the addition of 2.7 cars, young children often need to be transported to school and extra curricular activities: this can result in a net increase in vehicle trips by parents. In addition, the County population increases by people moving into the County and not just by new births.

See Group Response II-D for a discussion of rising fuel prices and travel choices.

4. Section 3.1.6 the transportation section in Chapter 3 of the Final EIR/S includes the relevant traffic volume data to calculate the existing and projected 20 year level-of-service (LOS) for intersections and roadway segments. Presenting peak period and annual average daily traffic volumes for LOS calculations is the standard practice for evaluating project alternatives compared to the No-Build Alternative. The purpose of focusing on the peak period traffic volumes is that if a roadway segment or intersection can adequately function during peak periods, they can function adequately at all other times. To present and analyze off-peak period traffic volumes would not be cost effective nor would it serve a meaningful purpose.

5. Caltrans has public safety responsibilities on all State and Interstate highways in California. However, the Humboldt County Association of Governments specifically requested Caltrans to develop a project to address safety concerns on the Route 101 corridor between Eureka and Arcata, which has highest traffic volumes on the north coast of California (north of Sonoma County). In order to meaningfully compare and evaluate project alternatives, the Eureka – Arcata Route 101 corridor was only compared with similar highway facilities.

6. See Group Response I-A regarding updated collision data and the project need and purpose.

7. The Draft EIR/S stated that the posted speed limit would be raised from 50 mph to 65 mph. As a result of many public comments favoring a lower speed limit, the current posted speed limit will be maintained immediately after project construction—but subject to change. See Group Response III-A-1 for more information regarding maintaining the existing posted speed limits.

In terms of southbound traffic on Route 101 between McKinleyville and Eureka, the morning peak period traffic is generally free flowing. Because the posted speed will remain unchanged after project construction, any additional traffic queuing is expected to be the same as the No Build Alternative.

8. Although Route 101 extends beyond both 9Eureka and Arcata, the specific traffic safety enhancement need for this project is independent of any perceived Route 101 safety concerns beyond the existing project limits from the north end of the Eureka Slough Bridge in Eureka to the 11th Street Overcrossing in Arcata.

9. Generally an EIR/S is the culmination of preliminary planning and engineering documents and focuses only on evaluating alternatives that are feasible and practicable. Previous studies identified and documented preliminary evaluation of a much broader range of project

alternatives: the alternatives that were dropped from consideration are described in Chapter 2 of the Final EIR/S.

10. The Draft EIR/S has been extensively revised and every attempt has been made to adequately address all public concerns including alternate travel modes. See Group Responses I-D, II-A, II-E, II-F, and II-G for a discussion of bicycle and public transit improvements and project need and purpose.

11. The railroad bed and the railroad levee are outside of the Caltrans roadway right-of-way. Caltrans has no direct authority or responsibility to restore the rail operation. See Group Response II-H for a discussion of a separate bicycle trail.

1734 Roberts Way, Arcata, California 95521
September 3, 2007

Humboldt County Association of Governments
427 F St. Suite 220
Eureka, CA 95501

Re: Proposed CalTrans 101 Corridor Project

Dear HCAOG Members:

I write to you in the hope that you will convey to CalTrans and the Federal Highway Administration my opinion that the Draft CalTrans EIR is inadequate. It ignores the transportation alternatives that are best for our health and the environment, and coverage of the four alternatives it does cover is way less than CEQA requires. Green Wheel's critique of the DEIR covers these shortcomings. 1

What I feel is more important is that a properly formulated EIR for Eureka-Arcata transportation in this century should include at least the following alternatives: 2

- A bike trail (not just bike lanes) on the east side of 101
- A bike trail on the west side of 101
- A bike trail on the west side of 101 and a levee high enough to protect the corridor from flooding
- A bike trail with levee and a rail corridor from Eureka to Arcata.

Any Final EIR that excludes these alternatives is dreadfully inadequate.

Sincerely,

John Schaefer

John Schaefer

Responses to John Schaefer:

1. The Draft EIR/S has been extensively revised and every attempt has been made to adequately address all public concerns including alternate travel modes. During the early project planning stages, many non-motorized vehicle solutions were brainstormed, refined, discussed and evaluated during the Value Analysis process during the early project design and planning phase (see Chapter 2 of the Final Environmental Impact Report/Statement (EIR/S). After a preliminary evaluation to determine if the alternatives met the project need and purpose and were feasible, all

but three of the alternative were dropped from further consideration. The effort and cost to evaluate every alternative would be exceedingly expensive. In addition since the Draft EIR/S was circulated to the public, two modified alternatives were designed and evaluated. Please see Chapter 2 of the Final EIR/S for more information regarding the two modified alternatives. Also see responses to the Green Wheels letter in Volume II of the Final EIR/S.

2. The railroad bed and the railroad levee are outside of the Caltrans roadway right-of-way. Caltrans has no direct authority or responsibility to restore the rail operation. See Group Response II-H for a discussion of a separate bicycle trail.

Humboldt County Association of Governments
Attn: Mr. Spencer Clifton
427 F St. Suite 220
Eureka, CA 95501

August, 2007

Subject: Eureka-Arcata Corridor
01-Hum-101, PM 79.9/86.3
EA 01- 36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Mr. Clifton,

This letter is being sent in strong support of Alternative 3 as described in the subject document. We are one of the many land owners, business operators or employees that will be directly (and probably negatively) affected by the closure of the present access locations, especially Airport Road, as provided in the other alternatives. We do not agree with the opinion that closure of all medians will have minimal impact to the businesses along the 101 corridor. 1

We actively and affirmatively support the efforts of the 101 CAP and its position that includes:

-the installation of the interchange at Indianola Road
-the retention of the access provided through the installation of traffic control signals at Airport Road
-the retention of the existing medians as long as possible
-the installation of the proposed acceleration/deceleration lanes as soon as is practical

Coming south from Arcata and entering the City limits of Eureka should be viewed as the location of the entrance to the City and improved accordingly. In addition, the setting must address this and the fact that the Highway through the City is not going to change in any meaningful manner anytime in the foreseeable future. 2

Thank you for the opportunity to comment. Please do what you can to absolutely minimize the effects of your actions on our businesses and residents in the area.

Sincerely,

Tim Shreeve, Manager
The Farm Store

Responses to Tim Shreeve:

1. Caltrans concurs that Alternative 3 would provide the best accessibility while achieving safety enhancement. Alternative 3, as proposed, may not be possible to construct since the County of Humboldt opposes any use of the airport to construct the realigned grade separation. However, Alternative 3 would also result in the highest permanent wetland fill and cost of the build alternatives. For these reasons, Modified Alternative 3A was designed. Please refer to the discussion in Chapter 2 of the Final Environmental Impact Report/Study (EIR/S) for a discussion

of Modified Alternative 3A, which is identified as the Preferred Alternative. Modified Alternative 3A is similar to Alternative 3, but has much less wetland impact and cost than Alternative 3 while achieving almost the same level of access as Alternative 3.

Caltrans staff acknowledges that Route 101 access restrictions in the proposed project may initially adversely affect one more businesses. However, most people have a basic understanding that enhanced safety is an acceptable trade off for less convenience. In time, many people are expected to adjust to the access restrictions and resume pre-construction trips to local businesses.

2. Caltrans staff acknowledges the importance of a visually appealing City gateway and will work with the City of Eureka to visually enhance the entrance to the City where feasible. However, the proposed project has a specific need and purpose that does not include City gateway enhancements, nor would the proposed project have visual impacts to the City entrance requiring mitigation.

Humboldt County Association of Governments
Attn: Mr. Spencer Clifton
427 F St. Suite 220
Eureka, CA 95501

August, 2007

RECEIVED
AUG 23 2007
HUMBOLDT COUNTY
ASSOCIATION OF GOVERNMENTS

Subject: Eureka-Arcata Corridor
01-Hum-101, PM 79.9/86.3
EA 01- 36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Mr. Clifton,

This letter is being sent in strong support of Alternative 3 as described in the subject document. We are one of the many regular customers of various businesses along the 101 corridor. 1

We think that our ability to support those businesses and their employees in the future will be directly (and negatively) effected by the closure of present access locations.

We want to continue our support of the businesses. The closure of medians will reduce our access, increase the miles traveled and increase the amount of time and energy that is involved. This is not acceptable given the possibility to maintain at minimum the access at Airport Road.

We support the efforts of the Business Owners along the Corridor with their efforts in keeping their businesses viable and accessible. We ask that you do whatever you can to absolutely minimize the effects of your project on the businesses, their employees and customers along the corridor. 2

Thank you for the opportunity to comment and provide our thoughts.

Sincerely,
Sandra Sutton
Customer of The Farm Store

Responses to Sandra Sutton:

1. Caltrans concurs that Alternative 3 would provide the best accessibility while achieving safety enhancement. Alternative 3, as proposed, may not be possible to construct since the County of Humboldt opposes any use of the airport to construct the realigned grade separation. However, Alternative 3 would also result in the highest permanent wetland fill and cost of the build alternatives. For these reasons, Modified Alternative 3A was designed. Please refer to the discussion in Chapter 2 of the Final Environmental Impact Report/Study (EIR/S) for a discussion of Modified Alternative 3A, which is identified as the Preferred Alternative. Modified Alternative 3A is similar to Alternative 3, but has much less wetland impact and cost than Alternative 3 while achieving almost the same level of access as Alternative 3.

Caltrans staff acknowledges that customers want to support local businesses within the Route101 corridor and that convenient access to these businesses is critical. Caltrans, along with agency representatives, met and discussed various solutions to enhance Route 101 Eureka-Arcata Corridor safety. The decision to plan and design a project to enhance safety by eliminating uncontrolled left turn movements by closing the medians was determined to be the most feasible and cost effective solution. Median closures would result in access restrictions, meaning non-signalized left-turns would be prohibited; however, Modified Alternative 3A includes features to compensate for the median closures.

2. Caltrans staff acknowledges the importance of roadway improvements to the local businesses. Caltrans will continue work to design and construct Route 101 corridor improvements to enhance traffic safety while maximizing access to local businesses and residents.

September 11, 2007

Craig Klapman

2488 Eye Street

Arcata, CA 95521

(707) 822-9631

Spencer Clifton

Humboldt County Association of Governments

427 F St.

Suite 220

Eureka, CA 95501

Dear Mr. Clifton,

I am writing to express my support to keep easy access to businesses along the 101 safety corridor between Arcata and Eureka.

I patronize those businesses and enjoy the current access. Please consider this when deciding which alternative to support.

Enclosed please find a copy of a letter prepared by Happy Dog, one of the businesses I use along the 101. I agree with the statements in that letter.

Sincerely,

Craig Klapman

Craig Klapman

Response to Craig Klapman:

Caltrans staff acknowledges the importance of roadway improvements to the local businesses. Caltrans will continue work to design and construct Route 101 corridor improvements to enhance traffic safety while maximizing access to local businesses and residents.

August 27, 2007

Caltrans
Attn: Kim Floyd, Project Manger,
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Eureka- Arcata Corridor
01-Hum-101, PM 79.9/86.3
Ea 01-36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Ms. Floyd,

I am a consumer who utilizes businesses along the safety corridor and am deeply concerned that access to these businesses will be nearly eliminated through the closure of the access medians. Closing the medians will result in longer traveling time and distance, increase gas usage, not to mention the increased traffic caused by the out of direction travel. I find the above, frustrating and unacceptable. 1

I have had the opportunity to read the three remaining alternatives being considered for the 101 corridor project and strongly agree with the business owners that alternative 3 is the most sound and logical choice. A traffic light at Airport Rd, with an interchange at Indianola Rd., will allow the businesses to remain viable and for me the consumer, to have access to them. I do know, that if all medians are closed on the 101 corridor my support of the businesses will markedly decrease. 2

Thank you for your time and consideration in this matter, and I hope you will choose the above alternative to save the businesses and residents in the Corridor

Sincerely,
Craig Klapman
Happy Dog Customer

CC: Mr. Spencer Clifton, Humboldt County Association of Governments
427 F St. Suite 220, Eureka, Ca 95501

Mayor Virginia Bass, City of Eureka
531 K St., Eureka, CA 95501

Response to Craig Klapman:

1. Caltrans staff acknowledges the importance of roadway improvements to the local businesses. Caltrans will continue work to design and construct Route 101 corridor improvements to enhance traffic safety while maximizing access to local businesses and residents.

2. Caltrans concurs that Alternative 3 would provide the best accessibility while achieving safety enhancement. Alternative 3, as proposed, may not be possible to construct since the County of Humboldt opposes any use of the airport to construct the realigned grade separation. However, Alternative 3 would also result in the highest permanent wetland fill and cost of the build alternatives. For these reasons, Modified Alternative 3A was designed. Please refer to the discussion in Chapter 2 of the Final Environmental Impact Report/Study (EIR/S) for a discussion of Modified Alternative 3A, which is identified as the Preferred Alternative. Modified Alternative 3A is similar to Alternative 3, but has much less wetland impact and cost than Alternative 3 while achieving almost the same level of access as Alternative 3.

Spencer Clifton

HCAOG

Eureka CA

Dear Mr. Clifton,

Why spend millions of dollars to change something that already works? By simply lowering the speed limit on a five mile stretch of highway, we have successfully created an effective and inexpensive solution to a dangerous and deadly problem. The safety corridor is a simple model of traffic control that could be used as an example for other cities with similar problems. The simplest solution is sometimes the best. 1

Sincerely,

Lynne Sarty

Lynne Sarty

3088 Mitchell Heights

Eureka, CA 95503

442 7569

Response to Lynne Sarty:

1. See Grouped Response I-A.

BOARD OF SUPERVISORS

COUNTY OF HUMBOLDT

825 5TH STREET

EUREKA, CALIFORNIA 95501-1153 PHONE (707) 476-2390 FAX (707) 445-7299

September 18, 2007

Mr. Rod Parsons, Chief
Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

RE: Eureka-Arcata Route 101 Corridor Improvement Project
Draft Environmental Impact Statement/Environmental Impact Report
01-Hum-101 KP 128.6/138.9 (PM 79.9/86.3)
EA 01 – 366000, 363300

Dear Mr. Parsons:

The Humboldt County Board of Supervisors thanks you for the opportunity to comment on the Eureka-Arcata Route 101 Report. Employees from the Humboldt County Department of Public Works and Community Development have reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIR). Technical comments from our staff are attached to this letter.

Since it appears that the options offered by CalTrans include capacity enhancement, the complexity of this problem requires extensive analysis with the solution to be creative and practical to meet all of the transportation needs of the corridor. The County supports improvements to safety and mobility, while fitting in with the specific local needs of our community. 1

The County appreciates the efforts to combine work projects by CalTrans to make more efficient use of available limited transportation funding (i.e. State Highway Operation and Protection Program (SHOPP) and proposed State Transportation Improvement Program (STIP) funds). However due to overriding social and environmental factors, it is our recommendation that a different approach be taken to future improvements, such as looking at the three main access roads from Arcata to Eureka as one system and developing an overall improvement plan that phases improvements on a prioritized basis 2 3

between the three roads; State Highway 101, State Highway 255, and the County-Maintained Old Arcata Road/Myrtle Avenue.

It may be that a combination of funds is necessary for the work that will eventually be done, including such sources that are allocated to gateway projects and environmental justice. We encourage CalTrans to review all available funding sources for each portion of the project in order to ensure that our community receives the maximum amount of transportation funding available. 4

As the STIP funds are one of the very few funding sources for improving City and County roads, as well as State Highways and Humboldt County has a significant need for road improvements; the Board of Supervisors wants to ensure that any STIP funds allocated to improvements are the highest and best use of these funds. We believe that phasing of the project should be looked at in detail, such as signalization for access to the Cole/Airport area businesses and residences. This may provide additional gaps for increased safety at other median crossings and give more time to come up with better solutions for the remainder of the corridor than are currently offered. 5

Again, we thank you for the opportunity to comment on this important section of road and hope that the comments from Humboldt County will result in a final product that meets the needs of the citizens of our community. 6

Sincerely,

Bonnie Neely, Chair
Humboldt County Board of Supervisors

Attachments

Humboldt County Department of Public Works Comments – Engineering Division
Humboldt County Department of Public Works Comments – Aviation Division
Humboldt County Department of Community Development Services Comments

Responses to Humboldt County Board of Supervisors:

1. The proposed project would not expand the traffic carrying capacity of Route 101 (i.e. adding additional traffic lanes). The proposed project does provide highway safety enhancement and roadway maintenance improvements that would be needed with, or without an increase in future traffic volumes. Chapter 1 – Project Need and Purpose, includes update vehicle collision data that indicates an increase in collision frequency at certain intersections since the Safety Corridor

improvements were made. In addition the proposed project was planned and programmed in a comprehensive, multi-agency regional transportation context and process. See Chapter 2 for more information regarding the transportation planning process.

The process to select a Preferred Alternative has been a continuous process since the Draft Environmental Impact Report/Statement (Draft EIR/S) was circulated to the public for comments. Alternatives have been modified to address public concerns. Next the modified alternatives were evaluated for potential environmental impacts and presented to the public as well as public resource agencies. The Final EIR/S documents the modifications to the project alternatives (Chapter 2), summarizes public comments regarding the alternatives, and documents the identification of a Preferred Alternative.

2. See Group Responses I-E and II-A. In addition please refer to Chapter 1 of the FEIR/S, which discusses the proposed project and the regional transportation planning process.

3. The potential project effects to the existing 101/255 interchange, Old Arcata Road and State Route 255 are fully evaluated in the revised Section 3.1.6 of Chapter 3 of the Final EIR/S. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would not have any adverse effects to State Route 255 or Old Arcata Road.

4. Caltrans has representatives attending Humboldt County of Association Governments and other local and regional transportation meetings where project funding is often a focus.

5. Caltrans has considered phasing elements of the proposed project; however, the Route 101 corridor functions as a complex, interrelated system. Minor projects may not have independent function in this context. For example, closing just one Route 101 median could substantially divert traffic to other median openings as well as to local roads. Overall, there are numerous, interrelated concerns that need to be addressed by a major comprehensive project.

6. Caltrans recognizes there are many diverse community needs. However, enhancing highway safety and maintaining the long term integrity of the roadway structure are the primary responsibilities of Caltrans. All community members directly or indirectly benefit from a safer, well maintained transportation system.

BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA
Certified Copy of Portion of Proceedings, Meeting of Tuesday, September 18, 2007

SUBJECT: **Eureka/Arcata Highway 101 Corridor Draft Environment Impact Report**

ACTION:

1. **Adopt the letter as presented by staff.**
2. **Request Cal Trans incorporate mitigation plans as presented into current and future maintenance projects to enhance the safety corridor purpose** 1
3. **Request Cal Trans respond to other comments received by the Board of Supervisors as in order to provide a more thorough analysis of the Draft EIR** 2
4. **Request Cal Trans to contact the Coastal Commission to get a preliminary review letter on the project.** 3
5. **Request Cal Trans examine County Staff Comments about developing a systematic or regional analysis approach** 4
6. **Undertake efforts to make permanent the Safety Corridor Concept** 5
7. **Request Cal Trans and HCAOG more fully discuss the Scenic Corridor Concept as part of this EIR.** 6

Adopted on motion by Supervisor Woolley and seconded by Supervisor Geist the following vote:

AYES: Supervisors: Woolley, Geist, Neely, Smith
NAYS: None
ABSENT: Supervisors: Rodoni
ABSTAIN: None

STATE OF CALIFORNIA)
County of Humboldt) s.s.

I, Nikki Turner, Deputy Clerk of the Board of Supervisors, County of Humboldt, State of California, do hereby certify the foregoing to be a full, true, and correct copy of the original made in the above-entitled matter by said Board of Supervisors at a meeting held in Eureka, California as the same now appears of record in my Office.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Seal of said Board of Supervisors.

NIKKI TURNER

Deputy Clerk of the Board of Supervisors of the County of Humboldt, State of California

Nikki Turner

September 18, 2007

(F-1)

Responses to Board of Supervisors:

1. Various measures to minimize harm will be incorporated into the proposed project. Chapter 3 discusses appropriate measures for every environmental topic. It should be noted that since the Draft Environmental Impact Report/Statement (EIR/S) was circulated to the public, Caltrans has addressed many public concerns such as eliminating the need to remove the eucalyptus trees on the west side of the highway under Modified Alternative 3A, which is identified as the Preferred Alternative in the Final EIR/S.

2. All written comments submitted to Caltrans during the two public comment period have been addressed in this Final EIR/S.

3. Coastal Commission staff has submitted four letters regarding this project. Copies of all of the letters are included in Volume II. Also included are responses to Coastal Commission project comments.

4. Caltrans staff has met with both Chris Whitworth and Tom Matsson of Humboldt County Public Works Department regarding this project.

5. See Grouped Responses I-A and III-A-1. Also, after construction of any of the Build Alternatives, the posted speed limit within the existing Safety Corridor would remain at 50 miles per hour immediately after project construction.

6. Section 3.1.7 – Visual/Aesthetics in Chapter 3 has been extensively revised to address visual concerns.

Humboldt County Department of Public Works – Aviation Division

Comments on CalTrans 101 Corridor Improvement EIS/EIR

General

The Aviation Division supports the concept of a signalized intersection for the safety and improvement of ingress/egress from Highway 101 of our customers/staff/neighbors in the Airport/Cole avenue area, however there are significant concerns related to the proposed location as described in detail below. It is recommended that CalTrans evaluate locating a signalized intersection for this area to the south of the existing Airport Road encroachment toward the closed Cole Avenue encroachment. 1

Specific Comments

Page x - Alternative 3 indicates in the second paragraph the taking of federally obligated airport property in an area that is earmarked for airport development and also has wetlands associated with it. CalTrans needs to contact the Federal Aviation Administration (FAA) and incorporate the restrictions on use of aiport property. 2

Page xii – Social and Economic impact for Alternative 3 does not indicate the economic impact the proposal may have on the airport. 3

Page xvii – Other permits and Approval section needs to add discussion on permits and comments needed from FAA through an FAR part 77 Airspace Obstruction analysis or objects affecting navigable airspace study on the impacts of lighting, vehicles and/or equipment on Highway 101, or completion of a 7460-1 FAA form to indicate whether or not Alternative 3 would have a severe impact on the established runway approaches and departures at Murray Field. There is no indication that the CalTrans Division of Aeronautics (DOA) has had input to this document. Please ensure that DOA has a chance to review and comment on this proposal. 2, 4

Page 23 – Section 1.4, Required Approvals and Permits – discussion of permitting and approval by FAA and DOA based on the impact to the airport property and possibly to flight procedures for Alternative 3 needs to be added. 2

Page 38 – Alternative 3, second paragraph – Needs to add discussion regarding taking of federally obligated property as relates to FAA and DOA requirements. 2

Page 52 – Cumulative Impacts – Technical studies on the impacts to aviation not mentioned or completed as part of the community impact. 3

Page 53 – 3.1.1 Land Use Community Business – Affected Environment – The airport should be included as a business and impacts of Alternative 3 on airport development need to be discussed. 3

Page 56 – Businesses in the Project Vicinity – The airport should be included as a business as it provides for all aviation activities as an enterprise account. 3

Page 58 – Business Survey – The airport has been in existence over 60 years nad needs to be mentioned in the comments. 3

Page 60 – CAP Business Survey – Economic impacts to the airport for Alternative 3 need to be included. 3

Page 62 – Public Recreation – Aviation activities as recreation needs to be added. 5

Page 67 – HCAOG Modes of Travel – Aviation needs to be included. 6

Page 75 – Land Use – Sentence 2 for Alternative 3 Easement – The taking of federally obligated airport property as well as the impact to current operations and future operations needs to be discussed. 2

Page 76 – Consistency with Adopted Plans – Airport Master Plan needs to be added. 7

Page 78 – Growth Regulatory Setting Environmental Consequences – Discussion regarding effects to airport an airport land use designations needs to be added. 8

Page 93 – Emergency Services – Need to include Air Ambulance. 9

Page 95 – Traffic and Transportation – Impact of Aviation needs to be covered in the referenced report. 10

Page 97 – Transportation Modes – Murray Field Airport is the most active General Aviation airport in Humboldt County and serves the General Aviation needs of the Eureka-Arcata area by providing a location for air cargo, air ambulance, air charter, student instruction, aircraft maintenance, Civil Air Patrol, business and recreational flying services. The airport's economic impact to the City of Eureka and Count of Humboldt can conservatively be estimated at $3,000,000 to $5,000,000 annually. While the airport is part of the National Plan of Integrated Airports System (NPIAS), it's tax base supports the general fund of the County and is a critical part of an enterprise fund that maintains the airports and airport system as self supporting. Due to the use of Federal Grant funds, through assurances, the airport property is considered to be federally obligated property. AIP grant funding for the airport is based on supporting the airport and its environment. 11

Page 118 – Humboldt County Airport – Studies which have been completed to support the comments made by CalTrans need to be documented. Verification that CalTrans has based there comments on FAR part 77 studies or a 7460-1 FAA from for FAA support or concurrence of the implications made in the CalTrans statements. Discussion of the impacts of traffic stopped in front of the south-west departure path needs to be included. 4

3

Page 123 – The eucalyptus trees just north of the airfield protect both aircraft and pilots from the power lines that cross over Highway 101. If these trees are removed the power lines need to be placed underground to prevent a catastrophic accident. 12

Page 151 – Airport Road to Indianola – The aviation division has just completed a project with CalTrans to remove all trees and shrubs that were impacting the runway flight path. Any items planted in this area should not cause or impact the safety of airport operations. 13

Page 158 – Section 4F De Minimis Use – The taking of federally obligated land and impacting areas designated for aviation development needs to be discussed. Alternative 3 would have an adverse impact on airport wetlands and planned use of airport property. 2

Page 242 – Alternative 3 impact on wetlands – The entire airport property with the exception of the asphalt surfaces is currently under study for construction of a perimeter security fence. As part of this project, an environmental analysis is being performed that will define the boundaries of wetland areas. 2

Page 252 – Summary of Wetlands Impact Avoidance – Fourth paragraph, third sentence, Alternative 3 – Would the described construction create a flooding situation on the airport? 14

Page 295 – Significant Environmental Effects of Proposed Project – The economic loss due to possibly restricting airport operations needs to be discussed. 3

Page 299 – Aesthetics item d) – Effects of signal lights on airport need to be reviewed before it can be determined to have no impact. 15

Page 301 – Community Resources item a) – Alternative 3 has potentially significant impacts on planned development of the airport. 2

Page 301 – Community Resources item i) – Alternative 3 has potentially significant regarding the possibility of alterations to air traffic. 2

Page 304 – Land Use and Planning item a) – Alternative 3 has potentially significant impacts in conflicting with master plan for airport. 2, 7

Page 306 – Public Services item a) - Alternative 3 has potentially significant impacts to the airport as "other public facility". 2

Page 307 – Transportation/Traffic item c) – Alternative 3 has potentially significant impacts if it requires changes in air traffic patterns. 2

Responses to Humboldt County Aviation Division

1. Caltrans staff evaluated various scenarios for relocating the signal at Airport Road. Modified Alternative 3A, the Preferred Alternative identified in the Final Environmental Impact Report/Statement, includes a proposed half signal at Route 101 and Airport Road that would avoid using airport property.

2. After consultation with County Aviation staff as well as Caltrans Aeronautics staff regarding the use of the airport for the signalization improvement, the full signalization element of Alternative 3 was determined not feasible and dropped from the project. Consequently, the proposal to relocate the Airport Road/Jacobs Avenue/Route 101 intersection on any portion of airport property has been dropped.

3. Section 3.1.1 Land Use, Community, Businesses in Chapter 3 of the Final EIR/S has been revised to address project effects on the Murray Field Airport.

The 101 Corridor Access Project (CAP) is not affiliated with Caltrans. The CAP group surveyed businesses within the Route 101 corridor and submitted the survey results to Caltrans.

4. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S includes a proposed half signal at Route 101 and Airport Road that would not stop southbound Route 101 traffic.

5. Although many private pilots use airplanes for recreational purposes, Murray Field Airport would not be considered a public recreation facility. Unlike the Fay Slough Wildlife Area north of the airport, for example, the public generally would not travel to Murray Field Airport for recreation.

6. Aviation has been added to the discussion of the Humboldt County Association of Government Regional Transportation Plan.

7. The airport master plan was reviewed and the proposed Route 101 improvement project was determined to be consistent with the master plan. Discussion of the master plan is now included in the Final EIR/S.

8. The airport was evaluated in the EIR/S and was classified as a Type III business. See the discussion in Section 3.1.1 Land Use, Community, Businesses in Chapter 3 of the Final EIR/S for project effects on Type III businesses. None of the Build Alternatives would change the land use designation of the airport.

9. The air ambulance service was added to Chapter 3 of the Final EIR/S.

10. Section 3.1.6 Traffic and Transportation in Chapter 3 of the Final EIR/S includes a discussion of project effects to the airport.

11. Comment noted. Note that data and information included in the Final EIR/S are commensurate to the bearing on possible impacts, environmental commitments, or alternative analysis.

12. The proposal to remove the Eucalyptus trees at this location has been dropped.

13. Comment noted. The Caltrans Landscape Architecture unit will be notified regarding any revegetation efforts at this location.

14. In general, none of the Build Alternatives would increase the flooding potential to any adjacent properties compared to the existing situation.

15. Section 3.1.7 Visual / Aesthetics of Chapter 3 in the Final EIR/S includes an evaluation of the visual effects of proposed signalization at Airport Road and Route 101.

Humboldt County Department of Public Works – Engineering Division

Comments on CalTrans 101 Corridor Improvement EIS/EIR

General

1. The State of California adopted the "California Strategic Highway Safety Plan" (SHSP) in 2006. The alternatives presented for improvements to the safety corridor should each have a short section on how they incorporate the strategies of the SHSP to work towards reducing the number of fatalities on California Roadways. It is clear that the Safety Corridor has many of the attributes of the SHSP and has contributed to the reduction in fatalities. Three of the four alternatives presented raise the speed limit. When an accident occurs at higher rates of speeds it increases the likelihood of a fatality. It is unclear how the proposed increase in the speed limit will help achieve the statewide goal of lowering the fatality rate on California's roads. 1

2. The project has moved from a purely safety project to include capacity enhancements. We recommend additional alternatives that incorporate all modes of travel and incorporate the three major access routes from Eureka to Arcata (Highways 101 and 255 and the Old Arcata/Myrtle Avenue corridor) as one operating system. The Department of Public Works recommends that the focus should be to maintain as much of the traffic as possible on Highway 101, however projects on Highway 101 have a direct impact on traffic on the other two cited routes. 2

3. More alternatives to the overpass type included in Alternatives 2 and 3 should be analyzed. While it is stated that left turn merges and off ramps are not desirable, they need to be analyzed. Building much smaller structures that provide for left merges and exits while eliminating the at-grade conflict are a reasonable solution and improve intersection LOS and maintain this stretch of road as fatality free. Instead of eliminating this type of facility because it does not meet the "need and purpose", we recommend that this type of facility be analyzed at a lower design speed and include intelligent transportation technology. The challenge should be "what features can be added to this type of facility to improve safety and reduce operational conflicts" versus this facility "does not meet the purpose and need". 3

4. The County is planning to construct improvements to Old Arcata Road/Myrtle Avenue in the next construction season. This project includes widening the shoulders of this route to provide for a much safer road while allowing room for bicycles and pedestrians to travel the entire route outside of the travel lane. This project includes a roundabout at the intersection of Old Arcata Road and Indianola Road for both traffic control and traffic calming. The County is also analyzing the intersection of Old Arcata Road with Freshwater Road for a future roundabout, again both for traffic control and traffic calming. Highway 255 has minimal shoulders for non-vehicular use. Of the three routes, it is clear that Highway 101 is the safest for a non-vehicular facility. It also has the best potential to create a route completely separated from trucks and cars. CalTrans needs to consider this in their overall improvement plan for this stretch of road, even if it just includes planning 4

for this type of facility. Any highway construction should not compromise the ability to construct the separated non-vehicular facility in the future.

5. 1.1 Project Need – Reduce Collisions - The accident information used throughout this section is from pre-Safety Corridor installation. The report should be based on accident information collected since the inception of the Safety Corridor in 2002. This is especially important as the "No Build" alternative retains the Safety Corridor features as they exist today not pre-Safety Corridor conditions. 58

6. Nowhere in the EIS/EIR are freeway interchange or freeway accident rates mentioned nor are they used in a before and after analysis. There are accidents on freeways and on freeway interchanges. In addition, because of the increased speeds involved, the accidents that do occur are more severe. Proposed alternatives 1 and 2 construct a freeway in all but name and all build alternatives increase the speed limit to 65 mph. 1, 6

7. The conclusion at the bottom of page 1 that accidents are increasing on the corridor is incorrect for the accident history since 2002. The accident rate has not been increasing and is consistent with State averages. 5

8. The conclusion at the top of page 2 that the accident rate on the corridor as a whole is greater than the statewide average does not match the provided data. The accident rate for Route 101 (inclusive of intersection collisions) within the study area even before the implementation of the Safety Corridor was less than the State average. Below is the summary section of Table 1-1 7

BEFORE SAFETY CORRIDOR

HIGHWAY TOTALS (INCLUDING INTERSECTIONS)	Actual	State Avg.	% of State Avg.
Fatal	0.015	0.016	94%
Fatal + Injury	0.25	0.54	46%
Total	0.57	1.28	45%

AFTER SAFETY CORRIDOR

HIGHWAY TOTALS (INCLUDING INTERSECTIONS)	Actual	State Avg.	% of State Avg.
Fatal	0.00	0.016	0%
Fatal + Injury	0.16	0.54	30%
Total	0.44	1.28	34%

Unless one of the alternatives is to return the highway to pre-Safety Corridor conditions, Table 1-1 should not be included in the study, nor should its statistics be used as a basis for a comparison of alternatives.

9. Level of Service (LOS) Justification - The level-of-service calculations are based on an increase of 50% in the traffic volume by 2030. The development of this statistic should be included in the text. Total Humboldt County growth is projected to be 15% by that year (source: Humboldt Planning Department). 8

10. The text refers to 1998 as the base year for LOS calculations. Table 1-2 refers to LOS measurements in 2006. One or the other should be changed for consistency. 9

11. The Safety Corridor has increased gaps and platooning of vehicles. One of the alternatives analyzed should be the use of synchronized traffic signals at or near Cole Avenue and increased speed limit enforcement to reinforce the platooning and gaps that enable safe left turn movements. 10

12. Section 1.2 – Project Purpose - The SHOPP projects are mixed with the STIP project in this EIR/EIS, bringing confusion to which parts of the proposed project will go forward regardless of the option which ends up being selected as the preferred option in the final EIR for long term improvements to the corridor. The bridges at Jacoby Creek and Gannon Slough, median barriers, 255 interchange improvements and lighting have not been discussed as part of the corridor safety improvements before this document. To include these improvements as an integral part of all "build" alternatives is beyond the original scope of the PSR for the Corridor and adds an extra layer of complexity to the issues related to long term alternatives for improvements to this corridor. If these improvements are to be included they should be presented as a separate alternative, not on an all-or-none basis with other possibly contentious "build" alternatives. 11

13. The current accident rates at the intersections in the corridor are comparable to statewide averages. Current intersection accident rates need to be compared with accident rates at 65 mph and for interchanges like the one being proposed. 1, 12

14. Additional alternatives to further increase platooning and gaps created by the V Street traffic signals should be investigated. 10

15. Resurface, Restore, and Rehabilitate - These improvements were not a part of the original PSR. While we agree with CalTrans that it would be more efficient to perform the 3R work at the same time as additional improvements, their addition to the alternatives is confusing what is actually proposed for improvement above and beyond the SHOPP program. 11

16. 1.3 Project Background - The accident summary table on page 16 of the EIR is difficult to put into context as presented. Below is the same table with accident counts from the State accident database. 12

NUMBER OF COLLISIONS FROM 7/01/2002 THROUGH 12/31/2005
ROUTE 101 FROM EUREKA SLOUGH TO STATE ROUTE 255 IN ARCATA
KP128.4 TO 138.1 (PM 79.8 to 85.8)

INTERSECTIONS	Actual Number of Collisions	Statewide Number of Collisions	Actual Collision Rate (#/million vehicle miles)	Statewide Average Collision Rate (#/million vehicle miles)	% of State Average
Cole Avenue					
Fatal	0	0	0.000	0.001	0%
Fatal + Injury	1	3	0.02	0.06	33%
Total Collisions	3	7	0.06	0.14	43%
Airport Road					
Fatal	0	0	0.000	0.001	0%
Fatal + Injury	2	3	0.04	0.06	67%
Total Collisions	2	7	0.04	0.14	29%
Mid City					
Fatal	0	0	0.000	0.001	0%
Fatal + Injury	1	2	0.02	0.05	40%
Total Collisions	7	6	0.15	0.13	115%
Simpson Redwood					
Fatal	0	0	0.000	0.002	0%
Fatal + Injury	0	4	0.00	0.08	0%
Total Collisions	0	9	0.00	0.19	0%
Indianola Cutoff					
Fatal	0	0	0.000	0.002	0%
Fatal + Injury	5	4	0.10	0.08	125%
Total Collisions	10	9	0.20	0.19	105%
Bracut					
Fatal	0	0	0.000	0.008	0%
Fatal + Injury	1	1	0.02	0.16	13%
Total Collisions	2	16	0.04	0.33	12%
Bayside Cutoff					
Fatal	0	0	0.000	0.001	0%
Fatal + Injury	2	3	0.04	0.06	67%
Total Collisions	5	7	0.1	0.14	71%
HIGHWAY INTERSECTION TOTALS					
Fatal	0	0	0.000	0.016	0%
Fatal + Injury	12	20	0.24	0.41	59%
Total Collisions	29	61	0.59	1.26	47%

17. Page 17 contains dialogue about the insignificance of the two- (2) accidents at the South G Street on-ramp. More dialogue should be given to the statistical insignificance of the one accident at Indianola that puts that intersection over the State average. 13

18. The statement on page 17 that the accident rate on 255 has increased is not reflected in the data. The accident rate on 255 for the last four years (2002-2006) since the Safety Corridor has been in place has dropped by 22%. 14

19. The ADT counts on Highway 255 are not consistent. The south end registers a 25% increase in traffic, but the north end only registers 1.2%. If the south end counters are "South of Navy Base Road" then many factors other than the Safety Corridor could change the ADT. Further analysis of the traffic volumes on Highway 255 are recommended. 15

20. The ADT counts on Old Arcata Road have not changed since the Safety Corridor. The accident increase should not be associated with the Safety Corridor, but is normal statistical variation. 16

21. Section 2.1 – Alternatives Development Process – Value Analysis Process - The County requested inclusion of traffic signals repeatedly during the Value Analysis (VA). They were not included in the report because they "did not meet the project need". 17

22. Alternative Selection Criteria – This Department believes that Caltrans is unnecessarily constrained by the Operational Conflicts Conformance Criterion. The automatic rejection of all solutions with left merges has eliminated many easily achieved, less expensive solutions to the accident problem. Some examples of automatically rejected solutions include: u-turn stations on the corridor with only right-on right-off at intersections (the "Michigan left" is used at over 700 locations in Michigan and provides for access without a direct at-grade crossing of traffic and shows significant safety and capacity improvements over at-grade crossings), fly-overs or a half interchange. These solutions would be millions of dollars less and would have less impact. 36

The issue of left merges should be analyzed for creative Intelligent Transportation (IT) solutions. 18

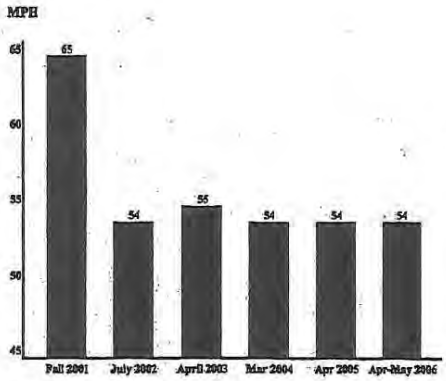
23. Section 2.2 – Project Alternatives – Alternative 2 - Consequences of this alternative listed on Page 38 include: "By improving highway access, this alternative would remove one impediment to growth through re-development at the Route 101/Indianola Cutoff." 19

Several feasibility analyses were performed in the 1990's by local engineering firms for big-box outlets in the Indianola area. The biggest constraint to their development was the Hwy 101 intersection. Page 80 of the impact analysis downplays this potential.

24. Section 2.2 – Project Alternatives – Alternative 3- This alternative contains a traffic signal, but not at the most desirable location, and not synchronized with the V Street signals. 20

25. Section 2.2 – Project Alternatives – Alternative 7- Several statements in this section on Page 39 are not substantiated by actual data. The average speeds on the corridor have not been increasing. The figure below is from the Eureka-Arcata Safety Corridor Fourth-Year Report May 19, 2002 to May 18, 2006 prepared by Caltrans 21

SPEED DATA - U.S. HWY 101 SAFETY CORRIDOR



A comparison of average 85th percentile speeds determined by speed zone survey measurements taken during off-peak hours for Fall 2001, July 2002, April 2003, March 2004, April 2005 and April & May 2006.

Page 39 also states that the F+I collision rate is almost twice the Statewide average. This is incorrect. The F+I collision rate at Indianola is 125% of the State average. The 25% exceedance is due to one accident.

26. Section 2.2 – Project Alternatives – Alternative X- The main reason traffic movements can be made from the corridor intersections now is due to the large gaps created by the traffic signals at V Street. Methods of accentuating the gap and reinforcing platooning of vehicles should be analyzed. Synchronized traffic signals and law enforcement are two methods of achieving these goals. 10

27. As mentioned on page 29 of the EIR several requests have been made by HCAOG and the County Public Works for an analysis of a traffic signal at Airport Road or Cole Avenue. Specifically, if these signals are synchronized with V Street signals they can act as a traffic-metering device reinforcing the platooning of traffic in the corridor. It is again requested that a synchronized signal be analyzed at a reopened Cole Avenue, with an access closure at Airport Road. The V Street traffic signals create gaps in the flow of traffic. These gaps are the main reason turn movements are currently possible at corridor intersections. A synchronized signal at Cole Avenue would reinforce platooning and gaps making turning movements safer for longer periods. 10, 17

28. As stated on page 38 a normal demand actuated signal would be statistically expected to increase accidents. However, a signal synchronized with V Street at 50 mph would reinforce speed limit adherence and would limit signal queues. With proper warning devices the accident rate could be kept low. 10

29. Traffic models of the V Street intersection have shown that southbound Highway 101 traffic will back up beyond the Eureka Slough bridges in future years effecting the flow of traffic in the corridor. The results of the V Street intersection traffic model need to be included in the analysis of the corridor. 22

30. Funding for long term enforcement of the 50 mph speed limit is possible through the STIP. Hwy 17 is not a comparable example of the use of enforcement. Terrain, traffic volumes and length of road are all factors contributing to failure in that example. Observation of driver behavior shows that all traffic drives at or below the limit when municipal police or Highway Patrol are on the corridor. 10, 23

31. No analysis is apparent on the effects of increasing the speed limit. The Caltrans route concept to make Highway 101 freeway is mentioned several times and all of the build alternatives include an increase in the speed limit to 65 mph. No discussion is made of this increase. Will this section of the highway be designated freeway? Will pedestrians be prohibited? Will parking for duck hunting be prohibited? Will severity of accidents increase the fatality rate? 24

Responses to Humboldt County Aviation Advisory Committee

1. See Group Response III-A-1.

2. Since the project does not include adding any new, continuous traffic lanes, none of the Build Alternatives would add traffic carrying capacity of Route 101. It is true that acceleration and deceleration lanes are proposed to be extended, but this would not result increasing the vehicle carrying capacity of the highway.

The planning and design of the proposed project does take into consideration all transportation modes on the three highways between Eureka and Arcata. All of the proposed highway improvements would benefit all transportation users. For example, the project includes a new, wider southbound Jacoby Creek Bridge that would benefit both motorists and bicyclists. Section 3.1.6 Traffic and Transportation in Chapter 3 of the Final EIR/S has been revised to address these issues in greater detail. Also see Group Responses I-D, I-E, II-A, II-E, and II-G.

3. Caltrans received many written comments to develop alternatives that would enhance safety while minimizing impacts. Many ideas and suggestions were considered both before the EIR/S

preparation and after the Draft EIR/S circulated to the public. See Chapter 2 in the Final EIR/S for a summary of alternatives that were considered during the early planning phase.

Alternative 1A was developed after the Draft EIR/S was circulated in response to alternative to a new grade separation at Indianola Cutoff. Although this alternative has advantages, it also has many drawbacks and ultimately Alternative 3A became the proposed Preferred Alternative. Alternative 3A is similar to Alternative 3, but has scaled down grade separation and signalization features.

4. Alternative 3A includes many improvements that would enhance bicycle safety on Route 101. See the discussion in Section 3.1.6 Traffic and Transportation in Chapter 3 of the Final EIR/S. In addition, the proposed roadway improvements would not preclude a future pedestrian/bicycle path adjacent to Route 101.

5. See Group Response I-A.

6. After construction of Modified Alternative 3A, the intersections will remain at the same grade as the Route 101 roadway (except Indianola Cutoff), Route 101 between the Eureka Slough Bridge and the Jacoby Creek Bridges would remain an expressway and not a freeway.

7. The text in Chapter 1 has been revised to read that at five of the seven intersections between Eureka and Arcata the collisions rates were higher on average than at similar highway intersections. Table 1-1 remains in the Final EIR/S because pre-Safety Corridor conditions are essential to provide a complete project background. None of the proposed alternatives includes removing the Safety Corridor without any improvements, however if no improvements are constructed, the Safety Corridor could lose its effectiveness as traffic volumes increase in the future. The Safety Corridor was intended to be a temporary measure until the proposed improvements evaluated in the Final EIR/S are constructed.

8. See Group Response I-B.

9. The year 2006 is the correct year representing the base or existing condition and not 1998. This inconsistency has been corrected in the Final EIR/S.

10. See Group Response II-D

11. There were several trade-offs that were carefully considered prior to the decision to combine the State Highway Improvement Program (STIP) and the State Highway Operations and Protection Program projects. Ultimately, because the two major projects shared common elements and both are needed, it was decided that these considerations justified combining the two projects.

12. Please refer to Table 1-2 which indicates that collisions are increasing at two intersections since the Safety Corridor was implemented.

13. Caltrans received several public comments regarding the collision rate tables in the Draft EIR/S: consequently, the collision tables were replaced with new collision rate tables for clarification.

14. The overall collision rate has decreased on State Route 255 after implementation of the Safety Corridor; however, the collision rate has increased through Manila.

15. Since the Draft EIR/S was approved, the State Route 255 volumes have been updated.

16. Since the Draft EIR/S was approved, Old Arcata Road has been widened; post-widening collision data is not currently available.

17. See Group Response II-C.

18. See Group Response II-D.

19. It is acknowledged that an grade separation would remove a major constraint to major development; however, other growth constraints remain. Also see Group Response III-B-5.

20. After consultation with County Aviation staff as well as Caltrans Aeronautics staff regarding the use of the airport for the signalization improvement, the full signalization element of Alternative 3 was determined not feasible and dropped from the project. Consequently, the proposal to relocate the Airport Road/Jacobs Avenue/Route 101 intersection on any portion of airport property has been dropped.

21. Subsequent Safety Corridor studies since 2006 indicate that prevailing speeds have leveled off. However, the collision rate is increasing at two intersections. See Table 1-2 in Chapter of the Final EIR/S.

22. The traffic forecast model does include the level-of-service at the 5th Street/V Street intersection for the year 2038. The modeling scenario includes the proposed re-striping 5th Street from the existing two lanes to three lanes, which would improve traffic flow.

23. The intent of presenting and comparing safety corridor data from other regions such as Route 17 was presented as another means of evaluating the Eureka-Arcata Route 101 Safety Corridor by presenting general trends and patterns of effectiveness.

24. See Group Responses I-A and III-A-2.

Humboldt County Department of Community Development Services

Comments on CalTrans 101 Corridor Improvement EIS/EIR

Chapter 1

1.1 Project need

Reduce Collisions

Project collision data used to support the project is outdated (1994 – 1999), and should be replaced with more current data, including data from Table 1-3 (2002 – 2005). Pre 2002 conditions are referenced throughout the Project Need section as if they are existing conditions, which is not the case because of the improvements that were made in early 2002 with the implementation of the Safety Corridor. 1

Table 1-1 shows that before the Safety Corridor project was implemented, collision rates at most of the intersections along the affected portions of Highway 101 were above the Statewide average. Some of the intersections (Cole Avenue, Indianola Cutoff and Bayside Cutoff) registered collision rates more than ten times the Statewide average.

With the 2002 Safety Corridor project, fatal collisions have on average dropped by 736%, fatal + injury collisions have dropped by 107%, and total collisions have dropped by 58% as shown in the following table derived from the information contained in Table 1-1 and Table 1-3 of the EIS/EIR.

101 Safety Corridor
Collisions as a Percent of State Average

Intersection	Collision Type	Pre Safety Corridor (%)	Post Safety Corridor (%)	Difference (%)
Cole Ave.	fatal	1,500	0	-1,500
	fatal+	200	33	-167
	total	171	43	-128
Airport Rd.	fatal	0	0	0
	fatal+	150	67	-83
	total	107	28	-79
Mid City	fatal	0	0	0
	fatal+	280	40	-240
	total	154	115	-39
Arcata Redwood	fatal	0	0	0
	fatal+	25	0	-25
	total	18	0	-18

101 Safety Corridor
Collisions as a Percent of State Average

Indianola Cutoff	fatal	2,150	0	-2,150
	fatal+	213	125	-88
	total	137	105	-32
Bracut	fatal	0	0	0
	fatal+	56	13	-43
	total	64	12	-52
Bayside Cutoff	fatal	1,500	0	-1,500
	fatal+	167	67	-100
	total	129	71	-58
Total	fatal	736	0	-736
	fatal+	156	49	107
	total	111	53	58

Justification of the purpose of the project should rely upon this more current data.

Also, conflicting data should be resolved: page 4 states, "traffic volumes are expected to increase approximately 50% by the year 2031" while page 43 states, "traffic volume on Route 101 between Eureka and Arcata is predicted to increase by approximately 30% by Year 2021" 2

Operational Conflicts

As in the previous section, justification for the project to remedy operational conflicts relies on data from the 1994 – 1999 time period, rather than from after the Safety Corridor implementation in 2002, so the conclusions are based on outdated information. 1

In addition to the improvements implemented with the Safety Corridor, the EIS/EIR on page 5 described recent closure of the Cole Avenue median, and improvements to the corridor that were made between Cole Avenue and Airport road: "The acceleration and deceleration lanes at Airport Road and Route 101 are the only acceleration and deceleration lanes at Route 101 intersections that meet highway engineering standards between Eureka Slough Bridge in Eureka and the Route 101/255 interchange in Arcata", and concludes they improved the operation of Route 101 as well as enhancing safety. The conclusions in this section should rely on more recent information that accounts for these recent improvements.

On page 6, the EIS/EIR claims that the projected increase in traffic volume will cause insufficient gaps in the traffic for people to enter the mainline traffic. It is not clear whether this conclusion is based on current data showing the intersections to be safer than most comparable intersections in the state. 3

Level of Service (LOS)

As with the previous two sections, conclusions in this section as justification for the project to rely on data from the 1994 – 1999 time period, rather than from after the Safety Corridor implementation in 2002, so the conclusions are based on outdated information. On Page 6, the document describes LOS E at most intersections in the corridor. Table 1-2 purportedly presents 2006 information, but this appears to be a typographical error, as it also refers to a left hand turn movement at Cole Avenue, which was not permitted in 2006. (Improvements completed in 2004 eliminated the left hand turn movement from Cole Avenue.) 4

The EIR should also explain why it is acceptable to have a reduction in LOS for the mainline Highway 101 (from LOS B to LOS C or D by year 2031), but it is not acceptable to have a similar reduction of LOS for the at grade intersections. 5

1.3 Project Background

The attempt to secure funding for enforcement and educational components of the safety corridor should be clarified. The EIR/EIS states that, "While grants for additional funding to extend the enhanced enforcement and educational components are researched each year, none have been obtained", but it is unclear whether applications for funding under these programs have been submitted. 6

There is not substantial evidence presented in EIS/EIR to support the conclusion on page 15 that safety corridors don't retain their effectiveness in reducing collisions and increasing Level of Service characteristics over time. First, the data from the local safety corridor shows a different trend. The other safety corridors studied showed they became totally ineffective once the enhanced enforcement program ended, as described on page 116 of the EIS/EIR. However, the enhanced enforcement and public education campaign for the Eureka-Arcata 101 safety corridor ran out of funding in 2003 without any apparent increase in collision rates as shown in the above table. 7

This section of the EIR/EIS does not account for enhanced enforcement of the highway safety corridor due to citizen complaints. According to the California Highway Patrol (CHP), there continues to be enhanced enforcement of the safety corridor due to citizen complaints (personal communication with CHP Officer 8/29/07). That agency points to the active involvement in enforcement by local citizenry as one of the primary reasons for the success of the safety corridor in reducing collisions. 8

Also, of the 29 other safety corridors that were studied, only four of them were four lane expressways like the Highway 101 Safety Corridor between Eureka and Arcata. The comparative study should be limited to information from the four similar Safety Corridors. 9

Chapter 2
2.2 Project Alternatives
Alternatives #1, #2 & #3

On page 35, the EIS/EIR states, "The primary purpose of the Corridor Improvement Project is to improve the safety and reduce the number and severity of fatal and injury collisions". However, intersections along the corridor are already at 0% of the Statewide average for fatal collisions and 49% of the Statewide average for fatal + injury collisions, so it is unclear why further improvement is necessary. 10

Alternative #7 (No Build)

It is inconsistent with this alternative for the EIS/EIR to rely on data from an earlier time period as justification for the project. The No Build project alternative assumes that the existing engineering improvements made with implementation of the Safety Corridor will remain until it is necessary to remove them. The data in Table 1-1 showing collision rates from the 1994 – 1999 time period, for instance, reflects conditions not considered in the No Build alternative. This inherent contradiction needs to be resolved. 1

The EIS/EIR should acknowledge that there continues to be enhanced enforcement of the speed limit due to citizen involvement. 11

The statement on page 39 of the EIS/EIR that, "without additional enhanced traffic enforcement, average traffic speeds have been steadily increasing, and are expected to continue to increase within the Safety Corridor", and similar statements made elsewhere in this section should be supported by data. The collision information presented in Table 1-3 showing the corridor is operating at a safer level than most comparable facilities in the State seems to contradict the above conclusion. 1, 12

The statement on page 39 that, "Although the overall number of collisions has substantially decreased during the first two years of the Safety Corridor implementation, the fatal plus injury collision rate at Indianola Cutoff remains at almost twice the Statewide average" should be corrected to reflect the data in Table 1-3 showing it is slightly higher (125%) the Statewide average. 12

It is not appropriate to rely on data from other regions of the State to support the conclusion safety corridors don't maintain their effectiveness in reducing collisions over time, particularly when data from the local safety corridor shows a different trend. As stated previously, the enhanced enforcement and public education campaign for the Eureka-Arcata 101 safety corridor ran out of funding in 2003 without any apparent increase in collision rates. This is significantly different from the results in other safety corridors. 1, 9, 13

Evidence should be presented supporting the statement in the EIS/EIR on page 40 that, "Without traffic safety improvements intended to reduce collisions related to median crossings within the corridor, collision rates are expected to increase back to pre-safety corridor levels, regardless of an extended enforcement period". Presently, the data shows the collision rates along the safety corridor are far less than Statewide averages. 1

2.3 Alternatives Considered but Eliminated from Further Discussion
Alternative 5 (Safety Corridor as a long term solution) and Alternative 6
The statement in the EIS/EIR on pages 43 & 44 that "Left turn movements across Route 101 medians could result in a higher percentage of fatal plus injury collisions than the State average" is not supported in the data presented in Table 1-3 that shows fatal plus injury collisions are less than the Statewide average. 1, 14

The statements on pages 43 & 44 that, "The LOS on Route 101 would degrade at intersections causing greater delays and therefore greater frustration" should be better supported by the evidence. The LOS for the mainline highway is projected to deteriorate by the same amounts as the LOS at the intersections, yet the EIR/EIS concludes on Page 8 that there is no capacity problem within the Eureka-Arcata 101 corridor. 15

This section of the EIR/EIS does not account for enhanced enforcement of the highway safety corridor due to citizen complaints. According to the California Highway Patrol (CHP), there continues to be enhanced enforcement of the safety corridor due to citizen complaints (personal communication with CHP Officer 8/29/07). That agency points to the active involvement in enforcement by local citizenry as one of the primary reasons for the success of the safety corridor in reducing collisions. 8

The EIS/EIR should not rely on data from other regions of the State to support the conclusion safety corridors don't maintain their effectiveness in reducing collisions over time as data from the local safety corridor shows a different trend. As stated previously, the enhanced enforcement and public education campaign for the Eureka-Arcata 101 safety corridor ran out of funding in 2003 without any apparent increase in collision rates. This is significantly different from the results in other safety corridors, which experienced dramatic increases in collisions after the enhanced enforcement program ended. 9

Chapter 3
Environmental Analysis Baseline Condition and Timeframe
The baseline condition is somewhat of a moving target in the document. Sometimes it is presented as the conditions as they existed prior to the Safety Corridor improvements in 2002, other times the baseline condition is after the improvements. For instance, collision rate information presented in Table 1-1 uses 1994 – 1999 data to justify the project, and the text describing the table presents this information as if it is current conditions. Another example is Level of Service information presented in Table 1-2 which is titled 2006, but includes information on an intersection that was closed in 2004, and the corresponding text only describes 1998 information. These sections of the EIS/EIR are in conflict with the description of the No Build alternative, which considers the 2002 Safety Corridor improvements as the current conditions. 16

If the intent of the EIS/EIR is to establish the baseline condition as before the 2002 Safety Corridor improvements, the analysis presented in Chapter 3 describing the impacts of the project should include evaluation and proposed mitigation measures for the significant 17

increase in traffic volumes on Highway 255 and Old Arcata Road that resulted from the 2002 project. Also, the No Build alternative should include measures to restore the Highway 101 corridor to pre-2002 conditions.

Conversely, if the intent of the EIS/EIR is to establish the baseline condition as after the 2002 Safety Corridor improvements, data used in the study should only be from after the improvements were made. 17

3.1.2 Growth

The conclusion on page 81 of the EIS/EIR that the project will not forseeably induce substantial growth should be supported by factual evidence. The statement that,

> "A new interchange may enhance the commercial property value of the Indianola area, which could potentially provide an incentive to more intensive use of the area, but not necessarily provide strong incentive for a large retail establishment. However, any new development near the Indianola Cutoff intersection would require permits and environmental review. Therefore, for the aforementioned reasons, although possible, it is not reasonably foreseeable that any of the project alternatives would likely induce substantial growth or indirectly create an incentive to develop large-scale development."

On the contrary, the evidence presented earlier in the section shows there have been several large scale commercial developments that have contemplated locating in the Indianola Cutoff area, including Sam's Club and Wal-Mart, and that constructing a Route 101 interchange at Indianola Cutoff would likely remove one of the most significant development constraints. 18

The EIS/EIR points to the lack of an existing area zoned for large-scale retail development, however Figure 3-1 on page 61 of the EIS/EIR shows a large area zoned for commercial use at the Indianola Cutoff interchange. 19

The conclusion in the EIS/EIR that "the existing area zoned commercial may be insufficient for off street parking requirements as well as a large scale retail building with required street set backs and landscaping" is not based on substantial evidence. There currently exist in the commercially zone properties in the area large areas already paved for parking; setbacks for commercial properties include zero setback provisions; and landscaping requirements are less than 2% of the area of the building. 19

The EIS/EIR also points to various required governmental permits as another major constraint. Arguably, placement of an interchange at the Indianola Cutoff will make it more likely the necessary permits will be issued because traffic impact mitigation would no longer be necessary, considerably enhancing the feasibility of a large scale commercial development. And with the existing commercial zoning of large areas at the interchange, and large paved areas on those properties, which minimize the need for 20

mitigation measures, the properties would seem to be ripe for large scale commercial retail development with construction of a new interchange. 21

Based on the above discussion, a more appropriate conclusion would be that the project may have a potentially significant growth inducing impact. Mitigation to reduce these impacts to less than significant levels include the purchase of development rights for new large scale commercial development on the commercially zoned lands at the Indianola Cutoff interchange.

3.1.3 Farmlands/Agricultural Lands

The conclusion on page 84 of the EIS/EIR that, "mitigation is not required since this project will not directly result in farmland conversion" runs contrary to the evidence presented earlier in this section, when it is stated that, "wetland mitigation may include acquiring agricultural (sic) and restoring tidal hydrology". 22

Appropriate mitigation should be included in the EIS/EIR to balance the potential loss of agricultural land. Mitigation measures could include payments to the County in compensation for the loss of tax revenues and other indirect values of continued agricultural productivity on the site or sites. 23

3.1.4 Environmental Justice

The conclusion on page 90 and 91 of the EIS/EIR that, "in the 20-year planning horizon, the No-Build Alternative does have the potential for disproportionate, adverse impacts at the Lazy J Trailer Ranch and KOA because collisions could increase at both Airport Road and at Bracut intersections if no improvements are made" is not supported by factual evidence. Presently, the data shows the collision rates along the safety corridor are far less than Statewide averages. 1, 14

This section should not rely on data from other regions of the State to support the conclusion safety corridors don't maintain their effectiveness in reducing collisions over time when data from the local safety corridor shows a different trend. As stated previously, the enhanced enforcement and public education campaign for the Eureka-Arcata 101 safety corridor ran out of funding in 2003 without any apparent increase in collision rates. This is significantly different from the results in other safety corridors, which experienced dramatic increases in collisions after the enhanced enforcement program ended. 1, 3

3.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

The EIS/EIR should evaluate the cumulative effects of the project on local roads as a result of the proposed alternatives and recent improvements made to the Safety Corridor. On page 114, it concludes that after the establishment of the Safety Corridor, traffic volumes on Highway 255 increased by 30%; traffic volumes on Old Arcata Road likely increased as well. However, there are no mitigation measures presented in the EIS/EIR 17, 24

to address these significant environmental impacts on these other roads that have already occurred from an earlier part of the project[1].

Many residents from the unincorporated community of Manila and along Old Arcata Road have complained of a deterioration in their ability to safely move from one part of the community to another because of the large increase in traffic on Route 255 and Old Arcata Road. There is a need to mitigate impacts of the project on real or perceived deterioration in bicyclist and pedestrian safety on these other roads from the increases in traffic volumes. Mitigation measures could include roadway improvements along Route 255, Old Arcata Road, and Indianola Cutoff to enhance public safety, and to achieve the integrated multimodal transportation system supported by the 2006 Transportation Plan. 17, 25

The conclusion on page 119 of the EIS/EIR that' "the increasing collision rates associated with Alternative 7 could result in a real or perceived deterioration in bicyclist safety over time", and similar conclusions in the same section, are not supported by substantial evidence. Presently, the data shows the collision rates along the safety corridor are far less than Statewide averages. And, as mentioned previously, it is not sufficient for the EIS/EIR to rely on data from other regions of the State to support the conclusion safety corridors don't maintain their effectiveness in reducing collisions over time when data from the local safety corridor shows a different trend. 1, 3, 14

Also, the EIS/EIR does not consider the real or perceived deterioration in bicyclist safety for those riding along Highway 101 of increasing the speed limit, as considered under Alternatives 1 – 3. 26

Section 3.1.7 Visual/Aesthetics
Regulatory Setting
The EIS/EIR should include reference to the scenic resource protection policies of the Coastal Act §30251, which states that, "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance." 27

The EIS/EIR should also include reference to the scenic resource protection policies of the Humboldt Bay Area Plan §3.40, particularly §3.40(B)(5), which states,

> " The Humboldt County Board of Supervisors shall initiate the preparation of a Scenic Route Study pursuant to the adopted Scenic Highways Element of the Humboldt County General Plan for the portion of Highway 101 between Eureka and Arcata and that portion south of Fields Landing, inclusively. The Scenic Route Study shall be prepared by the County Planning Department in cooperation with the California Department of Transportation. The content of the Study is outlined in Appendix E. A special emphasis of the study shall include opportunities for Cal-Trans, the County, and the Humboldt Bay Harbor and Conservation District to

[1] (There is no mention of those impacts being described and mitigated as a part of another environmental document prepared pursuant to the National Environmental Protection Act (NEPA) or the California Environmental Quality Act (CEQA).)

eliminate billboarding between Eureka and Arcata, through acquisition and other means, and to identify suitable areas for clustered signing."

Existing Views from Route 101
The description of the existing views should include all of the billboards along the highway. For example, the statement on page 125 of the EIR/EIS that "At the end of the eucalyptus tree row, views of Humboldt Bay from Route 101 open up completely" should be revised to identify that several large billboards degrade the existing views from Route 101 in that location. 27

Scenic Resources Determination
The conclusion on page 129 of the EIR/EIS that "There will be no impacts to the scenic resources of Humboldt Bay" is not based on substantial evidence. The construction of a 25 foot high interchange at the Indianola Cutoff would significantly impact scenic resources of Humboldt Bay in that location with construction of a concrete structure and related development. Photo simulation figures 3-11B and 3-13B shows the views of Humboldt Bay from the Indianola cutoff will be eliminated with the construction of the interchange. The conclusion is contrary to the statement on page 138 that, "For persons traveling west on Indianola Cutoff and some local residents living adjacent to Indianola Cutoff and near Route 101, the proposed interchange would disrupt views to some extent", and the conclusion on page 138 that removal of eucalyptus trees in the area is insignificant because, "in comparison to the change in the visual resources from this interchange, this change to the visual resource unit would not be noticeable." 28

Similarly, the conclusion on the same page that, "Views of Humboldt Bay will be improved by the removal of any eucalyptus trees along the northern section north of the lumber mill entrance" does not account for the existing administrative office buildings that block and otherwise interfere with views of Humboldt Bay from the highway in that location. (The same conclusion appears on page 154 of the EIR/EIS as well.) 29

The conclusion on page 138 of the EIS/EIR that, "There would be no feasible measures that would mitigate the loss of views of Humboldt Bay caused by the new interchange." is not supported by substantial evidence. It is not clear what, if any, mitigation measures were evaluated. The EIS/EIR should be revised to include evaluation of a visual impact mitigation measure that would include removal of billboards in the vicinity of the interchange consistent with the County's Humboldt Bay Area Plan. 30

Summary of Project Potential Visual Effects
This section of the EIS/EIR should include discussion of the visual impacts of the interchange at Indianola Cutoff and mitigation measures which include removal of billboards in the area. 30 31

Avoidance, Minimization and/or Mitigation Measures
Page 149 of the EIS/EIR proposes removal of scenic trees in the clear zone This is inconsistent with the treatment of billboards in the clear zone, which are proposed to be protected with the installation of guardrails. 32

Page 153 states that about 300 eucalyptus trees will be removed from in front of the existing Redwood mill, and that the area will not be replanted because there is insufficient area for replanting. It is acknowledged elsewhere in the EIS/EIR that the of eucalyptus trees being removed significantly contribute to the visual resources of the area because they buffer views of the industrial site. Accordingly, the EIS/EIR should include visual impact mitigation measures elsewhere in the project area, such as the removal of billboards consistent with the Humboldt Bay Area Plan. 29

3.4 Relationship Between Short Term and Long Term Effects
Under long term project adverse effects, include in the visual impact paragraph the elimination of coastal views east of the Indianola Cutoff, and degradation of visual quality resulting from the removal of the visual buffer between the highway and the industrial mill site. 33

Chapter 4
Significant Environmental Effects of the Proposed Project
Include in the visual impact paragraph the elimination of coastal views east of the Indianola Cutoff, and degradation of visual quality resulting from the removal of the visual buffer between the highway and the industrial mill site. 33, 34

Add a paragraph to address the projects impact on the coastal access located at Bracut. Closure of the median at that location will make it necessary for visitors from the South to go north to the Highway 255 in Arcata, then turn around and return to the Bracut encroachment. Following is the description of the access point in the Humboldt Bay Area Plan: 35

"47. BRACUT – The northern portion of this site is currently being proposed as a wetland restoration project by the California Coastal Conservancy. The property is in private ownership, and is currently in the process of being purchased by the state. No public access has been proposed as part of the project.

RECOMMENDATION: Public access for hunting and wildlife observation should be provided as part of this project.

A public agency should provide:

1. Railroad crossing improvements.
2. Parking suitable for at least five vehicles.
3. Bike racks."

Appropriate mitigation measures include funding for purchase of the access and the improvements listed.

Unavoidable Significant Environmental Effects
The conclusion that, "the removal of approximately 300 eucalyptus trees on the west side of the roadway" is an unavoidable significant environmental effect is not based on substantial evidence, considering the removal of billboards elsewhere in the project may be feasible, and may reduce the impacts of the tree removal to less than significant levels. 29

Mitigation Measures for Significant Impacts Under CEQA
Mitigation measures should be included to reduce or eliminate the following impacts:

1. Impacts to the County from the loss of productive agricultural land; 22,
2. Growth inducing impacts from the interchange; 18, 19, 20
3. Impacts from implementation of the 2002 Safety Corridor improvements to all modes of travel along Highway 255 and Old Arcata Road; 26
4. Impacts on coastal access at Bracut from the median closure at that location; 35
5. Impacts from visual impacts of construction of the interchange at Indianola Cutoff and from the removal of eucalyptus trees. 28, 29

Responses to Humboldt County Planning and Building Department (*formerly the Department of Community Development Services*):

1. Collision data have been updated in Chapter 1 of the Final Environmental Impact Report/Statement (EIR/S). Because traffic volumes are expected to increase within the 20 year project planning horizon, the collision rate could also increase. For this reason, the project need and purpose to enhance safety remain valid. Also see Grouped Response I-A.

2. Grouped Response I-B for projected traffic volumes.

3. This conclusion is based on current on-site observations, rising collision rates at certain locations, and the projected increase in traffic volumes. Comparing collision rates of the Route 101 intersection with similar highway facilities is a standard practice for establishing baselines and not for drawing specific conclusions such as gaps in traffic.

4. Chapter 1 has been updated to include year 2010 left turn move data.

5. Text was added in the Final EIR/S explaining why intersection LOS is more of a concern than mainline LOS.

6. See Group Response III-A-3 regarding traffic enforcement.

7. Please see updated Safety Corridor collision data in Chapter 1. The number of collisions and collision rates are rising at two intersections.

8. Gauging the effectiveness of citizen complaints as a factor in reducing collisions is very difficult since there are many variables that can affect the number and rate of collisions. As stated in response 7, the collision rates are increasing.

9. Drawing specific, firm conclusions based solely on safety corridor data that may or may not have similar characteristics to the Eureka-Arcata Safety Corridor would be inappropriate. However, the intent of presenting safety corridor data from other regions was presented as another means of evaluating the Eureka-Arcata Route 101 Safety Corridor in terms of identifying similar trends: the actual collision data for the subject safety corridor carries the most weight.

10. While it is true that no fatalities have occurred since the Safety Corridor was implemented, collisions resulting in injuries are increasing at certain intersection locations. See Grouped Response I-A.

11. While it may be true that there are varying degrees of citizen involvement with vehicle speed enforcement, this type of enforcement cannot be accurately quantified, nor can it be projected to the future.

12. Table 1-1 (formerly Table 1-3 in the Draft EIR/S) has been updated in the Final EIR/S.

13. Prevailing speeds through the Safety Corridor have stabilized at about 55 mph without enhanced enforcement and the Safety Corridor public awareness campaign. For drivers routinely using the Safety Corridor, public education would generally lose effectiveness over time as the drivers grow accustomed to the Safety Corridor.

14. It should be noted Table 1-3 indicates that only at Mid City Motor World and Indianola Cutoff have collision rates higher than the state average. However, all intersections within the corridor needed to be evaluated as a group as well as individually since modifying or closing one or median openings would affect the others.

15. The text has been revised in the Final EIR/S. Please refer to section 3.1.6 – Traffic and Transportation in Chapter 3 which describes Level-of-Service for left-turns deteriorating at specific intersections.

16. Chapters 1 and 3 have been revised and updated with more current information. In the context of explaining the overall purpose and need for the project, it is important to describe collision rates prior to the Safety Corridor. In a related but different context it is important to report collision data after implementation of the Safety Corridor to explain why the Safety Corridor is a temporary solution.

17. Implementation of the Safety Corridor in 2002 is not part of the proposed project evaluated in the Environmental Impact Report/Statement. Consequently, mitigation is not proposed for the Safety Corridor. Transportation conditions prior to, and after the Safety Corridor was implemented are discussed in detail in the EIR/S because the Safety Corridor is inextricably linked to any proposed improvements to the overall Route 101 corridor.

Although mitigation is not proposed for the Safety Corridor, Caltrans is currently evaluating traffic calming improvements on State Route 255 through Manila to improve traffic conditions. These traffic calming improvements are not part of this EIR/S. Also see Group Response I-E.

As described in Chapter 2, Alternative 7, the No-Build Alternative is described as allowing the Safety Corridor to remain intact. If any one of the Build Alternatives is constructed, the Safety Corridor elements would be removed after construction.

18. It is acknowledged that a grade separation would remove a major constraint to major development; however, other growth constraints remain. Also see Group Response III-B-5.

19. The text regarding a lack of a sufficient area zoned commercial, off-street parking, landscaping, and setback requirements has been removed from the Final EIR/S.

20. As stated in the EIR/S, there are other major development constraints that remain. For example, the absence of a sewer system as well as compliance with the California Coastal Act are two major constraints.

21. Even if a large development proposal received all appropriate permits, it would not likely result in a significant impact as defined by CEQA primarily because the area already has commercial development and the area immediately beyond the existing commercial development is zoned for agriculture, natural resources, and open space.

22. Chapter 3 has been revised and now specifically addresses the issue of using rangeland for wetland mitigation.

23. The rangeland to be used for wetland mitigation has been determined to be not unique or important by the U.S. Natural Resources Conservation Service. The proposed mitigation site will eventually be become part of existing wildlife refuges and have multiple public values such as wildlife habitat and open space/scenic values. An expanded wildlife refuge would likely generate additional tourism business for the local economy. Consequently mitigation is not proposed.

24. Section 3.1.6 – Traffic and Transportation in Chapter 3 of the Final EIR/S has been revised and does include cumulative impacts.

25. Construction of Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, includes numerous elements that would enhance local roads, public transit, and non-motorized transit:

a) Eliminating uncontrolled left-turn movements would enhance safety for all transportation modes. A safer, direct route on Route 101 would encourage all transportation modes to choose Route 101 over local roads.

b) Modified Alternative 3A includes a grade separation at Indianola Cutoff and signalization at Airport Road which would minimize out-of-direction travel and lessen travel on local roads.

26. See Group Response III-A-1 regarding maintaining the existing posted speed limits on Route 101. It should also be noted that subsequent to the public circulation of the Draft EIR/S,

bicycle awareness signs and rumble strips have been installed on both sides of Route 101 between Eureka and Arcata. The rumble strips were installed along the outside shoulders of Route 101 to alert vehicle drivers of drifting beyond the lane. The rumble strips would also be audible to bicyclists and alert them that a motor vehicle was drifting onto the shoulder.

27. The California Coastal Act and County of Humboldt regulatory/legislative text has been added to Section 3.1.7 Visual / Aesthetics in Chapter 3 of the Final EIR/S.

28. Text regarding the billboards has been added to Section 3.1.7 Visual / Aesthetics in Chapter 3 of the Final EIR/S.

29. The discussion of opening the view of the bay by tree removal is no longer relevant since the proposal to remove eucalyptus trees on the west side of the highway has been dropped. For more information see Group Response III-B-2.

30. The findings for the visual effects for the proposed Indianola Cutoff have been revised in Section 3.1.7 Visual / Aesthetics in Chapter 3 of the Final EIR/S. Also see Group Response III-B-3.

Since the circulation of the Draft EIR/S, Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, has been added to the proposed Build Alternatives in the Final EIR/S. Modified Alternative 3A includes a proposed grade separation at Indianola Cutoff that has steepened side slopes which would result in a smaller grade separation than the grade separation proposed under Alternatives 2 and 3. Also see Group Responses III-B-3, 4.

31. The summary in Section 3.1.7 Visual / Aesthetics in Chapter 3 of the Final EIR/S has been revised.

32. See Group Responses III-B-2 and III-B-4.

33. Section 3.4 - Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity in Chapter 3 does include visual effects resulting from tree removal and the proposed grade separation. Note that the proposed grade separation in Alternatives 2, 3, and 3A would not result in the "elimination of coastal views east of Indianola Cutoff." Refer to Section 3.1.7 Visual / Aesthetics in Chapter 3 for a discussion of the potential change in the visual setting resulting from a grade separation.

34. The loss of the visual buffer between Route 101 and the California Redwood mill is not an environmental consequence since the tree removal on the west side of Route 101 has been dropped from the proposed project.

35. While it is true that northbound travelers would need to turn around in Arcata to access the Bracut Marsh after the proposed project is constructed, access to the marsh would be safer. The Bracut Marsh is not currently signed for public coastal access from Route 101 nor does it have public parking.

BOARD OF SUPERVISORS

COUNTY OF HUMBOLDT

825 5TH STREET

EUREKA, CALIFORNIA 95501-1153 PHONE (707) 476-2390 FAX (707) 445-7299

December 16, 2008

Ms. Kim Floyd, Project Manager
Caltrans District 1
P.O. Box 3700
Eureka, CA 95502-3700

RE: Eureka-Arcata Corridor Improvement Project

Dear Ms. Floyd:

The Humboldt County Board of Supervisors voted unanimously at its December 16, 2008 meeting to respectfully request a 45 day extension from the December 20, 2008 comment deadline on the recently released "Eureka-Arcata Corridor Improvement Project, Potential Modifications of Alternatives." Numerous citizens have contacted us to request this extension due to the holiday period making it difficult to review and comment in a timely manner. As the Board offered extensive comments on the prior document, we also want to ensure that our Departments have appropriate time to review and provide comments on the revisions for the Board to consider. As the next Board meetings are not scheduled until January, the closure of the comment period on December 20, 2008 will not allow for the Board to comment.

Thank you for consideration of this matter.

Jill Geist, Chair
Humboldt County Board of Supervisors

JG:kh

cc: Humboldt County Department of Public Works
Humboldt County Community Development Department

Humboldt County Aviation Advisory Committee

September 6, 2007

Chairperson Bonnie Neely, and
Members, Board of Supervisors
825 Fifth Street, Room 111
Eureka, CA 95501

Subject: Highway 101 Safety Corridor DEIS Comments

Dear Chairperson Neely and Members:

Your Aviation Advisory Committee has reviewed the Caltrans DEIS for the Corridor Improvement Project between Eureka and Arcata. We make these comments to you regarding the possible impacts to future operations of Murray Field, one of the six airports in the County aviation system.

Project Alternative 3 has at least two major impacts on airport operations:

1. The creation of a signalized intersection at Airport Road and Highway 101 introduces a potential conflict between southbound traffic stopped at the signal and arriving aircraft landing over Humboldt Bay on Runway 11. Southbound trucks stopped at the signal and backed up across the extended runway center line introduce a situation not currently present when traffic is constantly moving. 1
2. Realigning the Airport Road intersection with Highway 101 the north (east) encroaches on airport property. This has the effect of removing the land from airport use and has the potential to restrict airport operations. 2

We also see other considerations regarding the DEIS. Removal of trees on the west (north) side of 101, between 101 and the rail tracks, especially those trees nearest the runway, will expose existing power lines to departing aircraft. These trees now act as a natural barrier, encouraging longer straight out departures before beginning right hand turns. Power lines, by themselves, are difficult to see by aircraft in flight. 3

A careful reading of the DEIS seems to indicate that its preparation was done without consultation with or following guidelines established by Caltrans Division of Aeronautics, regarding potential impacts on the Eureka Murray Airport. Also, there is no indication that any consultation was sought from the Federal Aviation Administration on airport impacts. 1

Sincerely yours,

Charles F. Goodwin, Jr.

Charles F. Goodwin, Jr.
Chairman

3561 Boeing Avenue
McKinleyville, CA 95519

Responses to Humboldt County Aviation Advisory Committee

1. Modified Alternative 3A, the Preferred Alternative identified in the Final Environmental Impact Report/Statement, includes a proposed half signal at Route 101 and Airport Road that would not stop southbound Route 101 traffic. However, left turn movements from Airport Road would be allowed.

2. Caltrans staff has evaluated various scenarios for relocating the signal at Airport Road. Modified Alternative 3A includes an intersection modification with a half signal that would not require acquisition of airport property.

3. The proposal to remove the Eucalyptus trees at this location has been dropped.

MANILA COMMUNITY SERVICES DISTRICT
1901 Park Street • Arcata, California 95521 • 707-444-3803 • Fax 707-444-0231

September 20, 2007

Caltrans
Attn: Kim Floyd, Project Manager
P.O. Box 3700
Eureka, CA 95502-3700

Re: Proposed Route 101 Eureka-Arcata Corridor Improvement Project

Dear Kim Floyd:

In our continuing concern about traffic safety in connection with Highway 255 that bisects our town, the Board of Directors of the Manila Community Services District has passed Resolution 2007.25 *Reaffirming Manila's Commitment to Increase the Safety of Highway 255* (enclosed) and is taking this opportunity to comment on the *Route 101 Eureka-Arcata Corridor Improvement Project*. Since the implementation of the reduced speed limit of 50 mph on 101, the Manila community has experienced an increase in traffic on Highway 255, including driving in excess over the 55 mph limit. 1

In the *Draft Environmental Impact Report*, it is stated that traffic impacts during the construction period will be minor; however, history has shown otherwise. When construction begins, Highway 101 will become one lane. The majority of traffic between Eureka and Arcata will divert from Highway 101 to Highway 255, through Manila – as it has historically. 2

Whichever improvement project for Highway 101 is eventually approved, the Manila Community Services District Board of Directors is concerned about the impact on our community during and after the construction period. At a minimum, the speed limit for Highway 255 should be no greater than 45 miles per hour. Highway 255 is a crossing for children, horses, school buses, bicyclists as well as vehicles and also serves as a bike route and foot path along the side of the highway, especially between the Pacific/Dean intersection and the Lupin intersection with Highway 255. 3

As noted in the Humboldt County Association of Governments-funded 2003 study, *"Manila Community Transportation Plan,"* the community would prefer a speed limit of 45 mph and speed reduction through the use of roundabouts. 1

In the past there has been a tendency to overlook the concerns of the community of Manila regarding Highway 255. It is the Manila board's desire that Caltrans consider the board as an active partner when undertaking projects that affect our community and impact human safety in Manila. 4

Sincerely,

MANILA COMMUNITY SERVICES DISTRICT

Dendra Dengler
President

Enclosure: Manila CSD Resolution 2007.25

MANILA COMMUNITY SERVICES DISTRICT

1901 Park Street • Arcata, California 95521 • 707-444-3803 • Fax 707-444-0231

RESOLUTION 2007.25

A RESOLUTION OF THE BOARD OF THE DIRECTORS OF THE MANILA COMMUNITY SERVICES DISTRICT REAFFIRMING MANILA'S COMMITMENT TO INCREASE THE SAFETY OF HIGHWAY 255 AS IT BISECTS THE MANILA COMMUNITY IN PROMOTION OF THE HEALTH AND SAFETY OF ITS RESIDENTS.

5

WHEREAS, State Route (S.R.) 255 runs through the center of the community and separates not only the residential areas but major community destinations as well,

6

WHEREAS, the Humboldt County Association of Governments (HCAOG) funded the Manila Community Transportation Plan (MCTP) prepared by Whitlock & Weinberger Transportation, Inc in 2003,

7

WHEREAS, the MCTP states — The community has a long documented history of concerns relating to the safety of and access of multimodal traffic in Manila. Correspondence with Caltrans and other entities date back to 1985, citing lack of lighting, improper grading, high speeds and dangerous intersections of the highway with county roads. Residents have also identified the absence of pedestrian facilities, landscaping and frequent heavy fog as issues,

8

WHEREAS, the MCTP states — The collision rate for the three intersections at Lupin Avenue, Pacific Boulevard-Dean Street and Peninsula Drive (south) were all 0.53 collisions per mve (million vehicles entering). The average collision rate for these intersections would be between 0.22 and 0.33 collisions per mve. Therefore, the collision experience at the intersections of S.R. 255 with Lupin Avenue, Pacific Boulevard—Dean Street and Peninsula Drive (south) are higher than what would normally be expected for similar facilities in California, and latest figures also show a 74% increase in collisions between Vance and Lumber Mill (5-18-2005 to 5-18-2006), and latest figures also show a 74% increase in collisions between Vance to Lumbermill (5-19-02 to 5-18-06),

WHEREAS, the Humboldt County Redevelopment Plan Draft Program EIR November 2005 pg 3.2-17 states that S.R. 255 from Eureka City limits to Mad River Slough was LOS "D" in 2003, 9

WHEREAS, the MCTP states --- According to Catrans traffic counts, auto activity on S. R. 255 has risen by 25 to 30 percent since the safety corridor was implemented, 1

WHEREAS, the MCTP states — In May 2003, a survey of Manila residents and non-residents was conducted to gather information about transportation use and the nature of transportation problems in the area. — the intensity of many of the responses was striking. The direct and personal experiences of residents and non-residents related to traffic safety and issues conveyed a real sense of anxiety and stress associated with living and passing through Manila. Drivers and pedestrians alike reported several near collisions and accidents. Many respondents indicated particular concerns about the safety of children and animals traveling along the highway and residential streets of Manila, 8

WHEREAS, there have been no suggested mitigation measures to account for the increase in traffic on S.R. 255 during the construction period of the Proposed Route 101 Eureka-Arcata Corridor Improvement Project, 2, 3

WHEREAS, Manila is included in the plan as an environmental justice community to be taken into consideration, 10

WHEREAS, the Draft EIR for the Proposed Route 101 Eureka-Arcata Corridor Improvement Project has only looked at the affects of each proposed plan on Manila and not the "Short Term Effects" of increased traffic on State Route 255 that is expected to occur during the construction period and until the project is considered stabilized and complete according to the General Construction Permit, 2, 3

NOW, THEREFORE, BE IT RESOLVED the Board of Directors of the Manila Community Services District, on behalf of the community, requests that the Draft EIR on Proposed Route 101 Eureka-Arcata Corridor Improvement Project address the "short term effects" and long term effects of increased traffic to S.R. 255, 2, 3

BE IT FURTHER RESOLVED the Board of Directors of the Manila Community Services District, on behalf of the community, requests and recommends that improvements to S.R. 255 such as a "temporary" or permanent lowering of the speed limit, the installation of lighting at Lupin Avenue, Pacific Boulevard-Dean Street and Peninsula Drive, signage, and any other improvements that would bring S.R. 255 to an acceptable and safe level of operation be made before construction on Proposed Route 101 Eureka-Arcata Corridor Improvement Project starts, 2, 3, 8

INTRODUCED, PASSED, AND ADOPTED by the Board of Directors of the Manila Community Services District on this 20th day of September, 2007, by the following vote:

AYES: Dendra Dengler, Wilathi Weaver, Violet Glass, Rita Carlson, Charles McDaniels

NAYS: none

ABSENT: none

ATTEST:

Dendra L Dengler
President
Board of Directors

R Carlson
Secretary

SECRETARY'S CERTIFICATE

I hereby certify that the foregoing is a true and correct copy of Resolution No. 2007.25 passed and adopted at a regular meeting of the Board of Directors of the Manila Community Services District held on the 20th day of September, 2007, by the following vote:

AYES: Dendra Dengler, Wilathi Weaver, Violet Glass, Rita Carlson, Charles McDaniels

NAYS: none

ABSENT: none

R Carlson
Secretary

Responses to Manila Community Services District:

1. The diversion of traffic to State Route 255 from Route 101 is documented in section 3.1.6 – Traffic and Transportation in Chapter 3 of the Final Environmental Impact Report/Statement (EIR/S). The sharpest increase in traffic on State Route 255 occurred immediately after the Safety Corridor was implemented in 2002. Gradually over several years the proportion of traffic diverted to State Route 255 from Route 101 has decreased. Route 101 remains the shortest route between Eureka and Arcata and has a posted speed limit of 65 mph north of the Gannon Slough Bridges.

Although mitigation on State Route 255 through Manila is not proposed for the Safety Corridor, Caltrans is currently evaluating traffic calming improvements on State Route 255 through Manila to improve traffic conditions. These traffic calming improvements are not part of this EIR/S. Also see Group Response I-E.

2. During daylight and peak periods, two lanes of traffic in each direction will be maintained. It is true that traffic has been reduced to one lane, but this generally occurs during collision clearing or emergency repair work. Since the proposed project is a major construction project, traffic control during construction will require a detailed traffic management plan.

3. There are no plans to reduce the speed limit on State Route 255 through Manila during project construction. After project construction, most through traffic is expected to remain on Route 101 between Eureka and Arcata since this a more direct and shorter route than State Route 255.

4. The Manila Community Services District is considered an active participant in the project development process. The project Citizens Advisory Committee includes at least one Manila resident.

5. Manila was included in the traffic and socio-economic studies summarized in the EIR/S.

6. The Manila Community Transportation Plan was consulted during the preparation of the EIR/S.

7. Caltrans is actively addressing these community issues separately from this project.

8. See Group Response I-E.

9. Comment noted. It should be noted that none of the Build Alternatives, with the exception of Alternative 1A, would add more than 5% traffic to State Route 255.

10. Manila is discussed as an Environmental Justice community in section 3.1.4 Environmental Justice of Chapter 3 in the Final EIR/S.

Appendix C – Organization Comments

September 26, 2007

Mr. Rod Parsons, Chief
Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Eureka-Arcata Route 101 Corridor Improvement Project
Draft Environmental Impact Statement/Environmental Impact Report
01-Hum-101, KP 128.6/138.9 (PM 79.9/86.3)
EA 01- 36600, 363300

Dear Mr. Parsons,

The 101 Corridor Access Project (CAP) group appreciates the opportunity to provide its comments on the subject project and document. This letter is being sent in strong support of Alternative 3 as described in the subject document. In addition, we have the following comments on the draft environmental document: 1

1. Speed limits-the document's project description needs to include the locations of the speed limits that are anticipated within the Corridor, especially for alternatives 2 and 3. This could be shown on a map where the speed limits change. 2

   The environmental effects of the project could be better and more accurately reflected and projected with this information provided. For example, the lengths of the acceleration and deceleration lanes at Simpson may possibly be reduced if the speed limits were lower, with the resultant reduction in the number of trees that would need to be removed in this area. 3

   The accident projections for the Airport Road intersection would also be less if a reduction in speed were adopted. The environmental document needs to be clear what speed limits are used in all projections of effects. 2

   2. Noise attenuation along Jacobs Avenue- Some form of mitigation appears to be warranted to protect the residences in the area. While one form was considered (and rejected) within the document other forms appear to be in order owing to the increases in the noise levels along the roadway and their ultimate impact to the residences along the roadway. 4

   3.Regional Setting-the document needs to provide a more extensive treatment of the environmental setting as it concerns overall Transportation Planning and Implementation within the County. The description of the project in the context of the Regional Transportation Plan, as adopted by the HCAOG, needs to be expanded to include all of the other expenditures/allocations/improvements being made on bus transportation, bicycle and pedestrian facilities and other improvements in the area (like the upgrades to Myrtle Avenue south of Indianola in the near future). 5

4. Entrance to the City of Eureka- a more extensive description and details of this concept needs to be provided so that the effects may be more adequately assessed in the document. Effects on scenic resources, effects upon speeds, and effects upon the Airport's operations could then be better and more adequately considered. 6

5.Alignment of Airport Road- suggest a review of the proposed alignment in light of comments from the Aviation Committee and the need to totally minimize effects(through avoidance where possible) of the project on jurisdictional wetlands. 7

6. Consistency in the use of terms- We suggest a review and accentuation of the use of the term Expressway, versus Freeway. We understand that different standards apply dependent upon which term is used. We understand that the project area is seen as an Expressway and not a Freeway. 8

7. Community Impact Assessment- We believe the potential effects on the businesses are significantly understated and inadequately assessed in the assessment and that the application of other studies in different circumstances is not accurate or appropriate. The probable relocation of businesses and subsequent changes in uses or physical conditions of the existing activities need to be addressed. 9

Thank you for the opportunity to participate and comment.

Sincerely,

Trevor Harper
Chair of the 101 CAP

Cc: Mr. Spencer Clifton, Humboldt County Association of Governments
Mayor Virginia Bass, City of Eureka

Letter to Caltrans
Comments on Draft EIR/EIS
101 Corridor Project
September 26, 2007

2 of 2

Response to Corridor Access Project:

1. Modified Alternative 3A, the Preferred Alternative identified in the Final Environmental Impact Report/Statement (EIR/S), is similar to Alternative 3. Modified Alternative 3A includes a new Route 101/Indianola Cutoff grade separation and a half signal at the Route 101/Airport Road intersection that would allow left turn moves to and from Route 101.

2. See Group Responses III-A-1 and 2.

3. See Group Response III-B-2.

4. Comment noted, however Section 3.2.7 in Chapter 3 of the Final EIR/S documents the noise analysis and compliance with applicable environmental regulations.

5. Section 3.1.6 - Traffic and Transportation in Chapter 3 of the Final EIR/S has been updated to include recent transportation improvements. There are no planned public transit improvements within the Route 101 Corridor between Eureka and Arcata.

6. The "entrance to the City of Eureka" may have different interpretations. Chapter 2 of the Final EIR/S includes a detailed description of Modified Alternative 3A. Section 3.1.7 - Visual in Chapter 3 of the Final EIR/S has been revised and expanded.

7. Modified Alternative 3A includes a half signal at the Route 101/Airport Road intersection that completely avoids Murray Airfield and minimizes wetland fill compared to Alternative 3.

8. Within the project limits Route 101 is an expressway between Eureka Slough Bridges and Gannon Slough Bridges and a freeway from Gannon Bridges north.

9. Comment noted. Section 3.1.1 in Chapter 3 of the Final EIR/S has been revised partly based on comments from the public and local businesses. Modified Alternative 3A would minimize much of the out of direction travel from left turn and crossing restrictions.

Ms. Kimberly Floyd
Project Manager- Eureka-Arcata Corridor Project
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

June 20, 2008

Subject: Eureka-Arcata Route 101 Corridor Improvement Project
Potential Modifications to Alternatives
Presented to HCOAG TAC June 12, 2008
01-Hum-101, KP 128.6/138.9 (PM 79.9/86.3)
EA 01- 36600, 363300

Dear Ms. Floyd,

This letter is being sent following our review of the information provided through your office and pertaining to the above subject. The 101 Corridor Access Project (CAP) group appreciates being included in the process and the continuing opportunity to provide its opinions and comments.

The J-turn alternative appears to be something that was discussed several years ago and was set aside at the time because it 'didn't meet design standards'. We felt at the time that this would be a means of reducing the overall project cost and improving safety within the corridor. We agree that this alternative should be included for consideration in the Environmental Document. This should not take too much more study because the relevant baseline studies have been already prepared. 1

The half-signal at Airport is better than closing the median. We continue to support the full signal at this location and the retention of the concept of creating an 'entry' into the City of Eureka starting here. We can see the usefulness of this alternative absent full signalization. 2

We can also see a couple of problems with the half-signal. One is an increase in out of direction travel for those who want to go south from the Jacobs Avenue and County Airport areas. A second is the retention of the need to make left and right merge movements at the u-turn location. Another is the elimination of the ability of bicycles to cross the Expressway. 3

Under both alternative designs, it appears that the ability to cross the Expressway by bicycle (and pedestrian) traffic will be lost. With the increasing numbers of bicyclists using the corridor, including the traffic coming from Myrtle Avenue/Old Arcata Road, the other alternative (especially the interchange at Indianola) provides for this linkage and accommodation of non-motorized traffic.

Thank you for the opportunity to participate and comment.

Sincerely,

Trevor Harper
Chair of the 101 CAP

Cc: Mayor Virginia Bass, City of Eureka
Mr. Spencer Clifton, Humboldt County Association of Governments
Mr. Tom Matson, Public Works Director, County of Humboldt
Ms. Jill Geist, Chair of the Humboldt County Board of Supervisors

Responses to Corridor Access Project:

1. Alternative 1A includes the 'J' turns or turnarounds and is fully evaluated in the Final Environmental Impact Report/Statement (EIR/S).

2. The Modified Alternative 3A, which is identified as the Preferred Alternative in the Final EIR/S. This alternative includes building a half signal at the Route 101/Airport Road intersection. The half signal would allow left-turns to, and from Route 101 without stopping southbound Route 101 traffic. The half-signal would also avoid the need to realign the Airport Road/Route 101 intersection which would be required for the full signal.

3. Adequate lane length for merging movements would be required under Alternative 1. However, Caltrans staff concurs the turnarounds and signal in Alternative 1A would discourage bicyclists attempting to cross Route 101.

REDWOOD REGION AUDUBON SOCIETY
P.O. BOX 1054, EUREKA, CALIFORNIA 95502

23 September 2007

Rod Parsons
Chief, Environmental Branch E-1
California Department of Transportation
P. O. Box 3700
Eureka, CA 95502-3700

CalTrans Highway 101 Safety Corridor Draft Environmental Report comments

Because of the way this draft EIR has been presented, Redwood Region Audubon Society would have to support Alternative 7- "No Build." Redwood Region Audubon Society has a local membership of approximately 650 households in northwestern California. Our mission is to support the study and enhancement of wildlife and to support sustainable use of our natural resources. We also have a concern for public safety. This project was a major topic of discussion at our last Conservation Committee meeting. These comments are a result of that meeting. 1

We need more independent alternatives. The way this document is presented we are not able select a choice of alternatives from among the three plus the "no build" alternative. The choices should be Alternative 1 OR alternative 2 OR alternative 3 even if it means fleshing out the alternatives more. The best alternative in our view, Alternative 3 alone would work for us IF it were not predicated upon also closing the median barriers AND building the Indianola interchange and ripping out 330 trees. Our choice would be to put in the traffic signal at Airport Road, allow for two-way traffic and extend the acceleration lane from Airport Road to Harper Motors, and with proper mitigation build an access road between Airport Road and Harper Motors. This traffic light will meter traffic enough to allow safer crossings at Indianola Road by allowing better breaks between traffic. Extend the acceleration lanes at Simpson Mill southbound, Indianola Road, Bracut, and northbound Bayside Cutoff. The current speed limit of 50 mph is fine but the speed limit needs to be enforced. Cameras are used to ticket vehicles at stoplights, they should be used to encourage safe speed also along this corridor. Close all the median crossings except Indianola Road. Don't remove any more trees than is necessary for immediate public safety. 2 3 4 5 6 7

From a fish and wildlife perspective rebuilding the tide gates should be done anyway, with or without a project. Properly redesigned tide gates will allow for better salmonid access to the adjacent creeks and channels. The Jacoby Creek bridges in both directions should be built rebuilt longer as well as wider. The lengthening of the bridges will allow for better tidal action into the Jacoby Creek area adjacent to Highway 101 and may help 8 9 10

in onsite wetland mitigation. Arcata's plan for the Jacoby Creek bottomlands needs to be considered at this point. The City of Arcata now has control over most if not all that area and wishes to encourage tidal action and reduce flooding caused by the current channelization and constriction of Jacoby Creek at Highway 101. Arcata is preparing a management plan for both sides of Jacoby Creek, which will include reducing flood potential by removing dikes adjacent to the creek and moving them back away from the creek bed and restoring saltmarsh. The flood potential will still be there if the creek is still constricted at the Highway 101 bridge. Lengthening these bridges may be considered in the mitigation planned for the project. The culvert from Old Jacoby Creek should be realigned with the old creek channel, not perpendicular to the highway as it is now. The culvert needs to be big enough to allow proper water flow. Tide gates should be replaced to allow better fish passage.

In Arcata both Gannon Slough and Campbell Creek flow through the Samoa Blvd. interchange. Shading these creeks with riparian plants could make the salmon and steelhead happier. The tide gates serving these waterways need replacement. 11

Global warming and sea level rise are items to be considered right now with this project. If this is not dealt with, during storm events in the future Highway 101 will flood. Witness the high wind event of December 31, 2005, that flooded southbound Highway 101. Old Arcata Road and Myrtle Avenue were part of a trail that an around Humboldt Bay above the high tide mark. If the highway is not raised, this may again become the route around the bay. 12

The trees along the highway enhance the beauty and soften the impact of the industrial buildings. Except in a few instances they should not be removed. If speeds are kept at reduced levels vehicle impacts with solid objects are less severe. Red-shouldered and red-tailed hawks use the trees as roosts and hunting perches. These birds are especially visible in the trees on the east side of 101. Although neither the cypress trees nor the Monterey pines are native this far north, they are native California trees. On the other hand the eucalyptus trees are non-native and often a nuisance. Sticky pollen and nectar of eucalyptus can gum up the bird's face so badly that the bird ultimately ends up starving. They provide roosts for the equally non-native nuisance European starlings. On the other hand these trees mask the industrial Simpson Redwood mill. We did not see a landscape plan in this document. Native salt tolerant trees and shrubs such as Sitka spruce, coyote bush, wax myrtle, and silk-tassel could be planted where it is absolutely necessary to remove trees for safety reasons. Wax-myrtle and silk-tassel can provide a cushioned blow to a vehicle in an accident yet enhance the beauty along this strip. 7 13

The common reed, *Phragmites* spp. south of the CalTrans yard at Bracut needs to be dealt with. This is a non-native invasive nuisance plant and is spreading alon g the ditch it occupies. 14

On pages 253 to 270 in Chapter 3 you talk about project mitigation. There should be NO NET LOSS of either AMOUNT or QUALITY of the wetlands. Exchanging one type of wetland for another is not mitigation. 15

Any alternative should include options for building a bicycle lane along the corridor. In our view the best alternative for a bicycle lane would be on the highway side of the railroad berm. During fall, winter, and spring high tides many shorebirds use the railroad bed for resting. Currently many of these birds actually roost on the railroad gravel ballast. Any people walking or bicycling will disturb these birds. 16

Thank you for allowing public comment on this important document.

Sincerely

Chet Ogan
Conservation Chair
Redwood Region Audubon Society

Responses to Redwood Region Audubon Society:

1. Since the Draft Environmental Impact Report/Statement was approved in 2007, two modified alternatives were designed and evaluated in the Final Environmental Impact Report/Statement (EIR/S). The two modified alternatives, as with all alternatives evaluated in the EIR/S were designed to balance enhancing public safety while avoiding, minimizing adverse environmental effects.

2. Largely resulting from public comment, Modified Alternative 3A was developed to address public concerns regarding access and minimizing tree removal. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S is essentially a combination of Alternatives 2 and 3. A frontage road between Airport Road and Mid City Motor World was considered during early planning stages, however the wetland impact of a frontage road was prohibitive. Modified Alternative 3A includes a new third northbound lane added toward the median, and will extend from Airport Road Intersection to Mid City Motors to provide adequate merging distance. Please refer to Chapter 2 of the Final EIR/S for details of Modified Alternative 3A.

3. While it is true that a signal stopping northbound Route 101 at Airport Road would create traffic gaps, the gaps would generally not be sufficient to offset the need for an interchange or median closure at Route 101 and Indianola. First, free right turns from Airport Road would be allowed. Second, the signal at Airport Road would only be actuated when vehicles on Airport Road are present. And finally the distance from Airport Road to Indianola Road is almost 2 miles, which would allow vehicles travelling at varying speeds to reduce the frequency and number of traffic gaps.

4. The existing acceleration and deceleration lanes would be extended at the intersections mentioned. At Route 101 and Indianola Cutoff for Alternatives 2, 3, and Modified 3A, the acceleration and deceleration lanes would be replaced by a grade separation.

5. See Group Response III-A-1regarding the posted speed limit and II-D regarding camera traffic enforcement.

6. See Group Response I-A regarding the closure of existing Route 101 median openings.

7. See Group Response III-B-2 regarding tree removal.

8. Comment noted. Caltrans staff is coordinating with resource agency staff to ensure the appropriate fish friendly tide gates are installed.

9. Since the Draft Environmental Impact Report/Statement was approved in 2007, the design to replace the southbound Jacoby Creek Bridge has changed. The new bridge would be slightly longer, wider, and have more clearance above the creek. In addition the new bridge would span the creek without placing piers and footings in the creek channel. The northbound Jacoby Creek Bridge is structurally sound and does need to be replaced.

10. Caltrans and the City of Arcata coordinate their respective projects. Flooding at the Jacoby Creek Bridges or at the Old Jacoby Creek culvert has not been an issue.

11. Caltrans, the City of Arcata, and the California Department of Fish and Wildlife are working collaboratively on improving fish passage conditions at Campbell Creek.

12. Caltrans concurs that planning for future climate change and sea level rise are issues that need to be addressed well in advance. Chapter 4 of the Final EIR/S includes revised and additional discussion concerning climate change and sea level rise.

13. In Chapter 3 of the Final EIR/S, Section 3.1.7 Visual / Aesthetic has been revised to discuss planting native vegetation to compensate for tree removal.

14. Caltrans concurs that this invasive plant needs to be removed; however, it will removed as a separate action, prior to and separate from the proposed project.

15. Section 3.3.2 Wetlands and Other Waters of the U.S. in Chapter of the Final EIR/S has been revised and includes the commitment to compensate for wetland impact such that there is no net loss of wetland value and function.

16. See Grouped Responses I-D and II-H regarding non-motorized transit improvements.

kstricklan@humboldt1.com
09/28/2007 03:04 PM

To kim_floyd@dot.ca.gov, mail@hcaog.net, kstricklan@humboldt1.com
cc jody@northcoast.com, tpf86@yahoo.com
Subject

From: Kaye Strickland, Chair
Citizens for Port/Rail Development
To: Kim Floyd, Project Manager, Cal Trans,
Spencer Clifton, Humboldt County Association of Governments

Date: September 27, 2007

Re: The DEIR for the Hi-Way 101 Arcata-Eureka Safety Corridor:
My Comments to Cal Trans and HCAOG:

None of the proposed alternatives, including the 'no project' alternative are workable as proposed. And with the public meetings held so far, it is pretty obvious that the public doesn't support them either.

However, of any of them to be useful only Alternative Three, with some modifications might have some chance to be acceptable. Using Alt. Three, I'd like your comments in the FEIR and EIS.

I totally support the maintaining open access for the business community along the Corridor, leave the medians open, and keep the Corridor as a true 'safety corridor'. For these reasons, my focus is on Alternative Three, the one alternative these folks have tentatively supported.

† Keep the Corridor as a true 'safety corridor'. 1
† The Corridor must be maintained at the current 50mph speed limit or maybe even lower, and why can't it be continued into Arcata? It has been hard for me to understand why it was cut short in the first place. It has been a success, as several have told you, 'If it isn't broke' don't fix it'. 2
† Re-instate the enforcement and possibly renew the double fines to help with the enforcement cost. This expense, originally approx. $100,000 a year is much lower than the millions proposed to bring it back to killer freeway speed. There is nothing sacred about 65mph, especially in this short seven mile stretch between the two cities. 3
† Maybe like in the BOS recommendations, it should be reconfigured as a totally regional project.

† I commend the Green-Wheels Organization for their very well done power point program. I support their emphasis on much improved On-Hi-way Bus Rapid Transit. (I can't remember the exact term used in the Power Point) The new HSU Jack Pass is a great case in point.
† I hope this effort will soon be successful for students at CR.
† Cal-Trans MUST become Multi-Modal in philosophy and practice. Hopefully this will be much more emphasized in the new two year Transportation plan that will soon be in process.
† Any structure at Indianola, or improvements at Air Port Road and signals will have to be designed to meet all requirements, including CEQA, and will have to be addressed in the FEIR.
† In the hopefully near term continue the corridor around the north bay and south on Hi-Way 255 thru Manila. This again is a much better use of our tax funds, than to fix something that has been working very well and saving lives. AND …. as soon as feasible, continue it all the way to the bridge and across to Eureka. If any Safety enforcement is needed it is inside Eureka. Another speed death just this past weekend. That then would be truly a regional 'safety corridor'.

I have spent many years on the wide variety of transportation issues, including much effort as Chair of CPD. Safety, multi-modal public transportation, the Railroad for freight and passenger and tourist use, Port/harbor improvements, a Safe multi-use trail (with the railroad in place). We emphasize these last, for economic reasons, badly needed stable-living wage jobs. We also support the Timber Heritage Association's goals for maintaining the rich historical rail memorabilia of this area, and a future Scenic Tourist Railroad around the Bay. The recent visit by Rail Heritage folks from Medford OR.

Thank you for these many opportunities for public comments on these plans, and for this longer time period for sending in comments. And I also thank you for including me in the Route 101 Citizens Advisory Committee.

Sincerely,

Kaye Strickland
3125 Lowell Street
Eureka CA 95503
707-443-6105
Kstricklan@humboldtl.com

Cc: J Woolley, B Neely, H.Co. BOS
Virginia Bass, Mayor City of Eureka

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Response to Kaye Strickland:

1. Public perception of what the project need and purpose should be as well as cost and environmental impact constraints have prevented the project sponsors from proposing one, universally supported alternative. However, for over ten years Caltrans has worked with businesses, residents, organizations, and public agencies to address concerns while meeting the project need and purpose of enhancing safety and constructing long term roadway improvements.

2. Modified Alternative 3A,the Preferred Alternative identified in the Final Environmental Impact Report/Statement (EIR/S), is similar to Alternative 3, but includes a half signal at Route 101 and Airport Road which allow left turns to and from Route 101 without stopping southbound Route 101 traffic. Modified Alternative 3A also includes grade separation at Indianola Cutoff with steeper fill slopes than Alternative 3.

3. The No Build Alternative would not meet the project need and purpose. Please refer to Group Response I-A and Chapter 1 of the Final Environmental Impact Report/Statement (EIR/S), which has been revised. Also see Group Response II-B regarding maintaining the Safety Corridor.

4. See Group Responses III-A-1 and III-A-2 regarding posted speed limits.

5. Modified Alternative 3A would provide safety enhancement and long term roadway improvements: the project need and purpose focuses on high priority concerns because of the need to minimize cost and environmental impacts. See Chapters 1 and 2 in the Final EIR/S for more information.

6. Modified Alternative 3A would provide safety enhancement and long term roadway improvements for all travel modes. For a discussion of public transit improvements, see Group Responses I-D, II-A, II-E, II-F.

7. The proposed interchange at Indianola Cutoff, the intersection improvement at Airport Road, and the replacement of the southbound Jacoby Creek Bridge are described and evaluated in the Final EIR/S.

8. Currently Caltrans staff is working with the community of Manila on planning and evaluating traffic calming options on State Route 255.

9. For a discussion of bicycle improvements, please see Group Responses I-D, II-B, II-E, II-F, II-G, and II-H.

EUREKA HERITAGE SOCIETY EST. 1973

September 15, 2007

Caltrans
Attn: Kim Floyd, Project Manager
PO Box 3700
Eureka, CA 95502-3700

Dear Ms. Floyd:

The Eureka Heritage Society has reviewed the draft Environmental Impact Report/Statement (EIR/S) for the Eureka-Arcata Route 101 Corridor Improvement Project.

The proposed project build alternatives 1, 2 and 3 each call for the removal of approximately 300 eucalyptus trees. The EIR/S does not address the trees as historic and cultural resources. We have evidence that these trees constitute a historic resource and believe that they should be considered as such during the EIR process. 1

The eucalyptus trees were transplanted by Jessie M. Nash at the original Cottage Garden Nursery located at Buhne and C Streets in Eureka. They were initially planted as a windbreak for nearby ranches and pre-date the paving of the Eureka-Arcata Highway. By March 1925, when the highway was initially paved, the trees were large enough to serve as the intended windbreak. While the trees have been thinned periodically throughout the years, they have remained for over 80 years to serve as a windbreak and as part of the viewscape along the 101 corridor.

In addition to the removal of the eucalyptus trees, the Society is concerned with the potential loss of the railroad, the elimination of additional trees that enhance the scenery and the overall impact of the project to the cultural landscape, the fabric that introduces the southbound traveler to the city of Eureka and history. Only the no build alternative avoids significant impacts to historic resources. 2

Thank you for the opportunity to comment on the EIR/S. Should you have any questions, please don't hesitate to contact the Society.

Sincerely,

Mary Ann McCulloch
Chair, Preservation Committee

PO Box 1354 Eureka, CA 95502 (707) 445-8775

Responses to Eureka Heritage Society:

1. In response to public concerns, the proposal to remove the Eucalyptus trees on the west side of the Route 101 has been dropped from Alternative 3B, the proposed Preferred Alternative. The project has been re-designed to realign the south bound Route 101 lanes to the median to avoid tree removal on the west side of the roadway at the California Redwood (formerly Simpson) mill. However Alternative 1A, not the Preferred Alternative, would remove some eucalyptus trees on the west side of the roadway.

A qualified architectural historian evaluated and discussed in detail the eucalyptus tree row west of Route 101 for their potential as historic resources, and concluded, as concurred by State Historic Preservation Officer, that the trees did not stand alone as eligible for the National or California Register, or as part of a historic landscape. It is Caltrans' finding that the trees still do not meet the criteria for National or California Register eligibility, either alone, or as part of a historic landscape. The possibility of the trees contributing to a historic corridor has been negated by the lack of integrity the corridor otherwise possesses in relation to its period of significance. For more information see the revised Section 3.1.8 Cultural Resources in Chapter 3 of the Final Environmental Impact Report/Statement (EIR/S).

2. The proposed project would avoid affecting the railroad since the project would be constructed within the existing right-of-way. Caltrans recognizes the value of trees and will incorporate all feasible and practicable means to avoid and minimize tree removal. The trees within the clear recovery zone on the east side of the roadway were evaluated individually for both biological and scenic value. Based on scenic quality, size, and distance to the roadway, some trees within the clear recovery zone will remain. Guardrail is an option to protect certain trees, however, guardrail would add another visual element; the length required would extend far beyond the trunks of the trees. The visual and biology sections of Chapter 3 of the Final EIR/S have been revised to address these issues. Also refer to the plan sheets in Appendix A for tree removal locations.

Chris Rall
Executive Director
Green Wheels
A project of the NEC
707.633.4488
chris.rall@green-wheels.org

Rod Parsons
Chief, Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

To: Rod Parsons,

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the 101 Eureka Arcata Corridor Improvement Project. Green Wheels is an advocacy organization committed to promoting balanced and sustainable transportation on the North Coast. Please find our comments enclosed.

Sincerely,

Chris Rall

Comments on the 101 Eureka Arcata Corridor Improvement Project DEIR

The Road is Safe with a 50mph Speed Limit

The draft EIR for the 101 Eureka Arcata Corridor Improvement Project makes three false assumptions in its justification for the project. It assumes the corridor is more dangerous than a typical California Highway, it assumes traffic volumes will increase by 50% in the next twenty five years, and it assumes speeds and collision rates will increase over time with the lower speed limit in place to such an extent as to justify safety improvements. The argument that this project is needed to improve safety is based on these three assumptions. 1

The argument that this corridor is more dangerous than other roads is based on the collision rates at various intersections along the corridor, in particular, the Indianola Cutoff and the Bayside Cutoff. This would appear to have been true based on a heuristic look at the data on accident rates before 2002 when the speed limit was lowered to 50 mph. However, no statistical test was conducted to determine whether any of these numbers were outside the limits of what you might expect for a typical road in California. In fact, the overall collision rate for the whole corridor was below average even before 2002. 2

Since the speed limit was reduced in 2002, collision rates plummeted to one third of the California average for the entire corridor. A χ^2 Goodness of Fit analysis conducted by this researcher (Appendix A) indicates that even the accident rate at Indianola Cutoff is within the range one would expect for an average California highway intersection. Furthermore, there has not been a single fatality on this section of road since the speed limit was reduced, while there have been many fatalities on 101 in Humboldt County on sections of road that are built to a higher standard. 2 3

Caltrans suggests speeds and collision rates will increase over time despite the lower speed limit. However, data cited in the document to suggest this have been lifted from other roadways. The 85th percentile speeds on the corridor remained at 54 mph through 2006, the same as in 2002, the first year with a 50 mph speed limit. Caltrans had the option of partitioning the collision data from the corridor to demonstrate an increase in collision rates in the three years since the "safety corridor" designation, which dictates double fines for speeders, was lifted. They did not. Subsequent presentations by supporters of the build alternatives have shown increases in collision rates at some intersections, decreases at others, and no change at another. 4

With no actual numbers of collisions reported in the DEIR, it is impossible for a reader to determine whether collision rates shown are the result of a substantial number of collisions or simply a product of stochasticity. A χ^2 Goodness of Fit Test (as we have conducted with some of the data requested and received from Caltrans) or other appropriate statistical test would be able to show whether accident rates are significantly above normal. Because of lack of proper analysis, and given our subsequent analysis (Appendix A) the DEIR fails to make the case that this road is particularly dangerous. 5

Traffic Volume Projections are Overblown

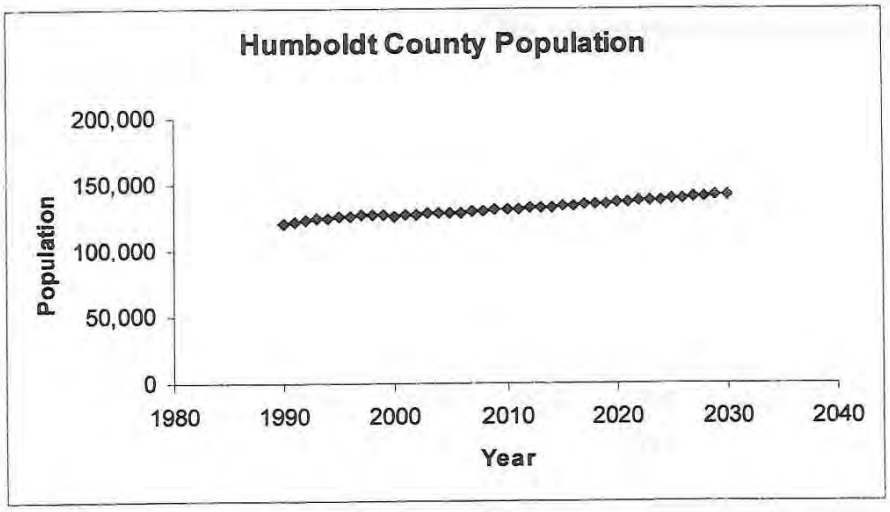
The second assumption is that traffic volumes will increase by 50% in the next 25 years. This assertion is not backed up by any data or citation in the Draft EIR. Caltrans staff revealed this projection was based on historic traffic trends on the corridor constrained by vehicle miles traveled (VMT) estimates from the California Motor Vehicle Stock, Travel and Fuels Forecast (CMVSTAFF). Population growth in Humboldt County has been projected at 0.4% by the Department of Finance (Figure 1) and 0.6% by Caltrans. This would result in a population 6

increase of between 10% and 16% in the next 25 years, which does not correspond to Caltrans' assertion of a 50% increase in vehicle miles traveled (VMT) for the county.

Caltrans projections of increases in traffic are steeper than the historical data (Figure 2), and much steeper than projected population growth (compare Figures 1 and 2). When accounting for population growth, Caltrans' projections would predict a more rapid increase in per capita VMT than has occurred historically (Figure 3). This represents an increase of daily per capita VMT from 27 miles today, to 38 miles. When taking into account the fact that one third of the population cannot drive, that means the average motorist would have to increase their driving from 40 miles today to 57 miles per day in 2031. This scenario is both highly unlikely and highly undesirable. Increases in VMT will hamper efforts to reduce greenhouse gas emissions, improve air quality, and limit automobile dependency with its associated costs.[1] We should spend regional transportation dollars to prevent this assault on our daily convenience instead of spending to accommodate it. 7

Predicted volumes on the 101 Eureka Arcata Corridor are also not consistent with historic trends (Figure 4). A linear regression fit to the last 15 years of historic traffic volumes between Eureka and Arcata on both 101 and 255 projects a 12% increase in volume over the next 25 years. If steeper traffic volume increases occurred more than fifteen years ago, these would indicate that traffic growth is leveling off, rather than accelerating, so a 12% projection may be exaggerated. 6

One of the problems with over estimating future traffic growth, is that subsequent over-building of car-infrastructure will encourage that traffic growth to materialize.[2] This traffic growth will limit the gains in congestion relief of the project, and add costs to consumers and society in increased driving. 8



[1] Todd Litman. 2002 Automobile dependency and Economic Development. Victoria Transportation Policy Institute: http://www.vtpi.org/ecodev.pdf.

[2] Todd Litman. 2001. Generated Traffic and Induced Travel: Implications for Transport Planning. Victoria Transportation Policy Institute: http://www.vtpi.org/gentraf.pdf. ,

Figure 1 Historical and projected population of Humboldt County.[3] Projections call for a 10% population increase over the next 25 years.

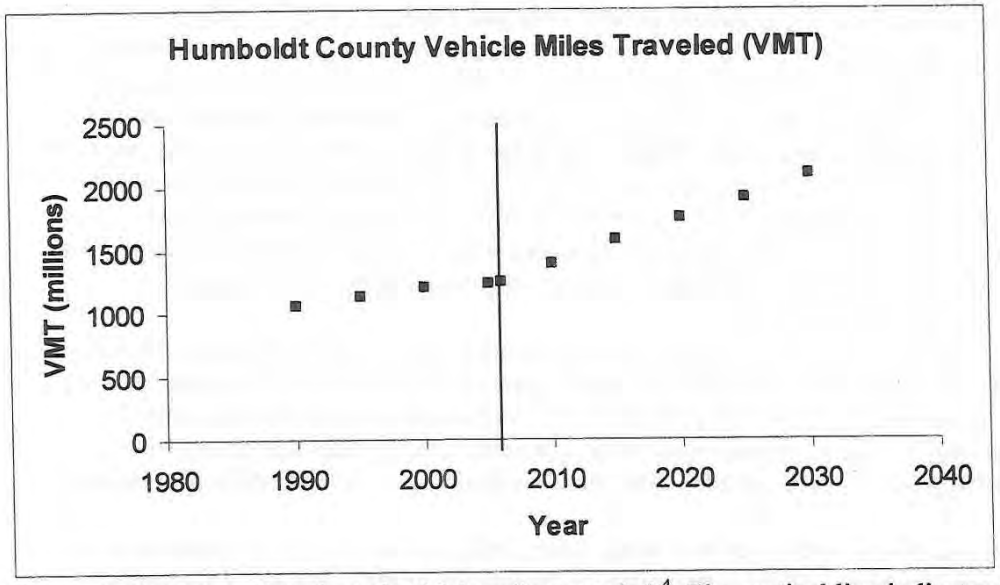


Figure 2 Historic and projected vehicle miles traveled.[4] The vertical line indicates the switch from historical to projected values. Projections call for a 50% increase over the next 25 years.

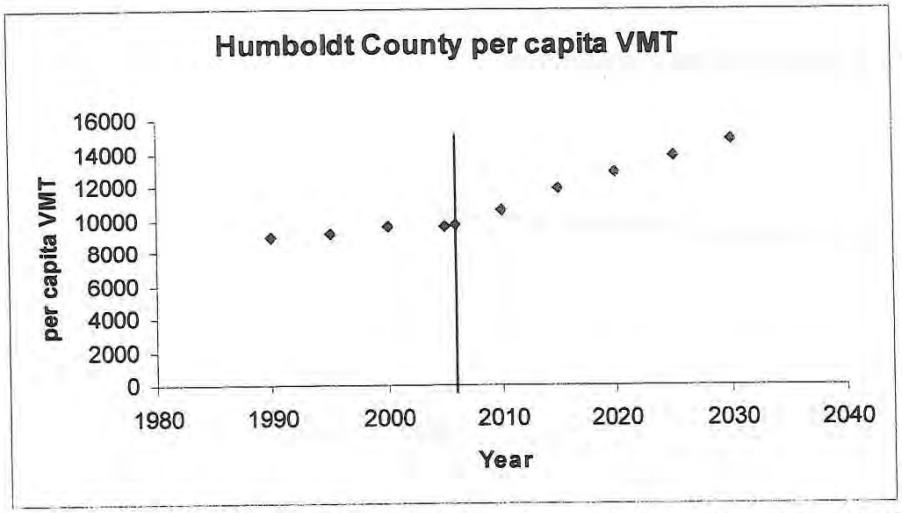


Figure 3 Annual per capita Vehicle Miles Traveled (VMT) based on data from Figures 1 and 2. A vertical line demarcates the shift from historical to predicted values.

[3] Historical data is from the U.S Census (http://censtats.census.gov/cgi-bin/usac/usatable.pl), projected data is based on population projections from the US Department of Finance http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/E-1text.asp.

[4] Historical and projected data are from the 2006 "California Motor Vehicle Stock, Travel and Fuel Forecast" report from Caltrans: http://www.dot.ca.gov/hq/tsip/otfa/mtab/MVSTAFF/MVSTAFF06.pdf Appendix B, Table 2.

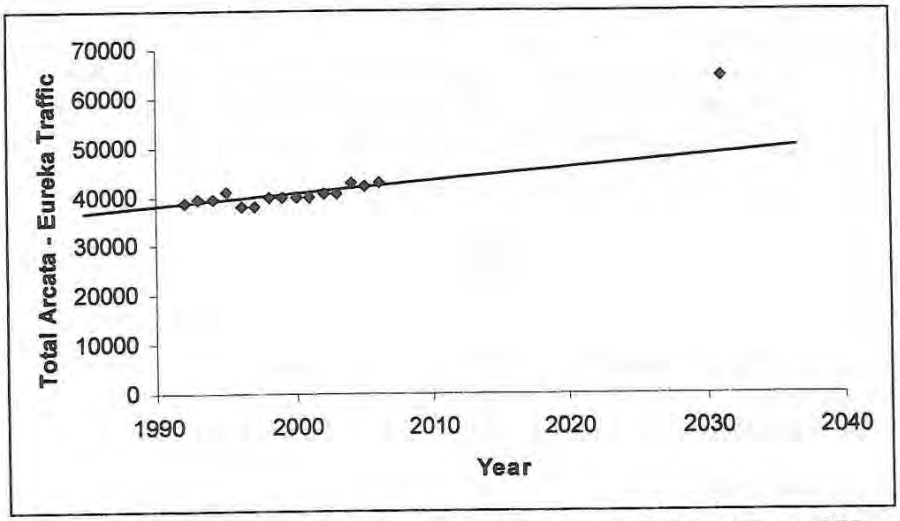


Figure 4 Historic and predicted total annual average daily traffic on 255 and 101 between Eureka and Arcata. Historic values are based on Caltrans estimates of traffic volume north of Indianola Cutoff on 101 and the Mad River Sough Bridge on 255. The predicted value is based on the 50% increase over 25 years cited in the DEIR. A linear regression fit to the historical data predicts an increase of 12% in travel demand between Eureka and Arcata over the next 25 years.

Failure to Assess Congestion Impacts Elsewhere

This project does not deal with most congested section of 101 in Humboldt County. By building for, and therefore encouraging a 50% increase in traffic volume that is not in sync with population growth, this project threatens to cause gridlock on the already congested 4th and 5th Street section of 101 in Eureka, as well as on Broadway in Eureka. Without planning for the increases in volume dumped onto these streets that cannot carry a higher capacity, this project will actually worsen overall congestion in the region rather than relieve it. 9

The Broadway section of 101 and 4th and 5th Street between Eureka Slough and Myrtle Avenue in Eureka are listed in The 2004 Humboldt County Regional Transportation Plan (RTP) as having a level of service (LOS) of F. As of 2006 the rest of 4th and 5th Streets was down rated from C to E. Contrastingly, LOS in the project area between Eureka and Arcata varies from D to B, passing grades. While this project does not add travel lanes, it does reconfigure the expressway into a freeway enabling higher speeds and safer passage of a higher volume of traffic. If the project did not increase capacity in this sense, it would be unnecessary for the DEIR to repeatedly cite the poorly supported projection of a 50% increase in traffic volumes over 25 years. Increasing traffic on the corridor will dump huge amounts of traffic onto already failing Eureka streets. 10

Measures contained within the RTP to mitigate these Eureka congestion problems would cost $115.85 million (Table 1) and it is doubtful whether they would even be effective. 11

By doing nothing to make alternative transportation more viable, and simultaneously accommodating traffic growth that is 5 times that of projected population growth, this project promises to contribute to increased driving costs for Humboldt County citizens, road costs for 12

various local governments, and environmental consequences, such as carbon emissions, loss of agricultural and forest lands, polluted run-off and reduction of air quality.

Table 1 Cost of planned 101 congestion relief projects within Eureka City Limits according to the Action Element of the 2006 Humboldt County Regional Transportation Plan. An additional $46.73 million in projects is planned for congestion relief elsewhere in Eureka.

Project Short Term	Cost (millions)
Waterfront Drive Extension, Del Norte to Hilfiker	12.00
Waterfront Drive Extension, G to J	2.50
Waterfront Drive Extension, T to X St	5.05
Widening Broadway	59.70
Commercial reconstruct to Waterfront	1.10
Parking Structure at 3rd and F	16.50
Parking Structure at 4th and G	19.00
Total	**115.85**

There was also a failure to assess traffic impacts to the problematic 101 / 255 interchange in Arcata caused by out-of-direction travel that closing the median crossings will cause. On a round trip excursion from Eureka to Bracut or to Bayside, motorists will have to use this interchange, increasing the traffic volume. The interchange can handle an increase in volume of motor-vehicle traffic, but this will have a negative impact on pedestrian and bicycle access across 101. This is discussed in more detail in the section on barriers to human powered transport. 13

Traffic impacts at the intersection of 101 and V Street in Eureka were assessed, but did not make sense. These projections predicted an LOS of B and C at 4th and 5th Streets respectively with all alternatives. This is somewhat inconsistent with the 2006 Regional Transportation Plan which describes this stretch of 101 as having an exisiting peak-hour LOS of F. 14

The Lost Alternative

The Draft EIR mentions a transit-based solution to the problems of the corridor as a previously considered alternative, and estimates the cost of the hypothetical transit system to be "$90 million more that[sic] the proposed Build 2 alternative" in order to carry the 20,000 passengers needed to keep traffic volumes constant. As discussed above, this traffic volume increase estimate is over four times what traffic data indicate. 6

Further investigation revealed that the cost cited in the Draft EIR was in reference to the Value Analysis of the transit alternative (Value Analysis Alternative 3.0), conducted in late 2001 and early 2002 which came up with a cost of $121.2 million (only $59.2 million more than Alternative 2) for transporting enough riders by public transit to keep traffic volumes from 15

increasing on the corridor. This analysis made several absurd assumptions. First, the assumed increase in volume of traffic was much greater than historical data suggests. In addition, 75% of new riders on this enhanced system were assumed to need a parking spot in a newly constructed park and ride lot in order to use the system. Exaggerating the park-and-ride capacity required, and the requirement that 75% of that capacity should be in expensive multi-level parking structures, resulted in the addition of $50 million to the cost, nearly doubling the cost of this alternative. The system also had a $23.4 million publicity campaign tacked on.[5] Even with these add-ons, the price of this alternative came in below the cost of Alternatives 2 or 3 when combined with the $115.85 million congestion relief in Eureka (Table 1) that will eventually be required with either of these alternatives.

Even though it had a 10.8% higher performance score than the preferred alternative, this mass transit alternative was dropped prematurely from consideration for several reasons: cost, incompatibility with land use patterns, plentiful parking, and concern that people would choose not to ride it. The problems with the reasoning related to cost have been discussed above. 16

The alternative was dropped in part because "dispersed moderately low-density housing and employment patterns of Eureka and Arcata" were thought to "limit the ability to feasibly serve travel demand with buses." Currently, most of Arcata is within 1/3 mile of a city bus stop and the same is true for Eureka. Most of the populations of McKinleyville, Arcata, Eureka and Fortuna are within 1.5 miles of a Redwood Transit Service stop, a distance that can be traveled by bicycle in ten minutes. If we invest in improving mass transit, and in transit-oriented development, we can accommodate growing transportation demand that population growth and economic development brings. Choosing not to invest in transit and transit-oriented development will make it harder to develop a greater transit mode share in the future, which will eventually cripple Eureka with congestion. 17

The DEIR also states that transit has proven a more viable choice "when LOS as well as parking becomes a problem." As stated earlier, while LOS on the corridor is acceptable, peak traffic LOS on 101 in Eureka ranges from E to F already. Increases in traffic volume will definitely be expensive to accommodate, and maybe impossible. 17, 9

While parking is currently plentiful and inexpensive in Downtown Eureka, a recent study found that parking is subsidized at a rate of $80 to $580 per month per space.[6] This and Eureka's plans for $35.5 million to increase parking capacity in parking structures(Table 1), indicate that parking will not be plentiful for long, and continuing to subsidize it will be expensive. There is a "perceptual problem" of limited parking in downtown Arcata,[7] but parking problems on the HSU campus are substantial. Parking permit prices at HSU are in the process of more than doubling from $67.50 per semester in 2005 to $157.50 in 2008. The HSU Masterplan calls for four multi-level parking structures, the first of which is estimated to cost over $12 million. 18

Meanwhile, a program called JackPass, providing unlimited rides for students on Redwood Transit Service (RTS) has already substantially increased student ridership on RTS buses traveling on 101. These buses were already often near capacity before JackPass was instituted and have among the highest farebox recovery ratios in the county, despite headways

[5] Value Analysis Report: Route 101 Eureka to Arcata Corridor Improvements, February 2002. Prepared by Value Management Strategies, Inc.
[6] HCAOG. 2003. Parking Needs Study. Submitted by Dowling Associates, Inc. http://www.hcaog.net/docs/Regional_Parking.pdf.
[7] See footnote 5.

usually over one half hour, limited Saturday service and and no Sunday service.[8] Costly and limited parking as well as low LOS are already contributing to transit ridership growth despite limited funding. With enough investment to provide reasonable headways (e.g. 10-15 minutes), there is great potential for an increase in ridership.

Lastly, consumer choice, while affected by convenience of auto travel, is also affected by convenience of mass transit. By implementing Rapid Bus and Bus Rapid Transit (BRT) features on the RTS system such as signal prioritization, dedicated streets or lanes, queue jumps and well placed stations, all elements Caltrans has built in projects around the state,[9] the quality and convenience of transit could be raised to meet consumer demand.

An Alternative that Should be Included

While Rapid Bus and BRT were less well known when the process for design and implementation of this project began in 2000, today Caltrans provides much of the expertise for construction of this type of project.[10] Busways are an additional modern transit strategy developed in Brisbane Australia that involves local buses funneling into a busway or BRT route, so that transit is provided to more dispersed areas, but feeds into more frequently running major routes without requiring transfers. We suggest Caltrans work up plans for a serious mass transit alternative for this project. It might be a Rapid Bus system running from McKinleyville to Fortuna with BRT features such as dedicated lanes and queue jumping in congested parts of Eureka. It may also include busway strategies to allow local buses and regional buses (such as Arcata, Blue Lake and Willow Creek buses) to funnel directly into the Rapid Bus system and contribute to its frequentcy. 19

Any mass transit alternative should be compared with other alternatives weighing all costs, including congestion mitigation measures in Eureka, changes in automobile ownership and operating costs affected by the alternatives, effects on economic activity and jobs creation, health effects and environmental impacts. 12, 16, 17

We contend that such an alternative would be highly competitive with the current alternatives, especially when considering the Eureka congestion mitigation costs and external costs of the automobile centric alternatives offered in the current DEIR. While this cost would certainly be substantial, improved bus service would mitigate or solve congestion problems on the corridor in question and within Eureka City limits where there is simply no room for a substantial increase in traffic volume capacity.

There are many additional benefits to the mass transit approach. The strategy would be consistent with the Governor's directive to reduce greenhouse gas pollution,[11] while Alternatives 1, 2 and 3 are not. Air quality will be substantially better than it would be otherwise. The third of our population that cannot drive will have improved access to the transportation system. A 10% reduction in car ownership and operating costs would result in an economic savings of 17

[8] HCAOG's 2006 Regional Transportation Plan, Needs Assessment: http://hcaog.net/docs/RTP2006/pdf/Needs%20Assessment%202006.pdf.

[9] Caltrans. 2007. Bus Rapid Transit: A Handbook for Partners: http://www.dot.ca.gov/hq/MassTrans/DOCS_PDFS/BRT/BRT_Handbook_1207.pdf.

[10] See footnote 6

[11] Executive Order S-3-05: http://www.governor.ca.gov/state/govsite/gov_htmldisplay.jsp?BV_SessionID=@@@@0825965329.1186779186@@@@&BV_EngineID=cccdaddjiehkekmcfngcfkmdffjdfng.0&iOID=69591&sTitle=Executive+Order+S-3-05&sFilePath=/govsite/executive_orders/20050601_S-3-05.html&sCatTitle=Exec+Order.

about $40 million annually for the county as a whole.[12] Since most automotive ownership and operating costs are for imported fuel, cars, parts and insurance, 70%[13] of that annual $40 million which would otherwise drain out, would instead re-circulate in the economy generating greater economic vitality.

This suggested alternative may or may not be selected as the preferred alternative at the end of the process, but the public has a right to know what we are missing by passing it up. It should be fully considered in the final EIR and compared to the other alternatives based on the full suite of costs and benefits of each, including traffic-volume mitigation and lost time within Eureka City Limits resulting from Alternatives 2 and 3, automobile ownership and operating costs, carbon emissions and health effects. 20

And Another Alternative

One way to reduce the conflict and hazard associated with left turns and left merges is to reduce the number of these types of movements taking place on the corridor. Closing the median crossings is not the only way to achieve a reduction in these types of movements. An alternative not considered previously would involve offering to buy out businesses and residences that rely on corridor median crossings for access. This could be done in a manner that is voluntary for business owners and residents, and strategic, prioritizing the most important businesses or residences to move based on where collision rates could be most cost-effectively reduced. Over time, such a strategy could enable the closure of some median crossings and access points, although this would not have to happen everywhere, since any reduction in "operational conflicts" would result in reduction in the potential for collisions. 21

This strategy would have the added benefit of providing opportunity for agricultural, wetland and salt marsh restoration, would encourage infill development in areas better served by multiple modes of transportation, and would better facilitate straight-line use of the 101 facility as was intended, while avoiding out-of-direction travel that is inherent in all three build alternatives.

The total value of all the businesses on the Corridor has been estimated at $29 million,[14] so the cost of such an alternative may be cost-competitive with the build alternatives if the corridor remains much the same with the 50mph speed limit. This alternative should be fully evaluated and compared with the build alternatives in terms of its ability to reduce collisions, wetland impacts, out-of-direction travel impacts, land use impacts and cost.

Errors and Omissions in "Bicycles and Pedestrians" Section

There are a few errors in the "Bicycles and Pedestrians" section of the DEIR starting on page 98. First, the DEIR claims within "the project limits in Arcata, there are sidewalks that cross Route 101 at Route 255." The curbs on this bridge are not sidewalks. Second, the DEIR claims that the "Humboldt Area Bike Map…designates Route 101 as an 'Intermediate Undesignated Roadway' bicycle route from V Street in Eureka to the Bayside Cutoff." In fact, 22 23

[12] $3943 per car-year * 2 cars per household (Bureau of Labor and Statistics, U.S. Department of Labor, estimates $7887 per year spent on the average two vehicles owned per household from http://www.bls.gov/ro7/cexwest.htm) * 128,330 people / 2.39 people per household (BLS 2006 estimate for Humboldt County) = $423,435,305, 10% of which is approximately $40 million.

[13] Todd Litman and Felix Laube. 2002. Automobile Dependency and Economic Development. Victoria Transportation Policy Institute: http://www.vtpi.org/ecodev.pdf.

[14] Total value of businesses based on presentation by Corridor Access Project (CAP) presentation to Humboldt County Board of Supervisors, Tuesday, September 9, 2007 (available in video archive of meeting).

the segment from V Street to the east side of the bridges over Eureka Slough is designated "Technical," meaning "these facilities typically challenge skilled riders." The "Technical" designation also applies to the 101-255 interchange in Arcata which, in addition, is described on the map as a "Difficult Intersection" in which the bicyclist is instructed to use caution. The DEIR does not discuss bicycle use of this interchange even though it is within the project limits. Third, the DEIR states "Bicycle use on Route 101 north of Bayside Cutoff is infrequent since there are many road alternatives parallel to Route 101 through Arcata." There is only one road alternative immediately north of Bayside Cutoff, and it is very indirect for bicyclists whose destinations are west of 101 in Arcata (~3 miles to the 255 interchange versus ~2 miles on 101). Document authors should be put forward current data quantifying bicycle use north of Bayside Cutoff to back up the assertion that it is infrequent. Last, the DEIR states "Some bicycle activists individuals and groups advocate for the creation of a separate (Class I bikeway)." This statement is misleading. It is true that bicycle activists advocate for this trail, but it is also supported by the Cities of Arcata and Eureka, the County of Humboldt, and enjoys broad public support. Public comments earlier in the process of developing this project, as well as public involvement in the recently completed Humboldt Bay Trail feasibility study demonstrate this broad support.

The omission of current bicycle volumes on the corridor, apparently due to the failure to measure them, inhibits proper planning for bicycle use of the corridor. Using bicycle volume estimates from 1999, before the speed limit was lowered, is not an appropriate planning approach. Bicycle volumes on the corridor have likely changed since 1999, because of increasing fuel costs and growing awareness of climate change issues. With bicycle traffic volumes, authors could calculate bicycle collision rates to determine the hazard that bicyclists face using this corridor. 24

Barriers to Human Powered Transport

The project alternatives include no improvements for bicyclists and pedestrians even though the Eureka-Arcata segment of the Humboldt Bay Trail is a top priority in the RTP, and would run along the corridor. The corridor itself constitutes a barrier to human powered transportation. On May 1, 2006 several people were arrested for attempting to walk to Eureka from Arcata along 101.[15] In November 2005, several cyclists, part of a large group, were arrested for attempting to ride from Arcata to Eureka in a fashion they felt was the safest.[16] Surveys from the Humboldt Bay Trail Feasibility study suggest that many more people would ride between the two largest cities in Humboldt County if it was possible to do so safely without riding on the expressway.[17] Because the portion of the expressway used by cyclists is the break-down lane, cyclists must often use the travel lane to get around parked vehicles. If the build alternatives result in an increase in speeds from 50 mph to 65 mph, this will increase the risk to cyclists when they are forced to use the travel lane. The other roads connecting Arcata and Eureka are even more dangerous than 101 due to narrow shoulders, and they are less direct. 12 7 25 26

The highway design manual states: "Where no reasonable alternate route exists within a freeway corridor, the Department should coordinate with local agencies to develop or improve

[15] May Day meltdown. May 9, 2006. Arcata Eye Newspaper: http://arcataeye.com/index.php?module=Pagesetter&tid=2&topic=3&func=viewpub&pid=91&format=full.
[16] See previous footnote.
[17] Humboldt Bay Trail Feasibility Study, 2007. Alta Planning, PlanWest, and HCAOG: http://hcaog.net/docs/trail_study/final_feasibility_study/Humboldt%20Bay%20Trail%20report.pdf.

existing routes or provide parallel bikeways within or adjacent to the freeway right of way. The long term goal is to provide a safe and convenient non-freeway route for bicycle travel."[18] While the section of highway in discussion is mostly expressway, the build alternatives discuss building it nearly to freeway standards and increasing traffic speeds. This represents moving us away from the long term goal. 10, 12

The Samoa Avenue / 255 bridge over 101 represents an additional barrier to human transport. Due to the ramp banking in the tight cloverleaf design, Caltrans refused Arcata's 2001 request for stop signs and realignment of lanes on the bridge to provide bike lanes and an ADA accessible sidewalk and crosswalks.[19] Arcata has built or plans to build sidewalks and bike lanes leading up to either end of the bridge. The bridge itself remains dangerous for cyclists because of the disappearance of the shoulder where off-ramps merge onto Samoa Boulevard. Pedestrians have no cross-walks at off-ramps and no sidewalk (Figure 5). The width of the curbs which pedestrians tend to use on this bridge is approximately 2 feet. This limits non-motorized access for Sunny Brae residents to reach the Arcata Marsh and businesses on South G Street. The alternative route which is safe for pedestrians and cyclists, the 7th Street overcrossing, entails walking nearly an extra half mile,[20] hardly a reasonable and convenient alternate route. The ten to fifteen minutes required to walk that distance is 13 to 20 times the delay resulting in a Caltrans LOS rating of F for automobile traffic. 22

[18] Caltrans. Sept 1 2006. Highway Design Manual. Section 1003.4: http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp1000.pdf

[19] Doby Class, Arcata Public Works. 15 Aug 2007. personal communication.

[20] Distances for detouring to the 7th Street over-crossing were estimated using gmap pedometer: long route, http://www.gmap-pedometer.com/?r=1217546; short route, http://www.gmap-pedometer.com/?r=1217551.

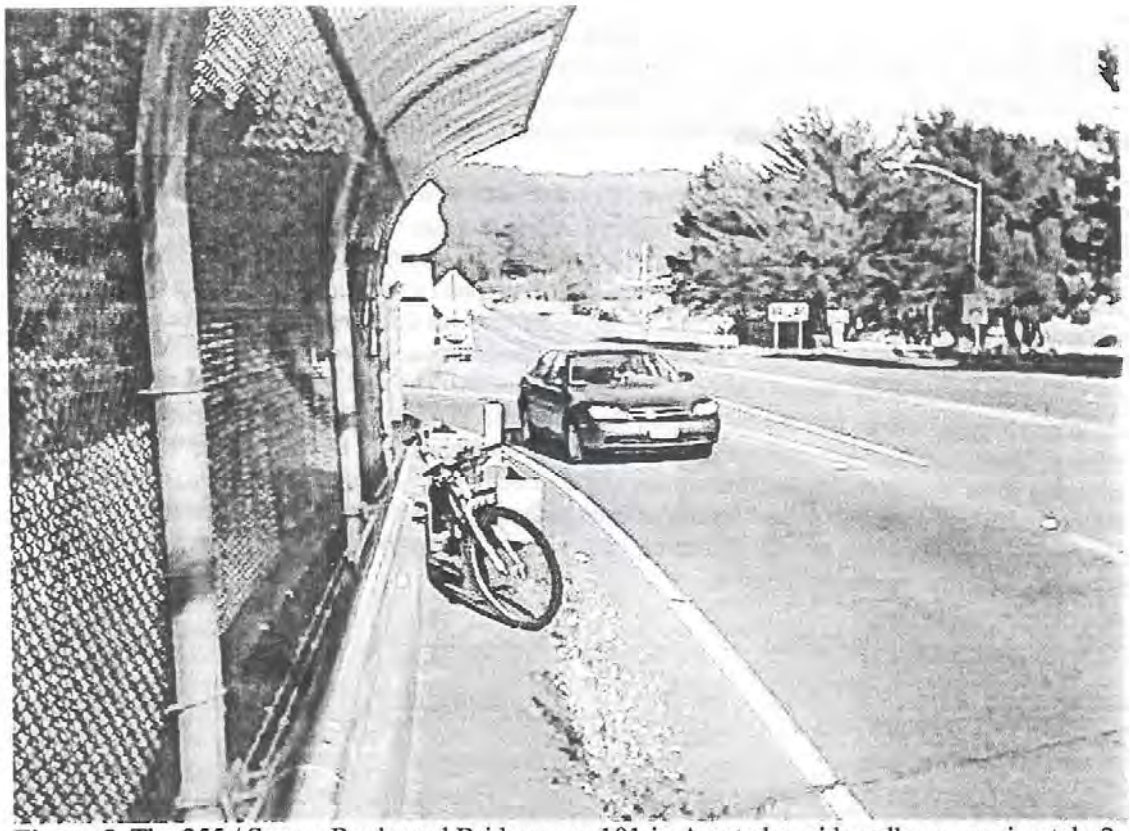


Figure 5 The 255 / Samoa Boulevard Bridge over 101 in Arcata has sidewalks approximately 2 ft. wide curb, no bike lanes, and no crosswalks where 101 off-ramps enter the boulevard, creating dangerous conditions for non-motorized travelers.

Out of direction travel caused by median closures of the three build alternatives will certainly increase motor vehicle traffic volumes on the bridge, worsening the situation. This researcher was unable to find projections of changes in traffic volume on the Arcata 101 / 255 interchange for the 3 build alternatives within the DEIR. 27

Two sections of the California Highway Code indicate that CalTrans is obligated to eliminate these two barriers to non-motorized transportation: 28

> "887.8. (b) Where the traffic safety or capacity of the highway would be increased, the department shall pay for the construction and maintenance of nonmotorized transportation facilities approximately paralleling the highway."
>
> "888. The department shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for nonmotorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient alternate route or such a route exists."

Due to the passive voice used in rule 887.8.(b), there are two possible interpretations. Because the build alternatives would increase capacity and safety of this section of 101, they obligate CalTrans to "pay for the construction and maintenance of nonmotorized facilities approximately paralleling the highway." The cost of this addition to the project has been estimated at $31.2 million, although a $14.8 million alternative may be possible through an agreement with the North Coast Railroad Authority.[21] This cost should be added to Alternatives 1, 2 and 3.

The other interpretation of this rule is that if the bike facility itself would add to the safety and capacity of the highway, "the department shall pay for the construction and maintenance..." The Humboldt Bay Trail Feasibility study found that such a trail would replace 36,388 car trips annually. The current fatal + injury collision rate for bicyclists was not quantified in the DEIR or compared with the state average, but a trail separated from the 50 mph traffic would almost certainly improve safety for cyclists. Since the build alternative of this project would raise the speeds to 65 mph, a separate facility for cyclists would become even more important.

In addition, the design of the 255 Samoa Boulevard / 101 cloverleaf interchange is a violation of Highway Code since it has been constructed in such a way that results severance of the Samoa Boulevard Bicycle Route.[22] We recommend that as part of this project, this interchange be re-worked into a dumbbell-type diamond interchange similar to the 101 / Giuntoli interchange in North Arcata. This would enable the change of the 255 bridge to two auto travel lanes, allowing for bike lanes, sidewalks and crosswalks to be constructed according to best management practices. 29

[21] Humboldt Bay Trail Feasibility Study, 2007. Alta Planning, PlanWest, and HCAOG: http://hcaog.net/docs/trail_study/final_feasibility_study/Humboldt%20Bay%20Trail%20report.pdf.
[22] Arcata Pedestrian and Bicycle Master Plan, 2004: http://arcatacityhall.org/pedestrian_bike_plan/ped_bike_plan_cover.html.

Consistency with Caltrans' Mission

A review of Caltrans' strategic goals is helpful in examining if this project is consistent with Caltrans' mission. These were lifted from Caltrans' website.

> **Strategic Goals:**
> - SAFETY -
> Provide the safest transportation system in the nation for users and workers.
> - MOBILITY -
> Maximize transportation system performance and accessibility.
> - DELIVERY -
> Efficiently deliver quality transportation projects and services.
> - STEWARDSHIP -
> Preserve and enhance California's resources and assets.
> -SERVICE-
> Promote quality service through an excellent workforce."

The first goal, Safety, is to provide the "safest transportation system." The system we now have as a result of emphasis on automobile-dependency kills more young people aged 1-35 than anything else.[23] The auto-accident death toll exceeds the equivalent of a 9/11 attack each year in California,[24] but could be substantially reduced by deemphasizing personal automobile use. Focusing on fixes here and there to marginally improve safety for motorists will not change the reality that automobile dependent transportation systems are inherently dangerous. Mass transit is 10 times safer per passenger mile than private automobile.[25] Regions that are less automobile-oriented have fewer transportation-related deaths.[26] 30

Nowhere in these goals is the word car mentioned. Despite this, over the last fifty years Caltrans has created a transportation system tailored almost entirely to cars and trucks, and this project is no exception. The second goal, Mobility, includes maximizing transportation system accessibility. This system is not "accessible" to over one third of our citizens who don't drive,[27] whether they are too old, too young, or cannot afford a car. 31

The fourth goal, stewardship, is called into question with this project. Given the weak justification for this project discussed above, permanently filling 3.78 (Alternative 1) to 15.3 (Alternative 3) acres of coastal wetland does not represent good stewardship of our natural resources. These wetlands serve as fish and wildlife habitat, and act to improve water quality of Humboldt Bay. 32

Deputy Directive 64 clarifies the importance of planning for all users:
"The Department fully considers the needs of **non-motorized travelers** (including pedestrians, bicyclists, and persons with disabilities) in **all** programming, planning, maintenance, construction, operations and project development activities and products." There has been little to no planning in this project for the needs of non-motorized travelers. There is not even any 12

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[23] Center for disease control and prevention. WISQARS Injury Mortality Reports, 1999 – 2004: http://webappa.cdc.gov/sasweb/ncipc/mortrate10_sy.html.
[24] See previous note.
[25] Todd Litman. 2005. Terrorism, Transit and Public Safety: Evaluating the Risks. Victoria Transportation Policy Institute: http://www.vtpi.org/transitrisk.pdf.
[26] See previous note.
[27] From the US Department of Transportation: http://www.nhtsa.dot.gov/people/injury/research/TrendAnalysis/2_chip.htm.

information on the current volume of non-motorized travelers using the corridor. An expressway is not an appropriate facility for bicyclists and pedestrians, yet this is the only direct route between the two largest cities in Humboldt County. This project does nothing to fix this most significant problem with the corridor.

Consistency with Local Transportation and Land Use Plans

On page 76, the DEIR states that "no inconsistencies with local adopted goals and policies of the Cities of Arcata and Eureka or Humboldt County were identified." We believe Caltrans failed to identify many inconsistencies. Furthermore, the DEIR cites no-build alternative inconsistencies with the 1984 Humboldt County General Plan policy 4231.3. This General Plan was meant to serve for 20 years (until 2004) is out of date and in the process of being revised, therefore any inconsistencies with this plan are subsidiary to current plans. 33

Arcata

Arcata General Plan, Transportation Element:

The project is inconsistent with the Arcata General Plan. The Transportation Element of the General Plan has a heavy emphasis on alternative transportation (Appendix B). It emphasizes alternative modes of transportation, and sets forth the goal of reducing the percentage of trips that are made by automobile as well as vehicle miles traveled. These goals are inconsistent with a project that plans for increases in motor-vehicle traffic without improvements for other modes of travel. The loss of connectivity caused by closing median crossings will increase vehicle miles traveled for example by forcing visitors to the Bracut Business Park to travel several miles out of their way to complete a round trip. More specifically, the plan states that Arcata does not support "any new interchanges, on State Route 101." This represents a major inconsistency for Alternatives 2 and 3 which propose the construction of a new interchange. 34

Arcata Bike and Pedestrian Plan

The Arcata Pedestrian and Bicycle Plan clearly cites the corridor between Eureka and Arcata as a route in need of bicycle improvements. "Objective G: Provide bicycle connections outside of the city limits, linking important destinations like Eureka with Arcata." This project, while not preventing the construction of a trail, fails to balance transportation improvements by providing a trail. 35

The project also fails to accommodate two proposed non-motorized routes in the Arcata plan. First, Route 255 / Samoa Boulevard / Old Arcata Road in its entirety is an existing or proposed Class II bike route within Arcata City Limits (Figure 6). Banking the turns on the hook ramps of the cloverleaf interchange precludes reducing the bridge to two lanes to allow for the proposed bike lanes. Instead of reworking the ramps to deal with this problem, the project eliminates sidewalks from the on and off ramps and creates additional motor vehicle traffic at the interchange due to out-of-direction travel to and from Bracut. Second, the Arcata plan proposes a pedestrian trail from South G Street to Old Arcata Road near Jacoby Creek Road (Figure 6). The project constitutes major resurfacing without providing pedestrian access over or under the freeway required by this plan. 36

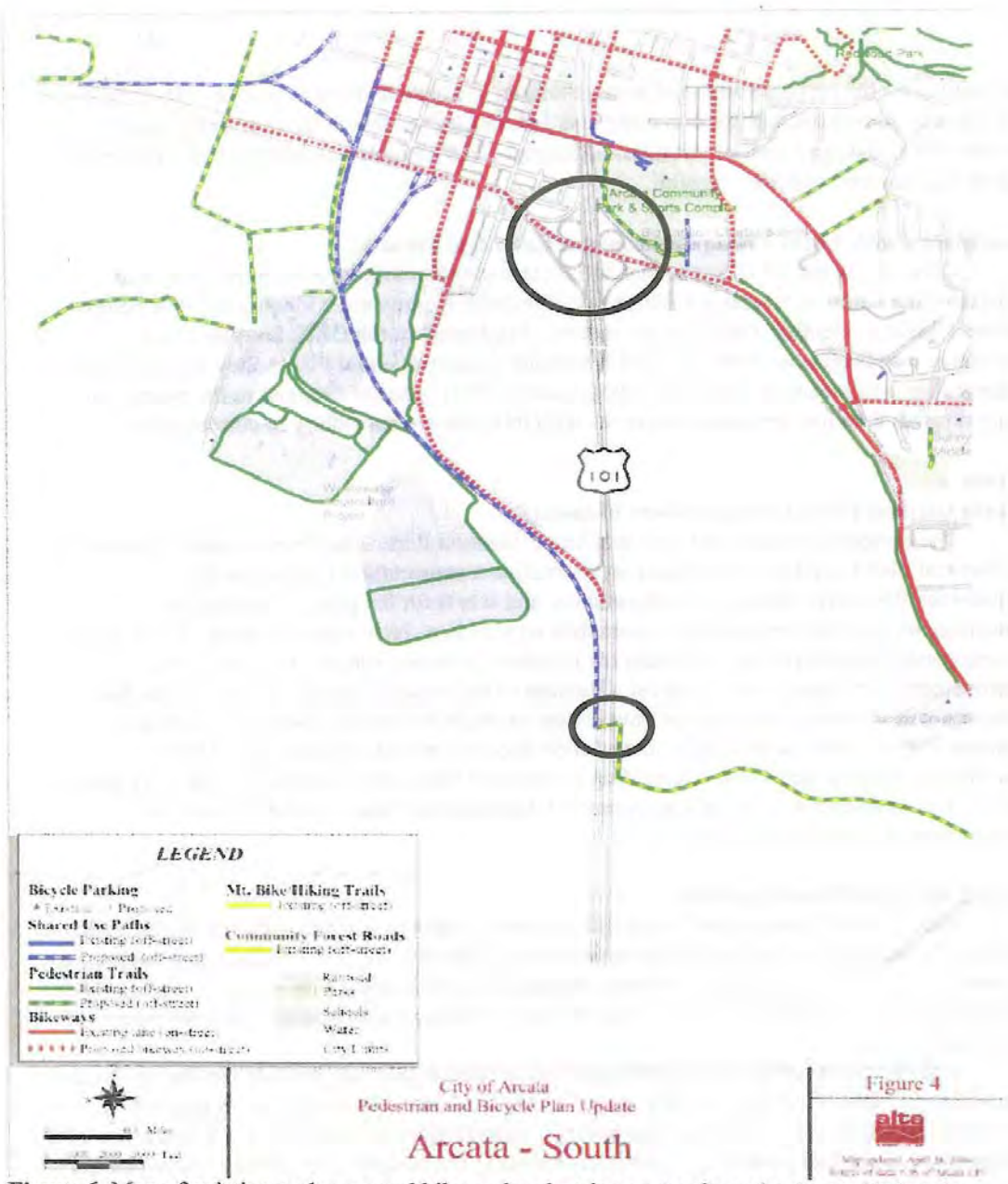

Figure 6 Map of existing and proposed bike and pedestrian routes from the Arcata Pedestrian and Bicycle Plan. Areas in conflict with the 101 improvements are circled.

Eureka

Eureka Strategic Visioning 2004

The council goal statement in this most recent plan for the city of Eureka calls for pedestrians and bicyclists to come first. The strategic vision also calls for expanded transit opportunities (Appendix D). Because this expensive project incorporates no transit, bicycle or pedestrian improvements it is inconsistent with these goals and policies. 37

Humboldt County

2006 Regional Transportation Plan

The 2006 Humboldt County Regional Transportation Plan contains policy for the reduction of single occupant vehicle trips and vehicle miles traveled, by creating a balanced multimodal transportation system and emphasizing transit-oriented land use policies (Appendix E). There is a large array of policy within the RTP which promotes balancing our modes of transportation, providing for all modes, reducing single occupant vehicle trips, vehicle miles traveled and peak traffic volumes. While the 101 Eureka Arcata Corridor Improvement Project is listed as a priority project, its "Purpose and Need" is identified as including "Multimodal Improvements." These goals and policies are at odds with a project designed for a 50% increase in traffic volume and a project which only provides improvements for private motor-vehicle travel. 8, 12, 35

Conclusion

The 101 Eureka Arcata Corridor Improvement Project has been proposed as vital to the safety of the corridor. However, the data suggest that the speed limit reduction was adequate to improve safety. There have been no fatal collisions since the speed limit was reduced, and the corridor as a whole is three times as safe as an average California roadway of this type, length and traffic volume. The expense of this project will draw regional transportation dollars away from projects that can more cost-effectively deal with more pressing transportation problems, such as Eureka congestion relief and safety projects, under-funded transit and the lack of safe non-motorized access between Eureka and Arcata, the two largest cities in the county. 38

Projections for increased traffic volume on this roadway have been grossly exaggerated, and all relevant local plans call for reductions in driving or a balance of multiple modes through alternative transportation improvements. This puts local plans at odds with the traffic projections, and at odds with a project that provides no improvements for the very modes that are in need of improvement to achieve a more balanced transportation system.

Because of the lack of justification, inconsistency with local plans, the large expense of this project, and failure to make improvements for multiple transportation modes, we recommend the "No Build Alternative." In the 2008 Regional Transportation Plan process, we have an opportunity to look at better options to accommodate more realistic increases in travel demand, through bicycle and pedestrian improvements and transit improvements such as "Rapid Bus" or "Bus Rapid Transit" improvements to our transit system. We welcome Caltrans' expertise and involvement in researching and developing projects along these lines.

Appendix A
I conducted a χ^2 Goodness of Fit Test on the number of fatal + injury collisions that took place at Indianola cutoff, the intersection of greatest concern, both before and after the 50 mph speed limit was applied. I used MS Excel's "chidist" function to calculate the P-value.

Ho: O (Observed number of collisions) = E (Expected number)
Ha: O unequal to E
alpha = 0.10

1997-2002 (60 mph):
O = 12 (number of fatal + injury collisions at Indianola)
E = 5.6112 (Average rate of 0.08 * 70.14 million vehicles)
$\chi^2 = (O-E)^2/E$
$\chi^2 = 7.2416$
$P < 0.007 <$ alpha therefore reject Ho
There were significantly more collisions than would be expected at an average California intersection of this type when the speed limit was 60 mph.

2002-2005 (50mph):
O = 5
E = 3.935 (0.08 * 49.19 million vehicles)
$\chi^2 = 0.288$
$P = 0.591 >$ alpha therefore fail to reject Ho
There were not significantly more collisions than would be expected at an average California intersection of this type when the speed limit was 50 mph.

Appendix B
Transportation Element of the Arcata General Plan Excerpts

POLICY T-1 BALANCED TRANSPORTATION SYSTEM WITH CHOICE OF MODES

Objective. Create and maintain a balanced transportation system with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. **Reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes.**

T-1a	**Investment in alternative modes.** In order to provide a realistic and cost-effective balance between travel modes, the City shall **emphasize investment in alternative modes** (bikeways, etc.) as a priority over increasing vehicular capacities of streets.
T-1c	**Intercity travel.** The City shall coordinate with Humboldt County and Caltrans to provide adequate facilities for vehicles, buses, and bicycles to serve intercity demand. Joint efforts may include transportation improvements outside of Arcata which serve intercity travel, **such as bicycle links, timed-transfer bus stops, park-and-ride lots, and regional transit service and development of park-and-ride lots in Arcata to reduce intercity**

vehicular travel.

POLICY T-2 TRAVEL DEMAND MANAGEMENT

Objective. Reduce the percentage of automobiles **and reduce the annual vehicle-miles of travel.**

POLICY T-3 BUS TRANSIT POLICY

Objective. Maintain a bus transit system which connects and serves major commercial and employment areas within Arcata, Humboldt State University, public schools, and higher density residential areas. Increase average citywide transit mode share of daily person trips to 5% from the 1998 level of 1%.

T-3b	**Regional transit service.** Short- and long-range transit plans shall be coordinated with the regional transit service provided by the Redwood Transit System. The City supports regional transit plans which improve service and timed transfers, and **reduce headways for intercity travel.**

POLICY T-4 STREETS AND HIGHWAYS PLAN AND POLICY

Objectives. Plan an internal street system consistent with Arcata's small-town, non-metropolitan character and which: 1) efficiently utilizes existing facilities and **reduces need for investment in new or expanded street and highway facilities** or capacities; 2) **improves connectivity** of streets to provide for direct routes between origins and destinations; 3) has a high quality of regular maintenance and repair; and 4) maintains a level of service which minimizes delays, but allows for higher levels of congestion during the short peak periods on weekdays.

T-4a	Freeways and Highways. State Routes 101 and 299 are designated as freeways for their entire length in the City. State Route 255 is designated as both an arterial and a highway within the City. The following standards shall apply to these classifications: 1. Function. The function of freeways is to provide for high speed automobile and freight movement for intercity and regional travel. Freeway access is highly controlled to achieve this function. Freeway operations, design, and maintenance are under the jurisdiction of the State. Highways (Route 255) also function to move automobiles and freight at relatively high speeds with little friction from intersections and conflicting traffic. Access is controlled on highways, but not as restrictive as freeways. [See functional classification map in Figure T-a.] 2. No additional travel lanes. The City does not support development of any additional through-travel lanes to State Routes 101, 299, or 255 **in Arcata or nearby areas.** Existing and projected traffic volumes do not warrant additional lanes on these facilities. 3. Auxiliary lanes. The City does not support construction of auxiliary lanes

between existing interchanges, **or any new interchanges, on State Route 101.**

Appendix C
Arcata Pedestrian and Bicycle Plan (Relevant Excerpts)

Objective G

Provide bicycle connections outside of the city limits, linking important destinations like Eureka with Arcata.

Objective G Policy Actions

1. Work and coordinate with neighboring City and County agencies to provide integrated bikeways.

2. Integrate with trails outside of the city limits, for example: Arcata - Eureka and Arcata – McKinleyville 101 Corridor, SR 255, Hammond Trail, Annie & Mary Rail-Trail, and Pacific Coast Bike Route.

Appendix D
Eureka Strategic Visioning 2004 (Relevant Excerpts)

"The City of Eureka supports a creative approach to traffic engineering that **puts pedestrians and bicyclists first**, encourages a safe, walkable downtown, and builds community and character in our neighborhoods. To maintain these qualities as our city moves into the future, we plan to undertake the following action."
Planned actions include:
"07/10 Incorporate **walkability concepts into all** community plans and projects"
"Encourage increased use of Public Transportation"
"06/06 Provide expanded transit opportunities to **reduce vehicle dependency** in the Downtown and Oldtown districts to encourage and facilitate pedestrian mobility once they arrive"

Appendix E
Humboldt County 2006 Regional Transportation Plan Excerpts:

"The overall goal of the Regional Transportation Plan for Humboldt County is: *To develop, operate and maintain a well-coordinated, **balanced**, regionwide **multimodal** transportation system that is safe, efficient, and **provides good access** to all cities, communities, and recreational facilities, and into adjoining regions. A **balanced multimodal transportation system** includes but is not limited to highway, public transit, aviation, marine, railroads, recreation, bicycle, pedestrian, and utility systems.*"

Goal A:

"**Goal**: Build, maintain a safe and efficient highways, roadways, and streets system that will **accommodate and balance multiple modes** of transportation."

"**A-12 Policy:** Promote **equity**, cost effectiveness, and **modal balance** in programming processes."
*"Objective: Program all funds **based on multi-modal transportation needs** and priorities as established in the RTP. Prioritize and **balance projects based on cost effectiveness as well as need."***

Goal D:

"**Goal**: Create a transportation system that provides **inter-community** and intra-community **nonmotorized pedestrian, bicycle travel throughout the region.**
D-1 Policy: Develop a cohesive system of regional bikeways that provide access to and among major activity centers, public transportation, recreation, and other destinations eliminating barriers to pedestrian and bicycle travel."
"**D-9 Policy:** HCAOG recognizes the **high level of public support** for provision of a **dedicated bicycle and pedestrian facility between Arcata and Eureka.**"

Goal G:

"**Goal**: **Minimize** traffic congestion, **reliance on single occupancy vehicles,** and maximize awareness of travel options through Transportation System Management (TSM) techniques (Intelligent Transportation System (ITS); Advanced Transportation System (ATS))."
"**G-2 Policy:** Promote a **balanced multimodal transportation system** that provides **equitable levels of access for all travel modes.**"
*"Objective: Support **land use policies** that encourage intermodal transportation connections, such as encouraging **development near existing transportation services**, integrating transportation improvements with infill developments, and allowing medium- to high-density development and mixed land uses."*
"**G-3 Policy:** Promote Transportation System Management (TSM) Measures.
Objective: Encourage the use of public transit, as well as ride-sharing, carpools, vanpools, bicycle commuting, walking, and telecommuting."
"**G-4 Policy:** Implement Transportation System Management (TSM) and Transportation Demand Management (TDM) strategies where clear opportunities and benefits exist.
Objective: Implement strategies of transportation system management (TSM) and transportation demand management (TDM) to conserve energy, improve air quality, and to provide congestion relief, as an alternative to capacity improvements."

Goal H:

"**Goal**: Continue to meet the County's needs for water, natural gas, and electricity through safe, reliable, and environmentally compatible transmission systems. Plan and operate transportation systems to **reduce energy consumption** and its environmental and social impacts."
"**H-6 Policy:** Consider energy conservation in transportation decisions.

Objective: Analyze and consider energy consumption impacts when planning both new transportation facilities and the maintenance or expansion of existing facilities. Caltrans and HCAOG member preference will be given to projects that:

*• Reduce the need for vehicle trips (for example, **giving preference to mass transit**, improved air and overland bus service, electronic information transmission);*

*• Reduce per-trip energy consumption (for example, encouraging use of efficient vehicles or **pedestrian travel**, improving traffic flow) and;*

*• Promote **energy-efficient patterns of residential and commercial development.***

Energy conservation is also a key objective of transportation system management policies."

Goal I:

"**Goal**: Promote energy efficient and environmentally compatible land use patterns that foster accessibility using appropriate modes of transportation."

"**I-2 Policy:** Encourage Cities and County to plan for land use patterns that **reduce automobile miles traveled.**

*Objective: Promote and favor development and redevelopment plans that minimize the energy used for commuting, such as **higher density and mixed land uses, infill development, bicycle, transit and pedestrian oriented developments**, and increased job-to-housing balance, maximum street interconnectivity, and minimization of cul-de-sacs.*

*Objective: Higher **residential densities** shall be encouraged in areas that **are served by public transit routes and are close to major employment or commercial centers**."*

"**I-3 Policy:** Encourage major Commercial, Business, Industrial, or Mixed-use facilities to develop transportation management plans.

Objective: Transportation management plans should address energy conservation measures such as connectivity to alternative transportation modes; preferential parking for carpools, vanpools, motorcycles, mopeds, and bicycles; shuttle services; alternative fueling stations; transit passes; bike lockers; and locker room facilities.

*Objective: Management plans should include policies to encourage local employers to offer flex-time and/or shifting work schedules which **minimize employees' impacts on peak hour traffic** and to provide **incentives** for **employees to use alternatives** to the single-occupancy automobile mode of travel."*

"**I-6 Policy:** Encourage transit-oriented development.

*Objective: **Reduce automobile travel** by encouraging cities to allow high density residential and mixed land uses (i.e., residential and commercial) in urban and urbanizing areas, **integrated with public transportation**.*

*Objective: **Reduce vehicle trips and trip lengths** by encouraging a **better job-to-housing balance** in land use planning and development."*

Goal J:

Responses to Green Wheels:

1. The project need and purpose were carefully formed based on traffic safety studies prepared in accordance with accepted traffic engineering methodologies as well as Caltrans working with other public agencies such as the California Highway Patrol. For example, the causes and conditions of all collisions resulting in fatalities or serious injuries are carefully investigated both by Caltrans and the California Highway Patrol. As will be explained in the following responses, unsupported assumptions and speculation were avoided in the planning and design of the proposed project.

2. While it is true that overall Route 101 between Eureka and Arcata has a collision frequency rate lower than similar State highways, the collision rates at certain Route 101 intersections are higher than similar intersections. See Group Response I-A and Chapter 1 – Project Need and Purpose has been revised to include updated collision tables and discussion.

3. While it is true that no fatalities have occurred since the Safety Corridor was implemented, collisions resulting in injuries are increasing at certain intersection locations. It is also true that there have been fatal vehicle collisions that have occurred at other highway locations. As mentioned previously, all fatal collision incidents are investigated and recorded. If the number of fatal and injury collisions is higher than the statewide average for a similar highway, the highway segment is evaluated to determine the need for a safety improvement. In many cases motor vehicle fatalities are alcohol related that could not have been prevented by highway design standards.

4. After additional enhanced traffic enforcement ended, prevailing traffic speeds have ranged from 54 to 56 mph during non-peak travel periods within the Safety Corridor. During December 2011, speeds were measured at 54 mph. (Source: Eureka-Arcata Safety Corridor Ninth/Tenth-Year Report, May 19, 2002 through May 18, 2012. Prepared by Caltrans District 1 – Traffic Safety Office September 2012.)

5. When higher than average collisions at specific highway or intersection locations are initially found, the Caltrans Traffic Safety unit investigates specific locations by analyzing California Highway Patrol collision reports and evaluating the locations to determine if a safety enhancement project is required. Please see Grouped response I-A for a discussion of why the project is still needed despite the apparent success of the Safety Corridor.

6. Traffic volume projections are focused on travel trends as well as historic growth for each state route and not on County population trends. Consider that many vehicle trips on Route 101 originate from the community of McKinleyville, which has grown much faster in the past 20 years than the County on average and has a high residence to job ratio: consequently there would be an increase in work trips McKinleyville to areas such as Eureka where there is much higher proportion of jobs. The growth line in Figure 4 matches the current estimates of growth in Annual Daily Trips (ADT) with a Growth Factor of 1.25 predicting approximately 50,000 ADT in the year 2041. See Group Response I-B for more information.

7. Caltrans concurs that greenhouse gas production needs to be reduced and air quality improved. Public transit, ridesharing, and non-motorized transit improvements were considered early in the planning process (See Chapter 2). However, these improvements would not meet the project need and purpose to enhance safety and construct long term roadway maintenance that would benefit all transportation modes. Since collision rates are increasing and roadway maintenance deficiencies exist now, the proposed project is needed soon. See Group Response I-D for more information.

8. The proposed project would not add any vehicle carrying capacity (e.g. add new through lanes) to the Route 101 corridor. The focus of the project is to enhance safety, improve traffic operations at intersections, and constructed needed roadway maintenance improvements.

9. As stated previously, the proposed project would not add vehicle carrying capacity nor is it designed to relieve traffic congestion: therefore the project would not "encourage" additional traffic. Any future traffic increase locally or regionally on Route 101 would occur with, or without the proposed project.

10. The proposed project will not convert the expressway segment of Route 101 to a freeway. In fact, Modified Alternative 3A, the Preferred Alternative in the Final Environmental Impact Report/Study (EIR/S), includes a half signal at Airport Road and Route 101. Since the circulation of the Draft EIR/S, the proposed project has been revised to maintain the existing posted speed limit on the expressway portion of Route 101 (see Group Response III-A-1).

11. Determining the effectiveness of all improvements in the Humboldt County Regional Transportation Plan is beyond the scope of this Final EIR/S.

12. The proposed project would enhance safety and provide long term roadway maintenance needs for all travel modes. In addition, the proposed project would be compatible for future public transit and non-motorized transit improvements. Please refer to Group Response I-D for a discussion of non-motorized improvements included in the proposed project.

13. Modified Alternative 3A, the Preferred Alternative in the Final EIR/S, includes a grade separation at Indianola Cutoff, which would substantially reduce the need for traffic turn around at the Route 101/255 interchange. In addition, the City of Arcata is proposing a traffic calming and non-motorized transit improvements at and near this interchange.

14. In both the Draft and Final EIR/S, the V Street and Route 101 discussion describes intersection level-of-service (LOS) not roadway segment LOS. The EIR/S also describes year 2031 LOS. Prior to 2031 a project to resurface and re-stripe Route 101 (4^{th} Street) between O and V Streets to increase capacity to accommodate additional traffic flow is expected to be constructed.

15. The public transit estimates were very approximate early in the planning process. However, the estimate was based on accommodating projected Route 101 demand between Eureka and Arcata. The current collision rates and roadway condition indicate that the proposed project is needed. The proposed project improvements would enhance the safety for all travel modes while

maintaining and improving the basic transportation infrastructure for all travel modes. See Grouped Responses I-D and II-H regarding non-motorized transit improvements.

16. Most importantly, the mass public transit alternative would not meet the safety enhancement and roadway maintenance project need and purpose.

17. The proposed project would provide a cost effective, direct solution to meet the project purpose and need that would benefit all travel modes. While Caltrans concurs that public transit will play an increasingly important role to achieve a balanced transportation system, focusing on a public transit solution to meet the project need and purpose would be difficult and may not even be possible. It is fortunate that population centers are in close proximity to bus stops, however potential bus ridership demand is greatly affected by other factors: the number of transfers required, the distance from origin to destination, and the "headway" or time between bus trips. Any one of these factors can greatly delay a trip by affecting the other factors thereby discouraging ridership. Unlike dense urban areas such as San Francisco, housing, jobs, and schools are spread over a relatively large area in the Arcata – Eureka region; consequently the combination of travel distances, headways, and frequency of transfers make public transit options difficult and impracticable for most people—especially for families, businesses, and long distance travelers.

18. Caltrans staff acknowledges that raising parking fees could provide a substantial incentive to use public transit and non-motorized transit and commend the success of the Jack Pass program. It should be noted that a high proportion of college students are public transit dependent and have limited transit options. Raising parking fees would likely be opposed by businesses and residents.

19. See Group Response II-F.

20. State and Federal environmental regulations do not mandate the full environmental evaluation of an alternative that does not meet project need and purpose. Suggestions for public transit improvements can be directed to the Humboldt County Association of Governments (HCAOG), which annually surveys the public for public transit deficiencies.

21. The purchase and relocation of commercial property as an alternative to closing Route 101 median crossings was identified and discussed during the preliminary planning process (Idea RTC-2 of the Caltrans Value Analysis Report for the Route 101 Eureka to Arcata Corridor Improvements, 2002.) This idea was dropped because of anticipated reduction in the local tax base, possibly not meeting the project need and purpose, and anticipated opposition from the potentially affected businesses. In addition, the Route 101/Indianola Cutoff intersection serves non-business traffic since it connects to Old Arcata Road and is a key intersection approximately halfway between Eureka and Arcata: even if businesses could be relocated at the Route 101/Indianola Cutoff intersection, the intersection remains important to local traffic circulation. Finally, the collision rate at the Route 101/Indianola Cutoff has been increasing; relocating businesses at intersections would not meet the project need and purpose.

22. The commenter is correct in that the Route 255 overpass does not have complete bike lanes and sidewalks. The potential conflicts between vehicles, bicycles and pedestrians at Route 101 and Route 255 interchange is outside the purpose and need of this project. These issues would need to be addressed in a separate project.

23. These bicycle related items have been corrected in Chapter 3, Section 3.1.6 Traffic and Transportation/Pedestrian and Bicycle Facilities in the Final EIR/S. In addition, Caltrans is committed to comply with the following Federal Coastal Consistency condition: "Construction of the Route 101 Corridor Improvements will not commence until adequate commitments are in place to assure that a separate Class 1 bike and pedestrian trail, parallel to Route 101 from Arcata to the northern end of downtown Eureka, will be constructed and operational by the time the major project components are completed." See Chapter 3 in Volume of the Final EIR/S for more information.

24. Caltrans staff track and evaluate all collisions involving bicyclists that are reported by the California Highway Patrol. The Caltrans Traffic Safety unit has not identified any high collision rate locations or recurring factors contributing to collisions that require action or a safety enhancement.

25. While it is true the existing Route 101 outside shoulders serve both as an emergency parking lane and a bikeway, vehicles parked on the shoulder are generally not a daily occurrence and at some locations, can park in an emergency partially or completely off the paved shoulder. In addition, in 2013, Route 101 (between Eureka and Arcata) was restriped to provide consistent 10-feet wide outside shoulders in both directions.

26. Since the circulation of the Draft EIR/S in 2007, Old Arcata Road to the east of Route 101 was widened thereby enhancing bicycle travel safety. Caltrans is currently identifying possible traffic calming improvements in the Manila community area on State Route 255: one or more of these improvements could also enhance bicycle travel safety for bicyclists using State Route 255 as an alternative to Route 101.

27. The existing level-of-service (LOS) at the Route 101/255 ramps is A or B. Table 3- 8 in the Final EIR/S indicates a slight increase in projected traffic volumes (except for Alternative 1A) for the year 2031. The projected traffic volume increase would not lower the LOS.

28. Modified Alternative 3A would restrict access and in some cases cause out-of-direction travel, but the project would create or cause an obstruction to non-motorized transit. As discussed in the Final EIR/S and the responses to comments, Modified Alternative 3A and the proposed Arcata traffic calming project would enhance safety for non-motorized transit.

29. The Route 101/255 interchange already has a traffic circle on the east side of Route 101 that functions much like the traffic circle at the Route 101/Giuntoli interchange. On the west side of Route 101, there are too many existing businesses in close proximity to construct a traffic circle.

30. Caltrans staff acknowledges that public transit is much safer and environmentally sound than single motor vehicle transit. However the Route 101 corridor regional land use and

transportation system evolved over several decades with automobiles and trucks as the primary transportation modes. Placing a greater emphasis on public transit and non-motorized transit is important but cannot be feasibly accomplished immediately with the existing dispersed land use, current business economy, and transportation systems in place. The proposed project can be viewed as a means to improve and maintain the corridor for an eventual transition to additional public transit, non-motorized transit, and low and zero emission vehicles. Conversely, the proposed project was not designed solely for the benefit of single motor vehicle transit: all transportation modes would benefit from the project (see response 12).

31. It is acknowledged that a substantial proportion of the population does not drive and would therefore not receive any direct project benefits: however, everyone benefits directly or indirectly from a safer highway. For example, both young children riding as passengers in cars on Route 101 or elderly people relying on truck deliveries for food and medical supplies would indirectly benefit from the proposed Route 101 improvements.

The Route 101 corridor is currently accessible to bicyclists and public transit. As stated in response 20, HCAOG, the co-sponsor of the proposed project, annually surveys the public for public transit deficiencies as well as prepares the Humboldt County Regional Transportation Plan. HCAOG has not directed Caltrans to expand existing access along the Route 101 corridor.

32. The environmental studies indicate that although wetland would be permanently filled, most of the wetland fill would occur on narrow strips directly adjacent to the roadway and most of the potentially affected possesses low habitat value and function. The remaining wetland after project construction would still intercept and filter roadway runoff.

33. As documented in Chapter 3 of the Final EIR/S, the proposed project was evaluated for consistency with the General Plans for the Cities of Eureka, Arcata and County of Humboldt. Caltrans also worked closely with the HCAOG, the co-sponsor of the project and the agency that prepares the Humboldt County Regional Transportation Plan. It should be noted that the General Plans place an emphasis on local and county owned roads; Route 101 is maintained by the State as a vital transportation artery serving both regional and interregional travel, which is a very different purpose than local roads. In fact, because of the traffic carrying capacity of Route 101, it generally diverts through travelers such as commercial traffic off of local roads.

34. Regarding the City of Arcata General Plan, the facts of the proposed project include:

The project would not increase the traffic carrying capacity of Route 101;

The project would not close or restrict any intersections within the City of Arcata;

The project does not propose an interchange within the City of Arcata;

The project does include improvements that would benefit all modes of traffic.

Based on the above, the proposed project would be consistent with the City of Arcata General Plan.

35. Caltrans supports and actively participates in planning for a non-motorized trail adjacent to the Route 101 roadway between Eureka and Arcata. However, the proposed project is just one of many Route 101 projects and has a specific need and purpose and a separate trail would not meet the need and purpose. The proposed project would be compatible with a future trail. Regarding a balanced transportation facility, Caltrans is not an agency primarily responsible for providing public transit or public trails, and cannot unilaterally expand public transit. However the existing Route 101 corridor as well the proposed project would support and be compatible with expanding public transit and non-motorized transit.

36. The proposed project does not include eliminating sidewalks at any location—including on cloverleaf ramps. The existing Route 101/255 ramps have curbs that appear to create or delineate the motor vehicle travel way and sidewalks; however the curbs were originally designed for drainage purposes and are not sidewalks; the curbs actually create an uneven surface that can complicate maneuvering for all vehicles.

37. Caltrans has the primarily responsibility for the safety of the traveling public on Route 101 for all modes of transportation including pedestrians and bicyclists, which are the most vulnerable travelers. Since bicyclists and pedestrians are allowed on the Route 101 corridor between Eureka and Arcata, they receive special attention during project planning and construction as documented in Chapter 3 of the Final EIR/S. As stated previously, the proposed project includes improvements that would benefit all transportation modes.

38. After the Draft EIR/S was circulated to the public in 2007, Caltrans received numerous written comments that shared many of the same concerns as Green Wheels. Consequently, Caltrans staff addressed many concerns in the proposed project by modifying the project design to include maintaining the existing speed limits and maximizing access. Please see Chapter 2 of the Final EIR/S for a description of Modified Alternative 3A, which is identified as the Preferred Alternative. However, public safety as well as the long term integrity of the Route 101 roadway cannot be compromised. Even if the prevailing traffic speeds and volumes are not increasing on Route 101, the proposed project is still needed to eliminate the single most important cause of serious collisions: namely uncontrolled left-turn movements.

The No Build Alternative was only presented in the EIR/S as a baseline for comparing and evaluating the Build Alternatives. The No Build Alternative does not meet the project need and purpose of enhancing safety and providing long term roadway improvements.

Modified Alternative 3A is estimated to cost approximately $46 million, which is much higher than most County of Humboldt transportation projects. About half of this cost is constructing long term roadway maintenance and highway improvements over a six mile segment of four lane highway. Both the safety enhancements and highway improvements would benefit all travel modes.

Caltrans has, and will always remain a transportation partner actively participating in public transit and trail planning.

greenwheels
Humboldt's advocate for transportation choices
707.633.4488
www.green-wheels.org

c/o NEC
1465 G Street
Arcata, CA 95521

January 13, 2008

Kim Floyd
Project Manager
California Department of Transportation
P. O. Box 3700
Eureka, CA 95502 – 3700

Dear Ms. Floyd,

Thank you for the opportunity to comment on the new modified alternatives for the 101 Eureka Arcata Corridor Project. While the less expensive Alternative 1A provides an option that is somewhat more affordable, Caltrans has failed thus far to adequately justify the project or to address the impacts this project would have on non-motorized users of the corridor. 1 2

To assist the reviewer, in the first section of these comments we provide enumeration to indicate where we expect a response to comment or an answer to a question. Suggested mitigations are listed in the second section in outline format for clarity.

Issues:

Flawed Project:

As we have written before, this project is deeply flawed because of a flawed project purpose. Caltrans states that the purpose for this project, other than addressing safety at intersections, is to address operational conflicts and travel delay at the at-grade intersections. Addressing operational conflicts should not have been part of the project purpose, but one possible alternative for improving safety. Addressing delay at intersections increases the capacity of feeder roads inducing sprawl. 3

(1) Caltrans has too narrowly defined the purpose by including the elimination of operational conflicts and delay instead of just improving safety, which was the primary impetus for this project when several fatal collisions occurred on the corridor before the speed limit was reduced. These additional purposes inhibited Caltrans from seeking the most cost-effective safety solution. 3

(2) Furthermore, defining safety as the number of collisions per vehicle miles traveled (VMT) rather than a reduction in the number of collisions over time, limits planners from looking at VMT reduction strategies to improve safety by reducing the number of collisions, not just the number of collisions per traffic volume. 4

Flawed Process

We are thankful for the opportunity to comment on the two modified alternatives and the summary of environmental consequences, but there is little to no detail available on how the analysis was conducted on the modified alternatives. For example, (3) what was the numerical result from the 5

quantitative analysis which placed Alternatives 1A and 3A in the "moderate" category for "Route 101 Corridor Business Access" in the "Draft Summary of Potential Environmental Consequences" (DSPEC),[1] and (4) why have these changed for Alternatives 2 and 3 between the DEIR and the DSPEC? Alternative 2 had "moderate" impacts on business access in the DEIR and "moderate to substantial" in the DSPEC. Alternative 3 changed from "minor to moderate" to "minor." CEQA requires that the public be granted the opportunity to comment on the analysis. This analysis has changed, and must be reported in a new draft document if we are to have the opportunity to review it. 6

The DSPEC lists "pedestrian and bicycle circulation" consequences for each alternative, stating that those consequences are "minor" in Alternative 3, and "moderate" in Alternatives 2 and 3A. (5) There is no information in the DEIR, or in this later set of materials associated with the modified alternatives, that indicates how Caltrans reached this conclusion. These are unsupported claims. 7 (6) We dispute that any of these build alternatives have impacts less than substantially adverse for pedestrians and bicyclists. In every build alternative, access to Bayside Cutoff, and to Bracut businesses—such as the KOA campground that many Pacific Coast Bike Route users rely on—is restricted depending on direction of travel. Forced out-of-direction travel in all of the build alternatives will certainly result in wrong-way travel behavior by many bicyclists on the corridor. Closure of the Bayside Cutoff and Bracut Median crossings will direct motorized out-of-direction travel through the 101/255 interchange in Arcata, impacting non-motorized travel between Sunny Brae and Downtown Arcata on the Samoa Boulevard bridge, which has no pedestrian facilities and roadway facilities that are poorly designed for bicyclists. 8 (7) These impacts can and should be fully identified in the DEIR if they have not been, and mitigated. 9

Another example of inconsistency between impacts listed in the DEIR and those listed in the DPEC follows. On page 218, the DEIR lists different values for the difference in gallons of gas burned per day for each build alternative compared with the no-build alternative. These values differ in the DSPEC: 10

Document:	**DEIR**	**DSPEC**
Alternative 1	3305	3970
Alternative 2	1483	2150
Alternative 3	-605	60

There is no explanation why these numbers differ, and so it leads us to question the methodology for measuring this. (8) Caltrans must explain in the DEIR how this analysis was done, and what methodology was used, and why the results differ between the DEIR and DSPEC.

Inviting Public Comment

The public comment period on the modified alternatives was far too short to allow for substantive public input. The public comment period consisted of 17 days between the Dec 3 release of analysis results for the modified alternatives at the Open House at the Wharfinger and the Dec. 20 deadline for comments. Requests for extension by Humboldt County and by this organization have resulted in individual extensions, but no blanket extension for anyone in the public who may wish to comment. (9) Given the short timeline and multiple requests for extension why they didn't Caltrans give a public extension? 11

The information on the modified alternatives was difficult to find on the website. The DEIR was removed from the page *www.dot.ca.gov/dist1/d1projects/envdocs.htm* where it had previously been linked, and moved to the page: *www.dot.ca.gov/dist1/d1projects/eureka_arcata/reports.htm* along with the relevant information about the modified alternatives. This page was not linked from anywhere we could find on the Caltrans website, not from: *www.dot.ca.gov/dist1/d1projects/eureka_arcata/*,

www.dot.ca.gov/dist1/d1projects/, or *www.dot.ca.gov/dist1/d1projects/envdocs.htm*. We could only find the page by asking for the web address from the project manager. (10) This was a failure to live up to the intent of CEQA for analysis of all the alternatives to be available for public review. 12

Greenhouse Gas Emissions

Assembly Bill 32, the Global Climate Change Solutions Act of 2006, sets targets for the reduction of greenhouse gas emissions to 1990 levels by 2020, and 80% below 1990 levels by 2050. Transportation accounts for roughly 50% of emissions in California making this a critical sector to address in reducing emissions. While the DEIR and subsequent analysis compare the build alternatives to each other and to the no-build alternative with regard to emissions, all of these options represent a substantial increase in greenhouse gas emissions. 13

This failure to plan for the actual emissions targets, and instead merely attempt to minimize the increase in emissions presents two problems:

(11) First, spending more money on a transportation model built on the erroneous assumption of perpetual increase in VMT (see our previous comments) will leave us with less money for investing in the new type of infrastructure we need to reduce VMT. A new type of infrastructure which provides access while reducing VMT, would address safety concerns in a way that also addresses the AB32 challenge. 14

(12) Second, by comparing the alternatives under the assumption of similar travel demand for each alternative, the analysis of greenhouse gas emissions ignores the effects that different alternatives will have on land use development. Different patterns of land use development will certainly have different impacts on travel demand. Therefore the overall impact each alternative has on greenhouse gas emissions may be more related to induced development associated with each alternative than to out-of-direction travel associated with each alternative. For example, an interchange at Indianola Cutoff will likely facilitate automobile-dependent development in that area, which has no transit service, and non-walkable distances to services and jobs. This will result in emissions impacts that have not been measured in the DEIR or the DSPEC, but are emissions associated with this project. 15

Sea-level rise

On December 31, 2005, Humboldt Bay washed over 101. In other words, for a few hours this facility was already below sea-level. This should have been a clear signal to planners that sea-level rise needs to be addressed in this project. The roadway surface may be only a 20-year structure, but the proposed rebuilt bridges over Gannon Slough are 50-year structures to our understanding, and need to be designed to deal with sea-level rise. In addition, the investment in new structures, whether interchanges, realignment of the thru-lanes, extension of acceleration and deceleration lanes, or new u-turns, will last longer with maintenance than the 20-year lifespan of the pavement. (13) Caltrans must formulate a plan to protect these new structures from sea-level rise for 100 years. 13

Non-motorized connectivity:

Deputy Directive 64 which used to state that Caltrans "*fully considers* the needs of non-motorized travelers" in all planning, programming, design, construction, operations, and maintenance activities and products" was strengthened in Oct 2008 as part of complete streets legislation. The directive now reads "Caltrans *provides* for the needs for travelers of all ages and abilities…" This change from "fully considers" to "provides" represents a strengthening of the directive. No longer can planners and engineers consider and then neglect safety and access for non-motorized users. It must be provided as part of "all planning, programming, design, construction, operations and maintenance activities and products." 8

Safety for motorists is measured as the number of collisions divided by the volume of traffic. This provides a measure of the level of risk the motorist faces at a given intersection, or, when divided by distance, a level of risk per mile driven on a given roadway. The level of risk a cyclist faces using this facility is unknown, because Caltrans has not measured the number of cyclists roadway users. The number of cyclists using the corridor has not been counted in 9 years. When it was counted, it was by a separate organization. Without a measure of the number of cyclist roadway users, there is no measure of collisions per bicyclist volume, which would help ascertain the risk a cyclist faces traveling the corridor. (14) The failure to even measure the most basic metric of non-motorized safety represents a failure to satisfy the old language for Deputy Directive 64, ("fully considers all users") and the new language ("provides for.") 16

(15) The modified alternatives further deteriorate connectivity for non-motorized users. The u-turns in Alternative 1A would be difficult for a bicyclist to use since motor traffic using the same facilities would be traveling at higher speeds in the same lane, and a bicyclist would be required to merge across 2 lanes of 55 mph traffic twice, rather than just once across 2 lanes of 50 mph traffic as bicyclists must do now to turn left. With several long out-of-direction travel distances required to reach places along the corridor, it is reasonable to expect that many bicyclists will travel the wrong way on the shoulder for long distances to get where they need to go more directly instead. For example, in Alternatives 1A and 3A where no left turns are allowed from Airport Road onto Southbound 101, many if not most cyclists will ride the wrong way on the Northbound shoulder in order to reach Eureka rather than ride an additional 2.3 miles (Alt. 1A) or 3.6 miles (Alt. 3A) to reach either the u-turn or the interchange where a turnaround is possible. This type of behavior will be common at Bayside Cutoff and Bracut in all build alternatives. 17

While Caltrans can choose to compare the impacts to non-motorized users in the DSPEC and has attempted to do so, to be clear, these impacts are consistent with Appendix G of the CEQA code. XV. d) "substantial increase in hazard due to a design feature" describes the following hazards:

- Increase in traffic volume on the Samoa Blvd. Bridge which has inadequate pedestrian and bicycle facilities and hazardous hook-ramps. 18
- Increased speed differential between motorists and non-motorized users due to the increase in speed limit. 19
- Frequency of wrong-way riding on the facility by non-motorized users due to loss of connectivity. 20

In addition, impacts to non-motorized users fit with Section XV. g) "Conflict with adopted policies" including Deputy Directive 64, discussed above, as well as language in local general plans cited in our previous comments and in the DEIR. 8

Coastal Access

Two critical aspects to coastal access are general connectivity to allow for coastal access from communities east of 101 discussed in the previous section and the California Coastal Trail.

In its funding of the Arcata Coastal Rail with Trail project which connects Arcata to Bracut, partway along the Eureka Arcata 101 Corridor, the State Coastal Conservancy recommended working with Caltrans to develop trail access. Meanwhile, the California Coastal Commission has formalized comments requiring complete trail planning as part of mitigation for this highway project. Caltrans shared in the visioning process for the Eureka Arcata Humboldt Bay Trail and has staked a position of being in support of it. (16) Therefore, Caltrans must ensure that this project does not render future trail development in this corridor infeasible. We outline below what mitigations would be required to ensure this Caltrans project does not negatively impact the trail project. 21

Our Take on the Alternatives

All the build alternatives will require substantial mitigations or alterations to recreate the non-motorized connectivity that will be lost by closing the median crossings. Without these mitigations (outlined below) each build alternative will worsen conditions for non-motorized users. If the mitigations outlined below cannot be provided, we continue to recommend the no-build alternative. 8 20 22

While fundamental flaws in this project remain, amongst the build alternatives now on offer, Alternative 1A offers the greatest cost savings, and strikes a balance between disincentivizing development at Indianola Cutoff, while not generating inordinate amounts of out-of-direction travel for motorists nor inordinate traffic volume increases on Old Arcata Road and Myrtle Ave. The drawback of increased out-of-direction travel should be weighed against the potential for inducing more automobile-dependent development and resultant emissions which an interchange would precipitate at Indianola Cutoff. 15

Mitigations required:

Non-motorized connectivity:

1) Mitigate for impacts (described in issues section) caused by the closure of Bayside Cutoff and Bracut Median Crossings (All Build Alternatives): 23

a) Class I multi-use trail from Bayside Cutoff to Bracut on east side of 101.

b) Non-motorized undercrossing at Bracut 5

These measures will allow cyclists entering 101 at Bayside cutoff to proceed south, will allow access to both sides of Bracut for non-motorized users, and will make the proposed Arcata Coastal Rail-with-Trail facility accessible at Bracut for northbound cyclists. The slightly higher elevation at Bracut makes an undercrossing possible, and bicyclists need far less clearance than motor-vehicles. This makes it an opportunity to provide a non-motorized crossing at fairly low cost.

2) Mitigate for closure of median crossing at Indianola Cutoff (Alternatives 1 and 1A):

Non-motorized over-crossing at Indianola Cutoff.

If such a bridge would cost $4 million as was estimated to us by Caltrans Staff, it is substantially cheaper than a full-blown interchange which would cost between $11 million and $25 million. 9

This median crossing is particularly important, since it provides access to the Humboldt Area Foundation, the only major foundation in our region. Many people who need to access the foundation have limited access to automobiles. There are no plans for transit service to Indianola Cutoff, so bicycle access is critical for those who do not own motor-vehicles.

3) Mitigate for Cole Avenue and Airport Road median crossing closures and restrictions (All alternatives):

Class 1 multi-use trail from the west end of Jacob's Avenue to 6th Street. Portion on 101 northbound bridge over Eureka Slough should be completed when bridge is replaced. For now it would connect with existing sidewalk on northbound bridge. 24

This mitigation is particularly important for low-income residents in the Jacobs Avenue neighborhood, many of whom do not own cars.

Sea level rise / Coastal Access / California Coastal Trail

The plan for dealing with sea level rise dictates the appropriate mitigation for the California Coastal Trail. There are two scenarios. 13 5

The first strategy is to protect the 101 by enhancing the North Coast Railroad Authority-owned levy between 101 and the bay. If this strategy is undertaken, Caltrans shall enhance the levy in a way that

accommodates a Class I multi-use trail. It is up to Caltrans to negotiate with NCRA as to how this will be accomplished.

The second strategy is to raise the level of 101, either gradually as it undergoes maintenance, or as part of this project. If this strategy is undertaken, Caltrans needs to ensure that it is not rendering future trail development infeasible. Therefore Caltrans shall establish that a Class I multi-use trail is fully feasible outside the Caltrans right-of-way in the face of wetland constraints and sea level rise challenges to the trail. This will require Caltrans to conduct all design, engineering and permitting for the trail to fully establish its feasibility. A recent feasibility study of the Eureka Arcata Humboldt Bay Trail[2] did not definitively establish the trail's feasibility. A setback between the railroad track centerline and the edge of the trail was assumed to be 8'6" in the completed study. This narrow setback is not permitted under current NCRA draft rail with trail guidelines (*www.northcoastrailroad.org/Acrobat/Web%20Trail%20Guidelines.pdf*), and is unlikely to be permitted under final guidelines. The preeminent document on rail-with-trail design, *Rail-with-Trail: Lessons Learned* recommends 10 feet as a typical minimum setback in constrained sections (*www.fhwa.dot.gov/environment/rectrails/rwt/section5a.htm#s5d*).

13

5

If Caltrans cannot establish full feasibility of a class I multi-use trail from Eureka to Arcata, this project must allow space for the trail within the Caltrans right-of-way in a location where it has demonstrated full feasibility of the trail.

Thank you for considering our comments.

Sincerely,

Chris Rall – Executive Director
Green Wheels

CC:
Assemblyman Wes Chesbro
State Senator Pat Wiggins
Humboldt County Board of Supervisors
Eureka City Council
Arcata City Council
Humboldt County Association of Governments
Eureka City Operations
Arcata Public Works

[1] Draft Summary of Environmental Consequences, *www.dot.ca.gov/dist1/d1projects/eureka_arcata/summary_env_impacts.pdf*

[2] Humboldt Bay Trails Feasibility Study, *www.nrsrcaa.org/baytrails/*

Responses to Greenwheels:

1. Chapter 1 of the Final Environmental Impact Report/Statement (EIR/S) discusses the project justification in terms of the project need and purpose.

2. Section 3.1.6 in Chapter 3 of the Final EIR/S includes a discussion of the project effects on bicyclists and pedestrians.

3. Intersection level of service (LOS) and enhancing safety are fundamentally interrelated: eliminating the single most important collision factor, uncontrolled left turn moves, would improve intersection LOS. Improving intersection LOS would not increase capacity of local roads since the only way to add vehicle carrying capacity would be to add through traffic lanes and the proposed project does not include adding lanes to local roads. The project could, however, increase the number of vehicles on local roads after the Route 101 medians are closed depending on the alternative. See Section 3.1.6 in Chapter 3 of the Final EIR/S for more information.

4. Comparing the statewide average of collisions per million vehicles for similar highways is just one tool Caltrans uses to evaluate traffic safety. When there are a recurring number of collisions above the statewide average at one or locations, Caltrans staff investigate the locations looking at California Highway Patrol reports and other factors. While it is true in theory that collisions could be reduced by substantially lowering the overall traffic volumes, such an undertaking would require major lifestyle, land use, and public transit changes which require considerable time and costs. The proposed project is needed within a three to five year timeline or less to enhance safety and construct roadway improvements.

5. After an initial evaluation of Alternatives 1A and 3A, it was determined that their impacts were similar or less than the three Build Alternatives in the Draft EIR/S. While it is true all the environmental documentation was not presented at the December 3, 2008 meeting, the purpose of the public meeting was intended to present Alternatives 1A and 3A and solicit feedback. The Final EIR/S includes a comprehensive evaluation of all five proposed Build Alternatives.

6. When the Draft EIR/S was approved and circulated to the public, Caltrans staff and the consultant preparing the study made preliminary findings based on qualitative and quantitative analysis. For example the out of direction travel data is an example of quantitative analysis. Interpreting comments from local business owners is an example of qualitative analysis. From the time of the Draft EIR/S to the Final EIR/S, the analysis methodology did not change, but the findings changed based on feedback from the public and business owners.

7. Chapter 2 of the Final EIR/S includes an alternatives analysis comparing the bicyclist and pedestrian benefits and drawbacks of the five Build Alternatives.

8. The consequences of access restrictions for bicyclists are similar to all transit modes as discussed in Chapter 3 of the Final EIR/S. However, the proposed project is anticipated to actually create more favorable bicycle conditions compared to the existing roadway. For more information see Group Response I-D. Please also see the posted speed limit discussion in Group Responses III-A-1 and 2.

9. While it is true that under Modified Alternative 3A bicyclists would no longer be able to make left turn moves to access Route 101 at all intersections, Modified Alternative 3A provides enhanced safety with Route 101 crossing locations at heavily traveled locations

of Airport Road and Indianola Cutoff. Constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata would minimize out of direction travel for all vehicles and pedestrians.

10. The energy consumption discrepancy has been resolved in Section 3.2.8 Energy in Chapter 3 of the Final EIR/S. The methodology has not changed since the Draft EIR/S.

11. The comment period was flexible since individuals could contact the Caltrans Project Manager after the close of the comment period. And unlike the comment period of the Draft EIR/S, there was much less project information presented during the December 2008 comment period.

12. Caltrans staff regrets any confusion accessing project information on the internet; however the project information was presented at a public meeting and contact information was provided for individuals who could not attend the meeting. There was no deliberate attempt to withhold information from the public.

13. See Chapter 4 of the Final EIR/S which includes an expanded discussion of greenhouse gas production and sea level rise.

14. Comment noted. Even if the future traffic volumes remain constant, the proposed project is needed to address safety concerns and the deteriorating highway infrastructure. The proposed improvements would benefit both motorized and non-motorized transit as well as public transit.

15. The fundamental safety concern at Indianola Cutoff is uncontrolled left turn moves. See Chapter 1 for a summary of the collision rate at this location. Any measure to eliminate left turn moves across traffic lanes would generally remove the traffic constraint for more intensified development at the Route 101/Indianola Cutoff intersection area. There are other constraints to increase in development density such as lack of a sewer line at this location. Caltrans staff concurs with the position that greenhouse gas emissions need to be curtailed. Transportation and land use planning need to be integrated to achieve this objective.

16. As mentioned in response 4, the average statewide collision rate for similar highways is just one tool that Caltrans engineers use to evaluate safety issues. The California Highway Patrol shares full collision reports, including factors that contributed to the collision, with Caltrans. Caltrans engineers in turn record, map, and analyze bicycle collision information looking for possible trends.

17. Caltrans staff generally concur that Alternative 1A would present challenges to bicyclists. Alternative 1A was designed in response to a request for an alternative to constructing a new grade separation at Indianola Cutoff.

18. Modified Alternative 3A is not expected to increase traffic on State Route 255. See 3.1.6 in Chapter 3 of the Final EIR/S for more information. Caltrans staff is currently working

with the Manila community on traffic calming options which would likely decrease traffic on State Route 255.

19. After project construction, the posted speed limits will remain the same as the existing posted limits but the posted speed limits may need to be adjusted pending the outcome of traffic speed surveys. See Group Responses III-A-1 and 2 for more information.

20. Project construction would not result in a "loss of connectivity" for bicyclists. After project construction of Modified Alternative 3A, connectivity of Route 101 to all existing local roads and State Route 255 would remain; however left turn and crossing moves would be eliminated at Mid City Motor World, California Redwood, Bracut, and Bayside Cutoff. Overall, the project would enhance safety for bicyclists since uncontrolled left turns would be eliminated and bicyclists would have the opportunity to cross or turn left on Route 101 at Airport Road and Indianola Cutoff.

21. Caltrans staff participates in trail planning efforts and will design the proposed project to be compatible with future non-motorized transit projects.

22. The No Build Alternative would not meet the project need and purpose. Please refer to Group Response I-A and Chapter 1 of the Final EIR/S, which has been revised. Also see Group Response II-B regarding maintaining the Safety Corridor.

23. The proposed grade separation at Indianola Cutoff would minimize out of direction travel and the elimination of left turn and crossing moves would enhance bicyclist safety.

24. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, does include a half signal that would allow left turn moves for both motorists and bicyclists to and from Airport Road.

HUMBOLDT BAY BICYCLE COMMUTERS ASSOCIATION

Our goal: To improve and encourage bicycle commuting
P.O. Box 9054, Eureka, CA 95502-9054

September 26, 2007

Mr. Rod Parsons
Chief, Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Re: EUREKA-ARCATA ROUTE 101 CORRIDOR IMPROVEMENT PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT

Dear Mr. Parsons:

This letter reflects our concerns regarding the alternatives under consideration for the Eureka-Arcata Corridor, as stated in the Draft EIS/EIR

The Humboldt Bay Bicycle Commuters Association has worked for the last 25 years toward its goal, which is "to improve and encourage bicycle commuting." In applying that goal to the alternatives currently under consideration for the Eureka-Arcata Corridor, we find that none of the alternatives helps work toward that goal, and in fact, each would have an adverse impact on the needs of those who choose to use a bicycle as a mode of transportation. 1

The Arcata/Eureka corridor is the most heavily used state highway section for bicyclists in Humboldt County. This is a critical facility for bicycle commuters, and accommodating cyclists helps reduce motor vehicle trips, reduces maintenance needs, reduces air pollution, and improves the health of the community. 2

Increasing the speed limit from 50 to 65 will likely increase average speeds by about 20 mph. Most traffic currently is traveling close to 50 mph. If the speed limit is increased to 65, we can expect the average traffic to be near 70 mph based on what has occurred on other sections of freeway on the north coast. With speeds near 70 mph, bicyclists in this heavily traveled corridor will be more likely to be involved in a collision due to inattentive motorists. This certainly will not encourage more bicyclists to consider commuting along the corridor. The shoulder currently used by cyclists is the first place disabled motor vehicles park, and is often littered with debris. Cyclists must occasionally maneuver into the travel lane to negotiate around shoulder blockage or hazards. With a 65 mph speed limit, the ability to do this safely is reduced, and the reaction time of motorists is significantly reduced. 1, 3

All alternatives, except the No Build, result in median closures and create out-of-direction travel, which is stated to be "less than 10 percent of total travel in the corridor" and is deemed "insignificant" in the Draft EIR/EIS. If the total is near 10 percent, all being made up of 4

motorists who work, shop or seek services in the corridor, this is significant. In fact, a 10 percent increase in traffic would be equivalent to five years of expected traffic growth occurring on Day 1 of the new highway. This will increase rather than decrease congestion. A purpose of the project is to "Reduce delay at intersections", yet all of the "Build" alternatives will require significant out-of-direction travel, resulting in longer trip times.

For bicyclists, the impacts are **very** significant. Consider bicyclists who had been commuting from the Bayside area to Eureka daily via Route 101. They would now be faced with a 4-mile out-of-direction trip north to the Samoa Boulevard Interchange. After negotiating the cloverleaf, they would then begin their trip to Eureka. While that would be significant for a motorist, adding 5 minutes to a regular trip, for a bicyclist the added time for the commute would be more like 20 minutes! Remember the controversy with the campaign "Give up a minute for safety", when the issue of 50 mph versus 60 mph was debated? Some motorists weren't willing to accept that kind of delay. By closing the median to crossing traffic, bicyclists will be faced with giving up 10 to 20 minutes on their trips. 5

The alternative for bicyclists would be to use Old Arcata Road, currently with no paved shoulders from Three Corners to Bayside. Even when widened, one cannot look forward to an adequately maintained roadway for bicyclists as evidenced by the roadway from Three Corners to Eureka for which Mother Nature has reclaimed at least half of the shoulder. Bicyclists must negotiate rocks, berry bushes, potholes and a ragged pavement edge along the edge stripe in many areas. When having to take the traffic lane to avoid debris, bicyclists must worry about heavy traffic and poor sight distance. The Ryan Slough Bridge on Old Arcata Road is also occasionally icy, resulting in a hazardous commute for cyclists. In addition, Old Arcata Road enters Eureka about 2 miles from the Hwy 101 corridor, which will also add time to a cyclist's commute to downtown locations. 5

Some end points do not allow for the use of Old Arcata Road. Consider bicyclists who commute to Mid City from Eureka. With Alternatives 2 and 3 the return trip would require them to go north to the Indianola Interchange before going south, adding another 2 miles to the trip. Similar situations would occur for those traveling from Arcata to the Mill Yard; from Arcata or Eureka to Bracut; and to the Farm Store or Carl Johnsons (if no traffic signal were provided). 5

It should also be anticipated that closing the medians could result in more cyclists riding the wrong way on the highway shoulder to get to their destination rather than riding miles out-of-direction. For example, a cyclist riding from Arcata to The Mill Yard would be tempted to ride back to Arcata on the wrong side to avoid riding to Indianola. If the Airport Road signal is not constructed, a Eureka resident riding to Jacobs Avenue would be similarly tempted to ride back the wrong way. This would certainly reduce safety for all users, including other cyclists. 6

We are also concerned about the proposal in Alternative 3 to add a continuous third northbound lane between Cole Avenue and Mid City Motor World. This auxiliary lane would be hazardous to cross, and would likely reduce the available shoulder for cyclists. The current acceleration lane at Mid City results in a very narrow shoulder. 7

Mr. Rod Parsons
September 26, 2007
Page 3

We believe that Caltrans is obligated under its own policies to provide equal or better service to bicyclists in conjunction with new highway construction. In the absence of provisions for improvements, such as a separate bike path, the Humboldt Bay Bicycle Commuters Association must reluctantly endorse the No Build Alternative. A parallel Class 1 bike path will encourage many more cyclists, and potential cyclists, to commute the corridor by bike. If a project is undertaken, we believe serious consideration should be given to maintaining the 50 mph speed limit from Indianola to the Eureka Slough Bridge, especially if a traffic signal is to be installed at Airport Road. 1, 3, 8

For bicycle commuters, all of the "build" alternatives are a disaster, and set the accommodation of bicycles on the corridor back 30 years or more.

Sincerely,

Scott Kelly, President

cc: Board of Directors, Humboldt Bay Bicycle Commuters Association
Humboldt County Board of Supervisors
Eureka City Council
Arcata City Council
Humboldt County Association of Governments

Responses to Humboldt Bay Bicycle Commuters Association:

1. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would enhance bicycle transit by eliminating uncontrolled vehicle crossing movements at Route 101 median openings and constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata to provide safe access and crossing of Route 101. Also the proposed southbound Route 101 Jacoby Creek Bridge was redesigned to include an 8-feet wide barrier separated travel way for bicyclists and pedestrians. In addition, the proposal to raise the posted speed limit immediately after construction for any of the proposed Build Alternatives has been dropped.

Since the approval of the Draft EIR/S in 2007, the following improvements were completed to enhance bicycle safety:

- Bicycle awareness signs were posted in both directions within the Route 101 corridor between Eureka and Arcata. These signs were designed to alert motorists of the presence of bicyclists riding on Route 101.

- In 2013, Caltrans restriped the Route 101 roadway to provide consistent 10-feet wide outside shoulders in both directions.

- In 2010, rumble strips were installed along the outside shoulders of Route 101 to alert vehicle drivers of drifting beyond the lane. The rumble strips would also be audible to bicyclists and alert them that a motor vehicle was drifting onto the shoulder. The rumble strips will be reinstalled during construction of the proposed Eureka – Arcata Corridor Improvement Project.

Caltrans acknowledges many bicyclists are intimidated or feel uncomfortable riding adjacent to high speed motor vehicle traffic and that a separated path would encourage bicycle commuting. Bicyclist needs and improvements have been considered from project initiation for all build alternatives. As a separate project, Caltrans is committed to fulfilling the following Federal Coastal Consistency condition: "Construction of the Route 101 Corridor Improvements will not commence until adequate commitments are in place to assure that a separate Class 1 bike and pedestrian trail, parallel to Route 101 from Arcata to the northern end of downtown Eureka, will be constructed and operational by the time the major project components are completed."

A bicycle and pedestrian path would not meet the need and purpose of the project to enhance safety by eliminating left-turn movements at intersections and resolving long-term roadway maintenance needs. Bicycle transit, even with improved bus transit, cannot reasonably offset projected growth in traffic volume to justify constructing a commuter path instead of the proposed Route 101 improvements.

There is insufficient roadway width for a barrier separated bicycle/pedestrian corridor on either side of the highway or median without filling in wetland or encroaching into railroad right-of-way or wildlife refuges: consequently, adding a bicycle and pedestrian path component to the project would dramatically increase wetland impacts and the overall cost of the project. In addition, incorporating a new bicycle/pedestrian path into the project would have delayed the project several years when there is a pressing need to address highway safety and roadway maintenance concerns.

Caltrans is an active participant on the Humboldt Bay Trail Planning Team. Caltrans is supportive of the effort to develop separated non-motorized trails adjacent to Route 101 between Eureka and Arcata and have committed that no elements of the Arcata-Eureka Corridor project will preclude development of a bay trail. Route 101 shoulders will remain open to cyclists both during and following project construction.

Caltrans, where feasible, supports trail options described in the 2007 Humboldt Bay Trails Feasibility Study. Any one of the proposed project Build Alternatives would not preclude constructing a bicycle/pedestrian bay trail. Additional non-motorized traffic information has been added to Section 3.1.6 – Traffic, Transportation/Pedestrian, and Bicycle Facilities in Chapter 3.

2. Comment noted. Caltrans staff concurs with the stated bicycling benefits. The proposed Preferred Alternative, Alternative 3B, would provide a substantial safety benefit for the vast majority of both motorized non-motorized transit while balancing cost and wetland impact considerations.

3. See Group Responses III-A-1 and 2.

4. While it is true that Alternative 1 would substantially increase out-of-direction travel and delay, it would have the least wetland impact while meeting the project need and purpose. However the proposed Preferred Alternative, Modified Alternative 3A, includes a half-signal at Airport and a grade separation at Indianola Cutoff, which are the two busiest Route 101 intersections. Consequently, Modified Alternative 3A would have similar out-of-direction and delay results as the No Build Alternative in the year 2030. It should be noted that even though all of the Route 101 roadway medians are expected to remain open, traffic volumes are expected to rise from 39,000 in 2013 to 54,000 by the year 2038. As a result, without any improvements, delay at these median intersections is expected to increase as well as out-of-direction travel compared to the current conditions under the No Build Alternative scenario.

5. Before addressing the project effects of delay and out-of-direction travel on bicyclists, the existing Route 101 situation needs to be explained:

- Currently bicyclists turning left or crossing Route 101 at the existing medians must cross multiple traffic lanes and wait in unprotected medians while avoiding motor vehicles that are also using the same median to complete crossing and left turn moves from the same and other directions. It is likely many bicyclists and pedestrians are discouraged from using the existing medians for this reason alone.

- Most commuting bicyclists tend to ride between Eureka and Arcata and not cross or turn left across Route 101 while traveling on Route 101 because most residences and jobs are located within these two cities. Recreational bicyclists on Route 101 are also not likely to cross or turn left on Route 101 since there are no public coastal/bay access points between Eureka and Arcata. For these reasons and because of the aforementioned safety concerns, bicyclists and pedestrians are seldom seen using the medians to cross or turn left.

After the proposed Preferred Alternative (Modified Alternative 3A) is constructed, bicyclists would have consistent 10-foot wide outside shoulders in both directions; uncontrolled left-turn movements would be eliminated; a signal at Airport Road and a grade separation at Indianola Cutoff would provide safer crossings and left-turns than the existing uncontrolled medians. Airport Road and Indianola Cutoff likely have the most demand for crossing and left turns than the other median locations. In addition, the Indianola Cutoff is located approximately midway between Eureka and Arcata, which provides a logical turn around location. It is acknowledged that Modified Alternative 3A would eliminate four of six existing median openings for bicyclists to use resulting in a small proportion of bicyclists traveling out of direction; however, the overall benefits would outweigh the drawbacks. As traffic volumes increase in the future, especially during peak travel periods, the proposed improvements of Modified Alternative 3A would have increasing benefit.

If Modified Alternative 3A were in place, bicycle commuters traveling southbound from Bayside could ride south on the now wider Old Arcata Road south and turn west onto Indianola Cutoff and access Route 101 on a grade separation to continue traveling south to Eureka.

Overall, there are trade offs to consider and weigh; no one alternative will completely resolve all issues for all motorists and non-motorists; even with an unlimited budget, frontage roads and bicycle lanes could be constructed, but would require filling wetlands and potentially adversely affecting the adjacent wildlife refuges. Modified Alternative 3A would provide a substantial safety benefit for the vast majority of both motorized non-motorized transit while balancing cost and wetland impact considerations.

6. Comment noted, however, it could be argued that the temptation to ride against traffic is always present since Route 101 is a divided highway and as stated in response 5, can be intimidating to cross.

Modified Alternative 3A includes a half-signal at Airport Road, which would allow bicyclists to turn left from Airport Road to travel south on Route 101 to Eureka.

7. Modified Alternative 3A is the proposed Preferred Alternative and does include a northbound auxiliary lane.

8. The No Build Alternative would not meet the project need and purpose of enhancing safety, improving traffic operations, and implementing long term roadway maintenance.

HUMBOLDT BAY BICYCLE COMMUTERS ASSOCIATION

Our goal: To improve and encourage bicycle commuting
P.O. Box 9054, Eureka, CA 95502-9054

December 16, 2008

Kim Floyd
Project Manager
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Re: EUREKA-ARCATA ROUTE 101 CORRIDOR IMPROVEMENT PROJECT

Dear Ms. Floyd:

This letter reflects our comments on the two new alternatives Caltrans has presented for the Arcata-Eureka Route 101 Corridor Improvement Project.

In general, the Humboldt Bay Bicycle Commuters Association believes the two new alternatives, Alternatives 1A and 3A, **result in negative impacts** to bicycle transportation on the corridor. Most of the comments presented in our letter dated September 26, 2007 regarding the Draft EIR/EIS have not been adequately addressed. We need to again emphasize that none of the alternatives helps to improve and encourage bicycle transportation, which we believe is an important objective to incorporate into regional transportation projects given the numerous factors that attest to the environmental, health and economic viability of this mode of transport. In fact, all of the alternatives pose a greater threat to bicyclist safety than the current situation. 1

Following are our specific comments on the proposed new alternatives.

Alternative 1A will remove median crossings for cyclists at Airport Road, Mid-City, Indianola Cutoff, Bracut, and Bayside Cutoff. Cyclists entering from the east side of the highway and wishing to travel south will be required to travel north to a turnaround location. The two proposed U-turns will require cyclists to cross two lanes of traffic, enter the U-turn with motor vehicles, and enter the southbound lanes from an acceleration lane on the left side of the highway. Even for the most experienced cyclists, this will be a dangerous maneuver requiring quick action and fast speeds, negotiating with motor vehicles trying to make the same movements at much higher speeds than cyclists. Alternatively, cyclists would have to wait on the 8-foot wide shoulder, standing perpendicular to traffic, to check for gaps in traffic. This would place them in a more vulnerable position as opposed to standing at a normal intersection. The potential for collisions will be high in either scenario, and will likely result in serious or fatal injuries to the un-protected cyclist. For less experienced cyclists, these crossings will be overwhelming, and they will choose other means or modes of transportation. The proposed U-turns would be a terrible choice for cyclists, and we strongly object to this alternative. 2

Cyclists entering the highway from Bracut or Bayside Cutoff will be required to travel out of

direction for several miles to Samoa Boulevard, then go up and over the interchange and re-enter the highway heading south. This will deter nearly all cyclists from these roads. We believe many cyclists currently enter Highway 101 at Bayside Cutoff going to Eureka. We also know that many touring cyclists stop at the KOA campground at Bracut. Under Alternative 1A they will be required to ride all the way back to Arcata to re-enter Highway 101 southbound. This interchange itself is a problem for most cyclists, lacking substantive shoulders and being the site of intensive merging traffic movements. Cyclists traveling south and wishing to get to the KOA from Highway 101 will see it on the other side of the median, but won't be able to get to it without traveling further south to the U-turn at California Redwoods, and then doubling back. Some cyclists, not knowing where the turnaround is, might be tempted to cross the median. Others may simply continue on, hoping to find another spot to camp.

Alternative 3A creates most of the same problems for cyclists. Those entering the highway from Airport Road or Mid-City will be required to travel out-of-direction to the proposed Indianola interchange, cross under the highway, then re-enter the highway heading south. Cyclists entering the highway from Bracut or Bayside Cutoff will have the same problems as in Alternative 1A described above. 3

Both Alternatives 1A and 3A result in significant negative impacts to existing bicycle transportation in the corridor. They will result in reduced safety at the crossings, and more out-of-direction travel. What may be a minor inconvenience to motorists will be a major impediment to bicyclists. This is particularly disappointing since our organization has been working for many years to improve and encourage bicycle commuting; this corridor is and has been of particular interest to our membership. The proposed alternatives will set these efforts back many years at a time when more people than ever are looking to drive less and choose healthier commute options. 4

We also object to the proposal to increase the posted speed limit in the corridor. Even increasing the speed limit from 50 to 55 will likely increase average speeds by about 10 mph according to Caltrans' estimates. Vehicle speed has probably the greatest effect on safety in the corridor, so it would seem inconsistent with the stated Purpose and Need of the project to raise the speed limit. This certainly will not encourage more bicyclists to consider commuting along the corridor. The shoulder used by cyclists is the first place disabled motor vehicles park, and is often littered with debris. Cyclists must occasionally maneuver into the travel lane to negotiate around shoulder blockage or hazards. With a higher speed limit, the ability to do this safely is reduced, and the reaction time of motorists is significantly reduced. 1

Without significant mitigation, all five of the build alternatives will result in significant negative impacts to bicycle transportation. We request that Caltrans seriously consider looking at several possible measures that could result in non-motorized transportation improvements. First, it may be possible to construct a parallel bike/pedestrian path on the east side of the highway from Bayside Cutoff to Bracut, and construct an over- or under-crossing to provide access to the southbound lanes, and to the potential future Bay Trail. We also encourage Caltrans to consider leaving some form of the existing median crossings to accommodate bikes/pedestrians, while 4 5

removing crossings for motor vehicles. We also strongly request that the speed limit in the corridor be kept at 50 mph. In fact, we support reducing the speed limit all the way through Arcata, where some of the most hazardous off-ramps and on-ramps are located. These ramps are particularly difficult for bicyclists to safely negotiate. Finally, we support the widening of the paved shoulders within the corridor to 10 feet. The wider shoulders allow cyclists to maintain a greater distance from motor vehicles, and they allow more room for cyclists to maneuver around stranded vehicles parked on the shoulder. 1

For bicycle commuters, all of the "build" alternatives are a disaster, and set the accommodation of bicycles on the corridor back 30 years or more. We realize that Caltrans staff has suggested the overpass alternative at Indianola will better accommodate cyclists. However, this alternative will create a situation where cyclists will either have to utilize the off- and on-ramps and cross Indianola traffic to avoid crossing the ramps, or to cross those ramps with traffic traveling near 65 mph. This design is accompanied by higher speeds and closure of other crossing opportunities that also reduces bicycle commuting safety for aforementioned reasons. 6

We are disappointed that Caltrans has not collected new data on bicycle transportation within the corridor. The only such data we know of, collected by RCAA, is over ten years old, and does not address all the movements impacted by the proposed alternatives. This information is critical to good planning. We strongly encourage Caltrans to invest in collecting the information before making any decisions about a preferred project. 7

We believe that Caltrans is obligated under its own policies to provide equal or better service to bicyclists in conjunction with new highway construction. In the absence of provisions for other improvements, such as a separate bike path, the Humboldt Bay Bicycle Commuters Association must reluctantly endorse the No Build Alternative. 1 8

Rather than invest millions of limited transportation dollars in a flawed concept, we suggest that the original Purpose and Need statement be revisited to address a more comprehensive goal, such as improved and safer transportation for **all** users of the corridor, rather than just motor vehicles. We realize this is no small undertaking at this juncture, however the corridor and community interests in this regard have changed significantly since the inception of the project. 9

Sincerely,

Scott Kelly

Scott Kelly, President
Humboldt Bay Bicycle Commuters Association

cc: Board of Directors, Humboldt Bay Bicycle Commuters Association
Humboldt County Board of Supervisors
Eureka City Council
Arcata City Council
Humboldt County Association of Governments

Responses to Humboldt Bay Bicycle Commuters Association:

1. Please see Group Response I-D and also see the posted speed limit discussion in Group Responses III-A-1 and 2.

2. Comment noted. Partly for the same reasons described, Alternative 1A was not selected as the Preferred Alternative. Modified Alternative 3A is the Preferred Alternative identified in the Final Environmental Impact Report/Statement (EIR/S).

3. Subsequent to the December 3, 2008 public meeting, Alternative 3A was modified to include left turns to and from Route 101 and is now referred to as Modified Alternative 3A. Modified Alternative 3A includes a grade separation at Indianola Cutoff, which is approximately midway

between Eureka and Arcata and would minimize out of direction travel from left turn and Route 101 crossing restrictions. Bicyclists needing to access Route 101 to and from Bracut and Bayside Cutoff could use a combination of the recently widened Old Arcata Road, Indianola Cutoff, and Bayside Cutoff to minimize out of direction travel and avoid turning around at the Route 101/255 interchange in Arcata. Bicyclists needing to turn right to and from Route 101 would not be subject to out of direction travel. Overall, bicyclists would benefit from enhanced safety throughout the Route 101 Corridor between Eureka and Arcata from the project, while balancing cost and wetland impact considerations. As traffic volumes increase in the future, especially during peak travel periods, the proposed improvements of Modified Alternative 3A would have increasing benefit.

4. Humboldt Bay Bicycle Commuters Association appears to primarily advocate commuting between work and home. Since there are far more residences and businesses located in Eureka, Arcata, Bayside, and the Indianola Area compared to the number of businesses and residences directly adjacent to Route 101, the overwhelming majority of bicycle commuters would benefit from the safety enhancements of Modified Alternative as described in response to comment 1.

5. For a discussion of bicycle improvements, please see Group Responses II-B, II-E, II-F, II-G, and II-H.

6. Caltrans staff would advise all bicyclists traveling on Route 101 to exit at Indianola Cutoff and then using the on ramp if they need to proceed on Route 101. Using the on and off ramps would avoid crossing paths with motor vehicles. Crossing Indianola Cutoff from the off ramp is not expected to be difficult since the ramps would intersect Indianola Cutoff, a two lane conventional street, at a conventional intersection. As stated in response 1, the posted speed limit after construction will not be 65 mph.

7. Chapter 3 of the Final EIR/S (Volume I) includes bicycle count and collision data. Caltrans performed motor vehicle, bicycle, and pedestrian counts during the re-design of the Route 101/Airport Road intersection for Modified Alternative 3A. Caltrans has, and will continue to collect and analyze bicycle collision reports from the California Highway Patrol.

8. The No Build Alternative would not meet the project need and purpose. Please refer to Group Response I-A and Chapter 1 of the Final Environmental Impact Report/Statement (EIR/S), which has been revised. Also see Group Response II-B regarding maintaining the Safety Corridor.

9. The existing project need and purpose in the EIR/S already encompass safety enhancements, intersection operation improvements, and roadway rehabilitation improvements that would benefit both motorized and non-motorized transit.

HUMBOLDT BAYKEEPER®

September 28, 2007

Kim Floyd, Project Manager
California Department of Transportation
P.O. Box 3700
Eureka, CA 95502-3700

Re: Eureka-Arcata 101 Corridor Improvement Project

Ms. Floyd:

On behalf of the board, staff and supporting members of Humboldt Baykeeper these comments are submitted regarding the combined Draft Environmental Impact Statement/Environmental Impact Report (DEIS) for the proposed Eureka-Arcata 101 Corridor Improvement Project ("the Project"). Humboldt Baykeeper appreciates the effort that has been expended by your staff and the environmental review that has been conducted. We appreciate the opportunity to present you with our concerns regarding this Project.

Inadequate Alternatives Assessment

Alternative 5, the safety corridor as a long-term solution, should be re-examined as the most feasible and environmentally protective alternative. The amount of funding for additional enforcement and public awareness campaigns is minimal compared to the amount of public funding that will be used to build any of the proposed alternatives. Double fine zone legislation can be renewed. The DEIS states that it does not meet the safety criterion, since it could result in higher percentage of fatal injury collisions than state average, yet the fact is that there have been no fatal injury collisions since the safety corridor was established. It appears that the safety corridor continues to be effective even though enhanced enforcement, public awareness campaigns, and double fines for speeding have expired. Statistics on collisions in the safety corridor before, during, and after these "features" existed should be included for public review and comment. Assessing the effectiveness of the U.S. 101 safety corridor based on a review of safety corridors in other areas of the state are inadequate when local statistics should be readily available.

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WATERKEEPER ALLIANCE MEMBER
217 E Street • Eureka, CA 95501 • 707.268.0664 (P) • 707.268.8901 (F) • www.humboldtbaykeeper.org

Growth Inducing Impacts

Both CEQA and NEPA require review of whether the approval of a proposed project would result in increased growth or changes in growth patterns. Section 3.1.2 of the DEIR/S evaluates whether the Project may result in such growth inducing impacts. Due to the potential for growth inducing impacts to the area along and to the east of the Project, we must support the adoption of Alternaive 7, the No Action Alternative.

The analysis of potential growth inducing impacts states that only Alternatives 2 and to a lesser degree 3 would have the possibility to result in any growth inducing impacts. DEIS at 79. The document goes on to state that

> "However, any new development near the Indianola Cutoff intersection would require permits and environmental review. Therefore, for the aforementioned reasons, although possible, it is not reasonably foreseeable that any of the project alternatives would likely induce substantial growth or indirectly create an incentive to develop large-scale development…"
> DEIS at 81-82

As an initial matter, we must disagree with staff's assessment that only Alternatives 2 and 3 have the potential to induce growth, and specifically disagree with the assessment that none of the proposed alternatives, other than Alternative 7, "(w)ill attract more residential development or new population into the community or planning area." DEIS at 78. By increasing the public's perception that the 101 corridor is "safer" development pressures in all of the communities east of 101 will increase. Though the 101 corridor is not the only access to these areas, it is the main artery that connects them to both Eureka and Arcata. Further, the fact that "permits and environmental review" would be required for any further development is an insufficient basis under CEQA for not performing a complete and thorough environmental review of potential growth inducing impacts.

Reuse of Soils Contaminated with Lead Levels that Exceed Hazardous Waste Criteria

Humboldt Baykeeper additionally has concerns regarding the possible onsite reuse of soils that are contaminated with aerially deposited lead. DEIS at 183. The entirety of the Project is located on filled wetlands. It is essentially located within the historic footprint of Humboldt Bay. The water table in this area is exceptionally shallow, and in many areas in the winter can rise to levels almost at the surface. Soils contaminated with lead, a water soluble substance, at levels that exceed hazardous waste criteria should not be reused in such a sensitive area. There are additional concerns regarding the potential for road surface failure in large storm or earthquake events that could result in the discharge of these contaminated materials directly into the Bay, a result that could occur even if such soils are "encapsulated" prior to reuse.

The DEIS does not adequately discuss the cumulative impacts of either removing or reusing in place soils that contain lead at levels that exceed the hazardous waste criteria.

The document merely states that the Project "would have a net positive cumulative environmental effect relating to hazardous substances that presently exist in the project corridor: this is because any one of the project Build Alternatives would remove hazardous substances from the shallow soils within the road shoulders and median areas and, then either encapsulate the material via a California Department of Toxic Substances Control variance or dispose the material at an approved disposal facility." DEIS at 184. This discussion is inadequate as to the potential cumulative effects. 6

Impacts to Wetlands and Waters Adjacent to the Project 7

Inadequate information is provided in the DEIS as to the mitigation that will be performed to compensate for the impacts to wetlands and other waters in the Project vicinity. Humboldt Baykeeper must therefore encourage the adoption of the No Action Alternative. 12

Though the DEIS for the Project states that impacts to wetlands will be mitigated, the DEIS does not identify the particular mitigation that will actually be undertaken. CEQA guidelines, 14 C.C.R. §15126.4(a)(1)(B), states that where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. The DEIS discusses five conceptual mitigation strategies for wetland impacts but does not clearly identify what particular action(s) would be undertaken or what standards will be applied in determining which measure would be selected. DEIS at 254-270. The CEQA guidelines state that "(f)ormulation of mitigation measures should not be deferred until some future time." 14 C.C.R. §15126.4(a)(1)(B). The mitigation measures for wetlands impacts clearly violates this CEQA requirement. 8

Though the DEIS assigns low value to the wetlands within the Project area, these wetlands and waters do in fact provide important functions and value to the local environment. Water fowl and wading birds such as egrets and herons are regularly seen feeding in the wetlands and waters adjacent to the Project, even within the median area. Waters adjacent to the Project are known habitat for threatened or endangered species such as tidewater goby, Coho Salmon and Chinook Salmon. Additionally, these areas are adjacent to, though not entirely contiguous with, four important wildlife areas and refuges. 13 10

The low wetland value is assigned to these wetlands due to three factors: their proximity to the roadway, the fact that some of them are mowed on a regular basis, and that they are not contiguous with other wetland areas. DEIS at 256. These factors should not be considered determinative of the value placed on these wetlands. Additionally these factors should not be considered when identifying the mitigation that will be chosen for the Project, should the Project go forward. Depending upon the Action Alternative selected there will be anywhere from 3.89 to 15.41 acres of wetlands impacted. As it is impossible to accurately determine the true value and function provided by any wetland, any mitigation should increase the total area, as well as the wetland function and value, not simply result in "no net loss". CEQA requires that any mitigation measure for a 14 15 11

project be roughly proportional to the impact of the proposed project, 14 C.C.R. §15126.4(4)(B), a low value should not be assigned to the wetlands and waters that will be impacted in order to avoid implementing appropriate mitigation measures.

These wetlands adjacent to the Project also serve an important function as sinks for sediment and toxicant retention. The DEIS states that the majority of the stormwater runoff from the 101 corridor leaves the area as sheet flow. DEIS at 170, 172-173. This sheet flow drains directly into these adjacent wetlands and waters where any toxicants that might be found have the opportunity to be filtered out prior to final discharge into Humboldt Bay. This is an important function that needs to be more fully considered in the environmental review for the Project. 16

Botanical Scoping

Several special status plant species known to occur in the project area[1] are not addressed in the Affected Environment section (page 272). The following species have the potential to occur within and/or adjacent to the project area, are protected under 14 CCR §15380 (d), and should be addressed in the DEIS: 17

Scientific Name:	Common Name:	CNPS List:
Montia howellii	Howell's montia	2.2
Puccinellia pumila	dwarf alkali grass	2.2
Sidalcea malviflora ssp. *patula*	Siskiyou checkerbloom	1B.2
Sidalcea oregana ssp. *eximia*	coast checkerbloom	1B.2
Viola palustris	marsh violet	2.2

Impacts to Special Status Plant Species

Impacts to documented occurrences of Humboldt Bay owl's clover (*Castilleja ambigua* ssp. *humboldtiensis*) and Point Reyes bird's beak (*Cordylanthus maritimus* ssp. *palustris*) are not adequately addressed. Avoidance of occurrences at Gannon Slough only considers possible effects due to mechanical impacts. Changes in hydrology and sedimentation rates could alter the elevation and other characteristics of the salt marsh that could result in expansion of the invasive Chilean cordgrass (*Spartina densiflora*), to the detriment of the rare plant populations. Impacts to two other rare plant occurrences—one at the Northwest margin of Eureka Slough in another west of the Route 101 right-of-way in Eureka Slough—are not addressed in the Environmental Consequences section (DEIS at 273). 18 19 20

Impacts to suitable (unoccupied) habitat for these two species should also be addressed since they are both annual plants with a high likelihood of colonizing in expanding into 21

[1] California Department of Fish and Game, Natural Diversity Database. Nov. 2002. Special Vascular Plants, Bryophytes, and Lichens. Biannual publication, Mimeo. 150 pp. Online Quadviewer visited on Sept. 25, 2007. <http://www.dfg.ca.gov/whdab/html/cnddb.html>

unoccupied salt marsh. Both species are semi-parasitic, and the current extent and potential impacts to their host species should also be addressed.[2]

Impacts to Rare Natural Communities

Northern Coastal Salt Marsh is a rare natural community that is known to occur within and adjacent to the project area.[3] Rare natural communities are those communities that are of highly limited distribution. Rare natural communities may or may not contain rare, threatened, or endangered species.

Impacts to plant communities that either support or are dominated by one or more rare, threatened or endangered species should therefore be addressed during environmental review.[4] Section IV (b) of the Checklist asks if the project would have a substantial adverse impact on a "*sensitive natural community identified … by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*"

Northern Coastal Salt Marsh is a rare natural community identified by the Department of Fish and Game, and it is also a plant community that supports one or more rare, threatened or endangered species. Therefore, impacts to Northern Coastal Salt Marsh within and adjacent to the project area should be addressed in the DEIS. 22

Impacts of Invasive Species

Potential impacts related to expansion of the invasive species Chilean cordgrass (*Spartina densiflora*) and common reed (*Phragmites australis*) are not adequately addressed in the DEIS. 23

Changes to physical and biological properties of Northern Coastal Salt Marsh that could encourage colonization and/or expansion of Chilean cordgrass should be addressed, since such changes would have significant negative impacts on rare plant species and/or rare plant communities within and/or adjacent to the project area. Such changes can include but are not limited to: changes in hydrology, stormwater runoff quantity and quality, timing/seasonality of stormwater runoff, salinity, tidal fluctuations, sedimentation rates, and elevation of salt marsh. 22

The common reed occurrence on the east side of Route 101 poses a unique quandary in that this species is known to respond to mechanical disturbance with aggressive 23

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[2] Marvier, Michelle A., and David L. Smith. 1997. Conservation Implications of Host Use for Rare Parasitic Plants. *Conservation Biology* 11: 839-848.
[3] List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database, Sept. 2003. California Department of Fish and Game, Sacramento, CA; California Department of Fish and Game, Natural Diversity Database. Nov. 2002. Special Vascular Plants, Bryophytes, and Lichens. Biannual publication, Mimeo. 150 pp. Online Quadviewer visited on Sept. 25, 2007. <http://www.dfg.ca.gov/whdab/html/cnddb.html>
[4] Wagner, Keith G. 2003. CEQA and Rare Vegetation Communities. California Native Plant Society's Vegetation Program - Sampler newsletter. Sacramento, CA.

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expansion via rhizomatous growth.[5] Further detail as to methods for controlling the spread of this species should be addressed.

Conclusion

Humboldt Baykeeper appreciates the opportunity to present these comments for your consideration. Inadequate information has been presented to support the need for this Project, especially considering the limited funds available and other important areas in need. Based upon the reasons discussed above, we urge the approval of Alternative 7 – the No Action Alternative.

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Thank you,

Pete Nichols
Director
Humboldt Baykeeper

Michelle D. Smith
Staff Attorney
Humboldt Baykeeper

Responses to Humboldt Baykeeper:

1. Alternative 5 was dropped from consideration primarily because this alternative would allow uncontrolled left turn movements at the Route 101 median crossings. Eliminating left-turn movements are the single most important safety enhancement feature of the proposed project.

2. Currently prevailing highway speeds are over 50 mph (see response to comment I-C). The speeds within the corridor are not expected to decrease after project construction. Permanent funding of police departments for additional enforcement on Routes 101 and 255 cannot be provided through any of the funding sources associated with the Eureka-Arcata Route 101 Corridor Improvement Project. Previously, temporary police enforcement on the corridor had been funded through an Office of Traffic Safety (OTS) grant. Reapplying for an OTS grant could provide temporary funding for police enforcement efforts in these areas in the future. Suggestion to maintain the Safety Corridor with enhanced traffic enforcement has been made to the Humboldt Council of Governments (HCAOG).

3. Although there have no collisions involving fatalities since the inception of the Safety Corridor, collisions have been rising at two of the intersections. See Chapter 1 for a revised and updated project need discussion. See Chapter 2 of the Final Environmental Impact Report/Statement (EIR/S) for more information about Alternatives 5.

4. See Group Response I-A.

5. The intent of presenting safety corridor data from other regions was presented as another means of evaluating the Eureka-Arcata Route 101 Safety Corridor: the actual collision data for the subject safety corridor carries the most weight.

6. Soil containing Aerially Deposited Lead (ADL) will be handled according to standards of the California Department of Toxic Substances Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils as described in Section 3.2.5. Soils below the threshold for the agreement may be used within the Indianola interchange structure, and excavated soils above the threshold will be transported to a Class I or II waste facility. The commenter is correct in that this is not a "cumulative" impact, it is a direct impact. That language in the EIR/S was adjusted accordingly.

7. The Final EIR/S has been revised to state all proposed alternatives have the potential to remove a constraint to intensification of development near the Route 101/Indianola Cutoff intersection. Alternatives 2, 3, 3A, and 3B that include a grade separation at Indianola Cutoff would provide much better access to future commercial development than Alternatives 1 and 1A.

8. Growth indirectly resulting from transportation improvements is a complex topic with several variables besides transportation and undeveloped or rural areas. Caltrans has constructed safety enhancement projects on the California north coast as well throughout California and intensification of growth or growth in outlying areas does not consistently result from safety enhancements. It is true that removing building a new grade separation to access previously inaccessible land sometimes indirectly leads to substantial growth. However in the case of the Route 101/Indianola Cutoff area the road access currently exists; there is a limited area of zoned commercial; there is a lack of sewer connection; and there is no evidence of strong development demand in outlying areas.

Finally, Caltrans is ultimately responsible for public safety on all State highways and public safety takes precedence over all other considerations.

9. Section 3.1.2 Growth in Chapter 3 of both the Draft and Final EIR/S contain all relevant research for predicting growth potential. For example, Section 3.1 Human Environment includes surrounding land uses, development trends, demographic data, General Plan information and other information relevant to growth.

10. Caltrans staff is cognizant of the presence of aerially deposited lead in soil and the proximity of ground water within the Route 101 corridor. The California Department of Toxic Substance Control (DTSC) issued an ADL variance to the Caltrans District 1 region that allows for reuse of soil with hazardous waste levels of lead if specific conditions are met. Variance requirements regarding management and placement of the soil will be carefully followed: this includes no reuse within 5 feet of groundwater, no reuse where the pH of soil is less than 5, no reuse when soil may leach more than 150 mg/l lead, and using the conservative 90% Upper Confidence Limit (UCL) statistical approach for evaluating lead concentrations according to DTSC's SW-

846 guidelines. Soil reused under the DTSC Variance will be covered with a minimum of 1.0 feet of soil.

Removing all ADL contaminated soil from the project site to prevent ADL release in the event of a large storm or earthquake would not be feasible and would result in a much larger area of wetland disturbance compared to the proposed project. If the ADL contaminated soil was encapsulated, it would be less likely to be washed away during a large storm event.

11. The cumulative impact section for hazardous waste has been revised as follows: Construction of any one of the proposed Build Alternatives would not result in creation of hazardous substances and would therefore not contribute to cumulative impacts. Regarding aerially deposited lead in soil that is excavated during project construction, the project would not have a cumulative impact since the excavated soil will be reused in full compliance with California Department of Toxic Substances Control variance or the soil will be disposed at an approved disposal facility.

12. The Final EIR/S includes an updated, revised conceptual mitigation plan that identifies specific mitigation proposal. A summary of the conceptual mitigation can be found in Section 3.3.2 Wetlands and Other Waters of the United States in Chapter 3 of the Final EIR/S.

13. Caltrans staff acknowledges the high wetland value and function of the wildlife refuges within the overall Route 101 Eureka – Arcata corridor. Nonetheless the location of wetland filling by the proposed project occurs predominately within isolated areas of the roadway median and areas immediately adjacent to the edge of the existing roadway pavement where the wetland value and function are relatively low.

14. Caltrans staff biologists followed accepted protocol for determining wetland and value as well as consulting with public resource agencies.

15. When determining the appropriate level of wetland mitigation, the value and function of the wetland impacted is one, but not the only consideration. Caltrans staff concurs that the mitigation area should be larger than the area of impact. Caltrans staff has and will continue to work with staff from public resource agencies to develop and refine the wetland mitigation plan.

16. Caltrans staff acknowledges the importance of wetlands in terms of enhancing water quality. Section 3.2.2 Water Quality and Storm Water Run-Off in Chapter 3 of the Final EIR/S has been revised to include an analysis summary of the project potential effects on water quality.

17. These species were not found during floristic surveys of the project area.

18. Section 3.3.3 Special Status Plant Species in Chapter 3 of the Final EIR/S has been revised to address project effects and measures to avoid or minimize harm. The bridge widening work at the northbound Gannon Slough Bridge has been dropped from the project.

19. The project is designed to perpetuate the existing drainage to avoid any increase in sedimentation.

20. Section 3.3.3 Special Status Plant Species in Chapter 3 of the Final EIR/S has been revised and expanded to address project effects to special status plants occurring within or near tidal areas—including Lyngbye's sedge.

21. Caltrans staff and consultants surveyed the biological study area and evaluated the project effects on any sensitive plant populations present at the time of the survey: this is the accepted protocol. It is unlikely that an area with suitable conditions for one or more sensitive plants would not already be occupied by the sensitive plants.

22. The Final EIR/S includes a discussion of potential projects effects and proposed mitigation to Estuarine Intertidal Wetlands, which in turn includes Northern Coastal Salt Marsh.

23. Common reed (*Phragmites australis*) occurs in only one location within the project limits. Caltrans will remove the common reed as a separate undertaking.

24. Compared to the Draft EIR/S, the Final EIR/S includes substantial additional information, including measures to avoid and minimize harm. The No Build Alternative, Alternative 7, would not meet the project need and purpose and is presented in the Final EIR/S for as a baseline for comparison purposes only. Consequently it is not a viable project alternative

HUMBOLDT BAYKEEPER®

April 13, 2010

Mr. Charles Fielder, District 1 Director
Ms. Kim Floyd, Project Manager
California Department of Transportation
P.O. Box 3700
Eureka CA, 95502

Re: Eureka – Arcata 101 Corridor Improvement Project, Draft EIR/EIS SCH # 2001092035

Mr. Fielder and Ms. Floyd:

The following comments are submitted on behalf of the board and staff of Humboldt Baykeeper, and supplement the comments already submitted by this organization on September 28, 2007 regarding the combined Draft Environmental Impact Statement/Environmental Impact Report (DEIS) for the proposed Eureka-Arcata 101 Corridor Improvement Project ("the Project").

Since the time of our original review of the DEIR/DEIS prepared for this proposed project it has become increasingly clear the extent of potential impacts on our local community from global climate change and the resultant sea level rise. A recent review of the DEIR/DEIS shows that the document completely ignored this important area of concern. As the location of the project clearly lies within an area that will be impacted by changes in sea level, as well as by the predicted increase in severe storm events, this is an impact that must be analyzed in any environmental review document prepared for the project, and the DEIR/DEIS must be recirculated to include this analysis. A brief outline of our concerns are included below. 1 2

The stretch of highway that is subject to the proposed project all lies below the year 2000 mean higher-high water elevation, and any sea level rise is likely to greatly affect the corridor. As we saw with the New Years storms of 2005/2006 which overtopped the railroad levee and partially flooded the corridor, any changes in sea level will have a negative impact upon this stretch of the 101 corridor. 3

In addition to the direct effect of sea level rise upon the physical structure, there are concerns related to sea level rise and the need to protect the wetlands that are adjacent to the proposed project location. As the need to protect this corridor become more pressing with the changes caused by sea level rise increases there will likely be increased impacts to wetlands due to increased dredging and filling in order to maintain this corridor. Furthermore, the construction will impede the availability and ability of these wetlands to perform their natural function of 1

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flood attenuation. These potential impacts were not disclosed or analyzed in the DEIR/DEIS and the document needs to be recirculated.

Humboldt Baykeeper appreciates the work conducted by CalTrans on this project and looks forward to seeing a recirculated draft EIR/EIS.

Regards,

Michelle D. Smith
Staff Attorney, Humboldt Baykeeper

Responses to Humboldt Baykeeper:

1. Caltrans staff acknowledges the importance of planning for sea level rise. Although sea level rise can be anticipated, how local, regional, state, and federal agencies and governments will respond to sea level rise is very difficult to predict. Route 101 between Eureka and Arcata is an existing facility and the proposed project would be improved to address immediate needs with relatively non-substantial wetland fill; the project would not preclude or be incompatible with future improvements to address sea level rise. It is possible there are sea level rise adaptation options and technology that are not currently viable but will be in the future. Clearly Caltrans as Lead Agency cannot predict with any degree of accuracy what adaptation strategies will be available or how local, regional, state, and federal agencies would implement these strategies in the coming decades, much less predict wetland impacts resulting from these strategies: it would be speculative to do so. See Chapter 4 of the Final Environmental Impact Report/Statement (EIR/S) for more information.

2. Chapter 4 of the Draft EIR/S circulated in 2007 did include a discussion of sea level rise. Since the circulation of the Draft EIR/S, the Final EIR/S includes additional sea level rise discussion, but the findings and conclusions have not changed since Draft EIR/S was circulated: consequently the Draft EIR/S will not be re-circulated.

3. Caltrans staff concur that sea level rise could eventually result in adverse effects to the roadway. However, the surface of the Route 101 travelled way between Eureka and Arcata is clearly not below the current mean higher high water (MHHW) elevation; the MHHW is the average of the higher high water elevation of each tidal day observed over the National Tidal Datum Epoch. If the travelled way were below the MHHW, the bay would frequently overtop the railroad and road. The highest tides are currently about elevation 8.7 feet. The existing roadway is approximately at elevation 11 feet, which is above the highest tides; it is true that some sections of the Route 101 roadway median are below high tide elevations of the adjacent Arcata Bay, and tidal water can accumulate above the surface of the median. Unusually strong

winds occurred during the 2005/2006 winter storms, which formed large waves on the bay to overtop the railroad and roadway.

Jacoby Creek Land Trust

Post Office Box 33 • Bayside, California 95524 • 707-822-0900
jclandtrust@yahoo.com www.jclandtrust.org

Kim Floyd
Caltrans
P.O. Box 3700
Eureka, CA 95502-3700

December 16, 2008

Dear Kim,

The board of the Jacoby Creek Land Trust (JCLT) is very concerned about the 101-corridor project and how it will adversely effect the Bayside Community, as well as negatively effect bicycle commuters, the Eucalyptus trees, and the northern Humboldt Bay region in general. Please take into account the following points:

1. The alternatives currently considered by Caltrans will dramatically increase the amount of traffic from Arcata through Bayside past the Jacoby Creek School, and from Bayside to Indianola, causing a daily and dangerous traffic problem for the school and the Bayside community's neighborhoods along Old Arcata Road. A four-foot wide road shoulder is not safe for young bicyclists, and probably not safe for adults, due to the tendency of drivers to park in, and sometimes drift onto, the shoulder. 1

2 All of Caltrans' current alternatives increase energy consumption (1) because of extra miles residents of Bayside must travel backtracking to Arcata or to Indianola in order to travel to Eureka; and (2) because bicycle access is cut off and the extra miles to bicycle to Arcata to travel to Eureka will discourage bicycling. In addition, Caltrans proposes no bicyclist or pedestrian safety improvement to the on and off ramps at the Samoa overcrossing where some bicyclists are redirected, additionally increasing the hazard they face attempting this route. 2

3. Consider installing a roundabout at each 101 intersection where uncontrolled access is a safety problem and maintain the 50 miles per hour speed limit, instead of the much more expensive and energy intensive alternatives presented December 3rd. This approach addresses traffic control and motorist speed far better than any of the currently considered alternatives. 3

4. Continuing the 50 mph speed limit instead of increasing it to 65 mph is far better not just for safety but also because it results in far fewer carbon emissions. 4

5. It is important to the JCLT that Caltrans' analysis of this project includes the rising sea level from global warming. The alternative proposed above, which relies upon simple improvements will make minimal changes with maximum safety improvements, thereby 5

conserving public funds while the question of the appropriate response to sea level rise is further studied.

6. In 2001, the Bayside Grange invited Caltrans representatives and representatives from the City of Arcata and the County of Humboldt, to speak to a full hall of Bayside residents. The one question that Caltrans, the City of Arcata, and the County of Humboldt were asked to address was, "What are the combined and cumulative effects that the transportation plans of these three government entities have on the community of Bayside?" Are the three agencies coordinating carefully toward a goal of community building rather than destroying the historic community of this area? The draft EIR cannot be determined to be adequate or complete without addressing this overarching question. 6

7. State and Federal law require Caltrans to fully consider and provide for the needs of non-motorized travelers, including pedestrians, bicyclists, and the disabled, in all plans, projects and construction. Caltrans policy calls for the implementation of multi-modal planning from the earliest planning stages, through project plans, permits and the construction stage. The U. S. Department of Transportation makes it federal policy to assure the increased safety of bicyclists and pedestrians. Because the EIR fails to address the significant impacts to these travelers, it fails to comply with this State and Federal law. This failure is particularly egregious for this project because of the extraordinarily limited, and similarly significantly impacted, alternative routes available to travelers in the Eureka-Arcata corridor. In these times when new, green infrastructure is critical for climate change protection, national security in lowering reliance on imported oil, and for greater health benefits – JCLT believes that non-car modalities should be not only just explored in the EIR, but taken seriously in planning for our transportation future. 7 8

8. Finally, since none of the above has been adequately addressed and the public needs sufficient time for input on this critical project, extend the comment period so that more people will have an opportunity to respond. The current deadline of December 20th is during the busiest holiday season of the year and not timed for an authentic process to invite active public input. Please notify me before December 20th of the date for the extended time. 9

Thank you for your consideration.

Respectfully,

Susan Ornelas

Susan Ornelas
Executive Director
Jacoby Creek Land Trust

Responses to Susan Ornelas, Jacoby Creek Land Trust Executive Director:

1. See Group Response A-III-4.

2. Modified Alternative 3A includes a grade separation at Indianola Cutoff, which is approximately midway between Eureka and Arcata and would minimize out of direction travel from left turn and Route 101 crossing restrictions. Other alternatives to further minimize out of direction travel, such as constructing frontage roads, were evaluated but dropped from consideration because of high right-of-way acquisition costs and wetland

impacts within wildlife refuges. Bicyclists needing to access Route 101 to and from Bracut and Bayside Cutoff could use a combination of the recently widened Old Arcata Road, Indianola Cutoff, and Bayside Cutoff to minimize out of direction travel and avoid turning around at the Route 101/255 interchange in Arcata. Bicyclists needing to turn right to and from Route 101 would not be subject to out of direction travel. Overall, bicyclists would benefit from enhanced safety throughout the Route 101 Corridor between Eureka and Arcata from the project, while balancing cost and wetland impact considerations. As traffic volumes increase in the future, especially during peak travel periods, the proposed improvements of Modified Alternative 3A would have increasing benefit.

3. Roundabouts at intersections were considered during the initial project planning and design process; however roundabouts were dropped from consideration for several reasons. The diameter of the roundabout to accommodate commercial trucks and maintain an acceptable level of service would extend beyond the existing right of way: consequently right of way acquisition requirements, cost, and wetland impacts to construct a roundabout would be similar to constructing a grade separation without the benefit of enhanced safety for pedestrians and bicyclists that a grade separation would provide. In addition, because the high traffic volumes on the Route 101 through lanes would need to be periodically stopped to allow the low traffic volumes on local road traffic to enter the roundabout, many drivers would likely switch to State Route 255 or Old Arcata Road for travel between Eureka and Arcata.

4. Since the public circulation of the Draft EIR/S in July 2007, the proposal to raise the speed limit to 65 mph on the expressway segment of Route 101 has been dropped. Please also see the posted speed limit discussion in Group Responses III-A-1 and 2.

5. Chapter 4 of the Final EIR/S includes a revised and expanded section on sea level rise.

6. Caltrans, the City of Arcata, and the County of Humboldt are members of the Humboldt County Association of Governments which programmed the safety enhancement component of this the proposed project. See Chapter 2 of the Final EIR/S for more information. Regarding the project effects on Bayside, Modified Alternative 3A is not expected to substantially increase traffic on Old Arcata Road. See Response 2 and Section 3.1.6 Traffic in Chapter 3 of the Final EIR/S for more information.

7. Planning and the evaluation of project effects to non-motorized transit (including pedestrians, bicyclists, and persons with disabilities) were fully considered for the proposed project. Since the Draft EIR/S was approved in 2007, the proposed project has been revised to address many bicyclists' concerns. See Group Response I-D for more information.

8. For a discussion of bicycle improvements, please see Group Responses II-B, II-E, II-F, II-G, and II-H. For a discussion of public transit improvements, see Group Responses I-D, II-A, II-E, and II-F.

9. Caltrans staff regrets the perceived short comment period. However the public notice, project brochure, and Caltrans website include contact information and we encourage the public to contact the Caltrans Project Manager for questions and comments after the comment period closes.

September 28, 2007

Caltrans
Program/Project Management
Attn: Kim Floyd
P.O. Box 3700
Eureka, CA 95502-3700

Dear Kim:

Thank you for the opportunity to review and comment on the Eureka – Arcata Route 101 Corridor Improvement Project.

Wrong Problem

We believe the wrong problem is being studied. The purpose and need of this project is stated to be safety, traffic operating conditions, long-term roadway maintenance, and highway design standards. While all this is commendable, it is clear that a comprehensive, multimodal transportation solution would better meet the needs of the region. 1

We therefore believe the Draft EIR should be withdrawn, and a new one prepared that includes the integration of bicycle, rail, pedestrian trail, and bus rapid transit. While it has been suggested and generally agreed upon that such a project is desirable, to undertake it separately is inefficient, and all the suggested alternatives, including Number 7, the No Build, would almost surely look different in such circumstances. Combining the two initiatives into a single project would provide for more a far more optimal solution, and could save many millions of dollars. 1

The same logic used to justify combining the Route 101 Corridor Safety Improvement project with the RRR work (page 30) applies to combining this with a Bike/Hike/Trail initiative. These include minimizing wetland impacts, simplifying coordination with public agencies, minimizing construction activities, achieving efficient traffic management during construction, achieving a higher degree of compliance with the Federal Highway Administration policy of setting logical project termini of sufficient length to address environmental matters in a broad scope, ensuring a higher degree of independent utility. All of these would be accomplished with a combined initiative. 1 2

Questionable Project Elements

So while we believe the EIR is fundamentally flawed in that it has the wrong purpose and need, the document as prepared has other problems. Many conclusions are reached using fuzzy logic and questionable data. Support for some conclusions are based on a number of value analysis studies that were done before the Safety Corridor was implemented, and now have questionable validity. Some of the more recent value analysis work appears to been done without adequate public participation, such as the 2005 Value Analysis which 3 4 5 6

the EIR states was done entirely with Caltrans personnel. It is this study which attempts to justify the removal of numerous large trees within the nine-meter "clear recovery zone", despite the very high environmental impact that would result. 7

Because of this decision to combine the RRR project with the Route 101 Corridor Safety Improvement project, all three "build" alternatives include the RRR work. Many of the items listed under this portion of the project are easily justified, and have minor environmental impact. Three of these, however, differ in that their environmental impact is large, and the benefit cost ratio is questionable.

Specifically these are (with original numbering from pages 33-34 of the EIR)

1) Extend or establish the existing Route 101 right-side acceleration and deceleration lanes at the following intersection locations listed from south to north in Table 2-1. The intersections are Cole Avenue, Mid-City Motor World, Simpson Sawmill, Indianola Cutoff, Bracut, and Bayside Cutoff.

These are not all equal in value or impact. In particular the proposal to establish acceleration and deceleration lanes for the Simpson Mill would necessitate the removal of approximately 300 mature eucalyptus trees. The amount of traffic entering and exiting this facility is small, and there is no record of an accident having ever occurred at this intersection. This item does not therefore appear environmentally justified. Even if the other acceleration and deceleration lanes are constructed, this one should be dropped from consideration. 7 8

2. Close all remaining Route 101 median crossings consisting of: Airport Road, Mid-City Motor World, Simpson Sawmill, Indianola Cutoff, Bracut, and Bayside Cutoff.

This item clearly cannot be supported as a "stand alone" item because of its economic impact. It is discussed as part of the Route 101 Corridor Safety Improvement project and is therefore out of place in this context. 9

11. Remove existing large trees within the corridor that are within the nine-meter (thirty feet) clear recovery zone.

The proposal to remove all trees within the clear recovery zone is not fully justified due to the resulting environmental damage. The EIR shows the partial removal of the eucalyptus tree row still has High Impact even after mitigation. While it is entirely possible for some trees to pose an excessive hazard and have their removal justified, the "all or nothing" approach suggested here is not satisfactory. We believe a tree-by-tree analysis will show that the eucalyptus trees should remain, and only selected trees on the east side pose a hazard. 10

<u>Failure to Adequately Address All Feasible Alternatives</u>

We have serious problems with the Alternatives Considered but Dropped from Further Consideration portion of this EIR (pages 42-45).

The logic used to drop alternatives 5 and 6, and PSR Alternative Y2 is vague, poorly documented, and laced with unsupported conjecture. 11

The traffic volumes predicted for Route 101 between Eureka and Arcata are not supported by either historic growth patterns, or projections by the California Department of Finance for population growth. 12

Simply stating that "Continual funding of additional enforcement would require an ongoing financial commitment by HCAOG, Caltrans Office of Traffic Safety Programs, the state Office of Traffic Safety, or the California Transportation Commission with funding approvals by the State Legislature in many instances" does not mean this cannot be done. 13

Most of the remaining arguments for dropping these alternatives from consideration are disingenuous. The argument set forth here that these alternatives do not meet Need and Purpose are speculative or based on unsubstantiated assertions. 11

Examples include (italics added) with brief comments:

"Left turn movements *could* result in a higher percentage of fatal plus injury accidents than the State average." 14

This is speculative.

"The slower posted speed limit … result in operational conflicts." 15

No support for this assertion and it seems counter-intuitive.

"The LOS on Route 101 would degrade …causing…*greater driver frustration*".

Frustration is not a problem unless it leads to dangerous behavior. 16

"Review of safety corridors across the state has shown their effectiveness is short lived"

This is not necessarily applicable to this safety corridor. This one is of a short length and may have different effectiveness. Furthermore the safety corridor could be further improved. This is discussed in more depth later in this letter. 17

"If a long-term project were not implemented, median closure *would likely* still be necessary" 18

This is speculative.

What is also bothersome is that Alternative 5, Alternative 6, and PSR Alternative Y2 all appear to be clearly superior to Alternative 7, the No Build Alternative. We do not see how these three alternatives can be discarded in favor of one clearly inferior. All three of these alternatives are clearly feasible and should be further analyzed and reevaluated against the Purpose and Need. 11, 19

Growth at Indianola

In Section 3.1.2 under Environmental Consequences it is suggested that the Construction of an Interchange at Indianola Cutoff "…it is not reasonably foreseeable that any of the project alternatives would likely induce substantial growth".

We strongly disagree with the arguments leading up to this conclusion. The EIR makes it clear that one of the major obstacles leading to the abandonment of proposals by Sam's Club, Costco, and Wal-Mart was caused by Traffic Mitigation costs associated with the project. Construction of the Indianola Interchange removes most of this impediment. 20

Furthermore other arguments regarding economic growth happening in non-rural areas, zoning restrictions, and Coastal Development permits are not at all insurmountable. Common sense dictates construction of this interchange dramatically increases the likelihood of development of a large retail establishment at this location. 21

Safety Corridor

While mentioned earlier in the discussion of Alternatives 5 and 6, we would like to make further observations about the Safety Corridor.

In the discussion of the Safety Corridor on pages 114-117 it is mentioned other safety corridors in the state experienced increases in collision rates over time. This is used to infer that the same thing will happen with the Eureka – Arcata Safety Corridor. This argument is not compelling. 17

This safety corridor is short in length, and will become approximately one mile shorter if the signalization at Airport Road is accomplished. There is a high probability its short length reduces driver frustration and improves compliance. This possibility is not discussed. 22

No consideration is given to improving what is already a highly effective safety corridor so it functions even better and its effective life is extended. Additions such as overhead message boards, fully illuminating the speed limit signs to match the "your speed" readouts, flashing beacons at all five remaining unsignalized intersections, and "Enforced by CHP " signs on the "Please Turn on Headlights" signs as has been done on other safety corridors in the state are just a few examples of initiatives that could result in such improvements. 23

Realignment of the Southbound Lanes

Of all the problems with the EIR the one that gives the greatest concern is the impact on visual aesthetics of the proposed acceleration and deceleration lanes at the Simpson Mill, and resulting environmental damage to the scenic landscape. The row of eucalyptus trees are nearly 81 years old, and have an expected remaining life of many more years. They are considered a cultural landmark. They slow southbound traffic by an average of four miles per hour, and screen the Simpson Mill from view. The photo simulations in the EIR show clearly the magnitude of the impact of their removal would be immense. 7

The desired improvements to the clear recovery zone on the west side of the highway and acceleration/deceleration lanes for the Simpson Mill can be accomplished by moving the southbound Route 101 lanes toward the median. The logic to discard this option was questionable. Notions of problems with geometric alignments are not backed up with engineering data, and the argument about wetlands is not quantified and does not appear to be an overriding consideration. We do not believe the arguments put forth for not considering the realignment of the southbound lanes are adequate. This seems clearly feasible and should be further studied.

Sincerely yours,

R Kuhnel for

Keep Eureka Beautiful

Ron Kuhnel
Board Member
Keep Eureka Beautiful

Responses to Keep Eureka Beautiful:

1. See Group Responses I-D and II-G.

2. There are similarities and major differences of combining projects such as a bicycle/pedestrian trail with the overall Route 101 corridor improvements. The main difference is that the existing proposed project consists of improvements and new structures augmenting the existing roadway. A grade or barrier separated bicycle trail would be a separate, new structure extending the entire segment on a new alignment between Eureka and Arcata. As stated in the Group Responses, a bicycle/pedestrian trail would not meet the project need and purpose and substantially increase cost, delay, and wetland impact.

3. See Group Responses I-A, B, and C which were prepared to clarify the project need and purpose. Also Chapter 1 – Project Need and Purpose in the Final Environmental Impact Report/Statement (EIR/S) has been revised.

4. Many of the studies summarized in the Final EIR/S have been revised for clarification and updated.

5. For clarification, two Value Analysis (VA) studies were conducted for the proposed project. VA studies are intended to develop, evaluate, and refine conceptual solutions very early in the process. In contrast, the studies summarized in Chapter 3 of the Final EIR/S are technical studies, separate from the VA studies, evaluating the potential project effects. The first VA study was conducted prior to the implementation of the Safety Corridor to identify a long term solution to the Route 101 concerns: the Safety Corridor was always intended to be a temporary solution until a long-term solution could be planned and constructed.

6. Unlike the first VA, the second VA study in 2005 did not have public participation. The second VA focused on the long term roadway maintenance improvements such as paving and bringing the roadway to highway design standards. Generally roadway rehabilitation and maintenance are issues requiring specialists. The public was invited to comment on the maintenance improvement aspect of the project at the August 7, 2007 and December 3, 2008 public meetings.

7. In response to public concerns, the proposal to remove the Eucalyptus trees on the west side of the Route 101 has been dropped. The project has been re-designed to realign the south bound Route 101 lanes to the median to avoid tree removal on the west side of the roadway at the California Redwood (formerly Simpson) mill.

8. While it is true traffic volumes and collision rates are considerably lower at the California Redwood intersection than the other intersections/median crossings, the acceleration and deceleration lane improvements are still needed. Without improvements, the slow acceleration and deceleration of large commercial trucks can disrupt traffic flow at this location. Also all motorists have a general expectation that the State highway system meets minimum design standards.

9. Alternative 1 consists of closing all Route 101 median crossings, which would result in substantial adverse economic effects. However, Alternative 1 does meet the project need and purpose to enhance safety by eliminating uncontrolled left-turns.

10. The trees within the clear recovery zone on the east side of the roadway were evaluated individually for both biological and scenic value. Based on scenic quality, size, and distance to the roadway, some trees within the clear recovery zone will remain. New trees will be planted to compensate for removing the trees within the clear recovery zone. The visual and biology sections of Chapter 3 of the Final EIR/S have been revised to address these issues. Also refer to the plan sheets in Appendix A for tree removal locations.

11. The justification for dropping Alternatives 5 and 6 is straight forward: these two alternatives would still allow uncontrolled left turn movements at the Route 101 median crossings. Eliminating left-turn movements are the single most important safety enhancement feature of the proposed project. See Chapter 1 for a revised and updated project need discussion. The justification for dropping PSR Alternative Y2 has been revised since the approval of the Draft EIR/S. See Chapter 2 of the Final EIR/S for more information about Alternatives 5, 6, and Y2.

12. See Group Response 1-B.

13. See Group Response III-A-3.

14. The discussion of Alternatives 5 and 6 in Chapter 2 of the Final EIR/S have been revised. The anticipated future fatal plus injury collision rates are based on past and current collision rates at the existing intersections. In addition, the single key factor related to fatal plus injury related collisions, which is uncontrolled left turn movements, would remain in Alternatives 5 and 6.

15. The proposal to raise the posted speed limit for any of the proposed Build Alternatives has been dropped. The posted speed limit will remain 50 mph or lower between the Eureka Slough Bridges and the Jacoby Creek Bridges. The posted speed limit will remain 65 mph north of the Jacoby Creek Bridges. Please refer to Group Response I-A regarding the Safety Corridor.

16. Although driver frustration and impatience do not usually lead to dangerous decisions, these two cannot be completely ignored as factors affecting safety. For example, a driver waiting for a long period with other vehicles queuing behind, might choose a shorter than normal traffic gap to turn left across opposing lanes of traffic.

17. Drawing specific, firm conclusions based solely on safety corridor data from other regions of the State would be inappropriate. However, the intent of presenting safety corridor data from other regions was presented as another means of evaluating the Eureka-Arcata Route 101 Safety Corridor: the actual collision data for the subject safety corridor carries the most weight.

18. Although the possibility of median closure is a conditional statement under the No Build Alternative, it is substantiated by fact and is therefore not speculation. The conditional statement of closing medians is based on past and present collision rate trends: consequently, base on trends, it is quite possible that if collision rates increase at one or more median crossings, the median crossings would need to be closed. As stated previously, the single key factor related to fatal plus injury related collisions is uncontrolled left turn movements, which would remain under the No Build Alternative scenario: to not make this conditional statement would not present a comprehensive and accurate presentation of the proposed project and the No Build Alternative.

19. The No Build Alternative is included and evaluated in detail in the EIR/S because it provides a baseline condition to compare the Build Alternatives. The No Build Alternative would not meet the project need and purpose nor is it necessarily superior to Alternatives 5 and 6 or PSR Alternative Y2.

20. See Group Response III-B-5.

21. It is possible that a large retail business could eventually be developed near the Route 101/Indianola Cutoff area if the intersection were improved. However the area at this location is already zoned commercial and developed. Also the area is constrained not just by zoning, but by a railroad, a state highway, and wildlife refuges. Consequently a new large retail business could result in the intensification of use at this area, however the immediate area is constrained and the existing commercial development is unlikely to expand. It should also be noted that this segment of Route 101 is already the most heavily traveled roadway segment in the entire County of

Humboldt. Therefore if a new, large development were constructed at this location, the increase in traffic to the business would not be a drastic change to the setting.

22. Although it is likely true that a relatively short Safety Corridor would increase speed limit compliance and minimize driver frustration, the single key factor related to fatal plus injury related collisions, which is uncontrolled left turn movements, would remain under the existing Safety Corridor scenario.

23. Enhancements to the existing Safety Corridor infrastructure could potentially maintain a safer prevailing speed and promote greater awareness of crossing traffic, however based on experiences of other Safety Corridors and safety signage in general, the effect would be temporary. As mentioned previously the single key factor related to fatal plus injury related collisions, which is uncontrolled left turn movements, would remain under the existing Safety Corridor scenario. For more information see Group Responses I-A, I-C, II-B, and II-D.

Keep EUREKA Beautiful

2020 Fern Street • Eureka, California 95503-6266
www.keepeurekabeautiful.org

December 20, 2008

Kim Floyd, Project Manager
California Department of Transportation
1656 Union Street
Eureka, CA 95501

Dear Kim:

I want to thank you for your openness to our input on the 101 corridor plan and to take advantage of it one last time, to underscore how important we feel the trees are as a historic resource on the northcoast. 1

Given the lack of accident history at that intersection, there seems little reason to pursue such a draconian alternative as eliminating roughly half the trees, especially in the light of widespread hopes that we may someday get a bicycle and pedestrian path there. 2

I urge you to rethink current proposals which would cut the trees.

Sincerely yours,

Michele McKeegan, President

Responses to Keep Eureka Beautiful:

1. Caltrans concurs that tree preservation is a high priority and feasible alternatives to mature tree removal are always considered.

2. The proposal to remove the Eucalyptus trees on the west side of Route 101 has been dropped. The trees within the clear recovery zone on the east side of the roadway were evaluated individually for both biological and scenic value. Based on scenic quality, size, and distance to

the roadway, some trees within the clear recovery zone will remain. The visual and biology sections of Chapter 3 of the Final EIR/S have been revised to address these issues. Also refer to the plan sheets in Appendix A for tree removal locations. Regarding bicycle/pedestrian trail planning, see Group Response I-D and II-G.

Redwood Community Action Agency

September 28, 2007

Rod Parsons, Chief
Environmental Branch E-1
California Department of Transportation
P.O. Box 3700
Eureka, CA 95501

Dear Mr. Parsons:

Thank you for the opportunity to comment on District 1's Draft EIR for the Eureka-Arcata SR101 Corridor Improvement Project. We understand that this is a complex planning challenge and appreciate Caltrans' efforts to spend many years considering a diversity of issues to best meet transportation needs.

We feel that the stated project **need and purpose** does not reflect a multi-modal assessment of safety needs in the corridor, and, consequently, does not particularly well serve travelers of all means and modes. While this assessment may reflect funding parameters imposed upon Caltrans from above, we feel that this is a unique and timely opportunity to consider the bigger picture and incorporate tools that address future needs potentially different from today's transportation needs. 1

In particular, it is our feeling that congestion reduction measures are a cost-effective way to decrease collision frequencies and intensities – improving safety on the corridor and at intersections. This objective and its suite of related techniques, however, are not addressed in the need, purpose or proposed alternatives. We understand that a common aspect of Caltrans' assessment of other jurisdictions' projects which may have effects on state highway facilities is to look at how a given project is reducing congestion, including by non-automotive means. We believe this assessment should be applied to the proposed project as well. There are many options available for reducing auto travel demand on the corridor that will effectively improve corridor safety. Again, we understand that many of these options may be outside of the traditional realm of Caltrans funding sources, however we feel that neglecting to address and plan for them here artificially narrows the realm of potential solutions to a long-term challenge. It is our experience that, given a strong need and broadly supported project, funding can be sought to address a variety of needs from a variety of sources. 2

On the subject of **bicycles and pedestrians**, pages 98-99, we feel that analysis is incomplete, particularly since we witnessed a great deal of public input about bicycling and multi-use trail needs during the project scoping years ago. One thing we would add to the reference and analysis of the bicycle counts we coordinated a decade ago is that two important variables are very different today from that time: traffic speed (now posted 15 mph lower) and the price of gasoline (which is now much higher per gallon). These two issues may very well result in a larger number of cyclists using the corridor compared to ten years ago – it seems like it to us. Community awareness of and interest in active 3

904 G Street • Eureka, CA 95501-1829 • (707) 269-2002 • FAX: (707) 445-0884

lifestyles is growing and we expect more people to bike to work if they have a safer and more inviting way to do so.

We also feel that the wording in several places of this section does not accurately reflect complex issues and diminishes the level of importance that non-motorized transportation issues currently occupy in the public and political sectors. In the second to last paragraph of the section, we feel it is too limiting to say that some cyclists 'feel that the shoulder is too narrow'. In our experience of working with and planning for cyclists in this region, of more concern than shoulder width is the speed of traffic; need to cross off- and on-ramps; at-grade crossings of highway intersections; negotiation of the Eureka Slough bridges and three lanes of traffic on exit and entry into Eureka; and the lack of any form of physical separation from traffic in an era of increasing technological distractions for drivers. 4

Additionally (in the last paragraph of the section) to say that 'some bicycle activists individuals and groups advocate for the **creation of a separate bikeway**' is a vast understatement. Over a year ago, the Humboldt County Association of Governments, Cities of Arcata and Eureka, and RCAA co-sponsored a multi-agency planning effort facilitated by the National Park Service's Rivers, Trails & Conservation Assistance Program that culminated in the 2007 *Humboldt Bay Trail Feasibility Study*. The organizations and agencies involved are individually and collectively much more than a few bicycle activists. HCAOG initiated this multi-jurisdictional trail planning effort due to the fact that establishment of a multi-use trail between Arcata and Eureka consistently receives very high public support in their Regional Transportation Plan updates. In our past experiences leading public outreach efforts for RTP and Regional Bicycle and Pedestrian planning efforts for HCAOG, members of the public all over the county consistently reference the importance of and need for this trail. In addition, comprehensive public participation efforts associated with the *Humboldt Bay Trails Feasibility Study* (2001, funded by the State Coastal Conservancy) identified a trail between Eureka and Arcata as the most highly desired trail in the region and one of the six highest public access project priorities – not due to its feasibility, but to its broad popularity. A public poll associated with and referenced in the *Annie & Mary Rail-Trail Feasibility Study* (2003, also funded by the SCC) also found an Arcata-Eureka multi-use trail to be the most popular trail interest in the region. 5

We were told at HCAOG Board meetings during the months before and after we completed the 2001 *Humboldt Bay Trails Feasibility Study* that a trail could not be included in the scope of the Eureka-Arcata 101 corridor project because it was not a means to reduce corridor congestion. We disagreed at the time and continue to disagree. We understand that Class I facilities are not a common component of Caltrans projects, though we know of and have provided staff with several examples of such in relation to past Hammond Trail, Annie & Mary Trail and Bay Trail planning efforts (and are happy to do so again). We also understand that such a component would add costs, mitigation requirements and maintenance needs to the proposed project. We still think it's worth consideration in the scope of this project. Public health benefits and traffic congestion relief will result in societal cost savings that will help offset project costs, both of which are ultimately borne by the public. 1

We feel that the **three 'build' alternatives** will be drastically more detrimental to non-motorized travelers than a no-build project that would maintain the status quo safety challenges facing this mode of valid and valuable corridor travel. At this time, the corridor supports the largest number of bicycle commuters in the region and also has the potential to attract many, many more if the riding conditions are improved. Higher traffic speeds and the necessity of out-of-direction travel upon median closure will undoubtedly have a significantly deleterious effect on bicycle commuting in the corridor. We have already noticed a chilling effect on commuters we know resulting from the alarming number of recent auto-bike collisions, and we feel that the three 'build' alternatives will make bicycle commuting much 6

more unattractive and unsafe. Crossing on- and off-ramps is a challenging proposition for experienced riders and is one of the issues that keeps many from even attempting to ride, even with traffic around 50 mph. In addition, for someone bicycle commuting between Indianola and Mid-City or Jacobs Avenue, we imagine that it might become much more appealing to make the dangerous decision to ride against traffic in the shoulder once the Bayside Cutoff median is closed. Overall, we feel it is important to keep the speed limit at 50 mph in the corridor, no matter what other decisions are made.

In addition, we feel that the alternatives assessment also needs to more robustly consider associated potential **land use impacts**, particularly development-inducing effects of the proposed 'build' alternatives and the negating consequences that these effects would have on intentions to improve corridor safety by increases in local traffic. While this consideration may not be popular, we hope that potential purchase and relocation of key commercial properties that have the most significant traffic safety effects has been considered. 7 8

A final note on the alternatives from a **fisheries management** standpoint is the need to take this opportunity to re-connect slough channels that were disconnected from the bay during the original construction of Highway 101. We are currently working on several estuary restoration projects around Humboldt Bay and have noted the loss of critical estuary habitat and access to that habitat as a result of the building of dikes and the "reclamation" of tidelands. The Arcata-Eureka corridor project needs to consider re-connecting the channel between Fay Slough and the Bay on the south side of the Green Diamond Mill and examine other areas where slough channels can be reconnected to provide direct access between the Bay and existing or potentially restorable estuary habitat. Estuary habitat is key to the recovery of endangered salmonids and other marine fish species such as tidewater goby. Additionally, estuary habitat is a highly productive and key component in the life cycle of numerous commercial and non-commercial marine species. The project will need to mitigate for wetland impacts and an appropriate mitigation measure is re-creating direct access to avoid thermal and physical barriers which prevent fish from accessing these critical habitat areas.. 9

Though we will not go into detail here about the specific designs proposed in the three 'build' alternatives, we feel that the **range of solutions offered** – to meet a limited need and purpose – is lacking. We do not support any of the 'build' alternatives, nor do we support the 'no build' alternative, for the safety challenges it does and will ultimately pose. Being a solution-oriented organization by nature, this is an uncomfortable position for us, however we feel it is necessary to say that none of the options offered address what we strongly feel to be a more broad set of needs than are analyzed here. 10

Thank you for your time and consideration. If we can be of any assistance in considering additional options for corridor improvements, please let us know. If you have questions, please do not hesitate to contact either Jen at 707.269.2060 (jen@nrsrcaa.org) or Don at 707.269.2063 (don@nrsrcaa.org).

Sincerely,

Jennifer Rice, Co-Director
Natural Resources Services Division of RCAA

Don Allan, Co-Director

Cc: HCAOG Executive Director and Board
Eureka City Manager and Council
Arcata City Manager and Council
Humboldt County Public Works Director and Supervisors

Responses to Redwood Community Action Agency:

1. See Group Response I-D.

2. While it is true that none of the build alternatives evaluated in the Environmental Impact Report/Statement (EIR/S) were designed specifically to reduce traffic congestion, many options such as improving public transit and implementing Traffic System Management (TSM) measures were evaluated early in the process. These options, however, would not realistically meet the project need to enhance traffic safety by substantially reducing single passenger motor vehicle trips: for this reason they were dropped from further consideration. In theory, a combination of public transit, bicycle transit, and TSM could lower traffic volumes to the point where there would be frequent and sufficiently long traffic gaps for uncontrolled left-turn movements such as on a typical early Sunday morning. However, the traffic on Route 101 is expected to increase to over 50,000 vehicle trips per day. Unlike dense urban areas such as San Francisco, housing, jobs, and schools are spread over a relatively large area in the Arcata-Eureka region making non-motor vehicle transit difficult and impracticable for most people. The proposed project would be compatible to future public transit and bicycle improvements.

Also see Group Responses II-A, II-E, II-F, and II-G.

3. See Group Responses I-D, II-E, II-G, and III-A-1.

4. Caltrans staff has also discussed this project with experienced bicyclists. In addition to maintaining the existing posted speed and eliminating uncontrolled left-turn movements on Route 101 as discussed in Group Response III-A-1, the proposed project includes longer acceleration and deceleration lanes at intersections which would enhance safety of bicyclists at intersections. Also see Group Response II-H.

5. Caltrans staff acknowledges the extensive support for a separated multi-use trail. In fact, more than half the written comments received on the Draft EIR/S requested non-motorized or public transit improvements. However, as explained in previous responses, a multi-use trail would not meet the project need and purpose.

6. Modified Alternative 3A, the Preferred Alternative identified in the Final EIR/S, would enhance bicycle transit by eliminating uncontrolled vehicle crossing movements at Route 101 median openings and constructing a Route 101/Indianola Cutoff grade separation midway between Eureka and Arcata to provide safe access and crossing of Route 101. Also the proposed southbound Route 101 Jacoby Creek Bridge was redesigned to include an 8-feet wide barrier separated travel way for bicyclists and pedestrians. In addition, the proposal to raise the posted speed limit for any of the proposed Build Alternatives has been dropped.

Since the approval of the Draft EIR/S in 2007, the following improvements were completed to enhance bicycle safety:

- Bicycle awareness signs were posted in both directions within the Route 101 corridor between Eureka and Arcata. These signs were designed to alert motorists of the presence of bicyclists riding on Route 101.

- In 2013, Caltrans restriped the Route 101 roadway to provide consistent 10-feet wide paved outside shoulders in both directions.
- In 2010, rumble strips were installed along the outside shoulders of Route 101 to alert vehicle drivers of drifting beyond the lane. The rumble strips would also be audible to bicyclists and alert them that a motor vehicle was drifting onto the shoulder. The rumble strips will be reinstalled during construction of the proposed Eureka-Arcata Corridor Improvement Project.

7. See Group Response III-B-5 and the revised Section 3.1.2 Growth, in Chapter 3 of the Final EIR/S.

8. The purchase and relocation of commercial property as an alternative to closing Route 101 median crossings was identified and discussed during the preliminary planning process (Idea RTC-2 of the Caltrans Value Analysis Report for the Route 101 Eureka to Arcata Corridor Improvements, 2002.) This idea was dropped because of anticipated reduction in the local tax base, possibly not meeting the project need and purpose, and anticipated political opposition. In addition, the Route 101/Indianola Cutoff intersection serves non-businesses since it connects to Old Arcata Road.

9. Caltrans staff has worked closely with the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration – Fisheries Service to avoid, minimize, and mitigate potential effects to sensitive fish species. A proposal to add a new connection from Humboldt Bay to the slough parallel to Route 101 illustrates the complexity of such improvements. A new connection would benefit anadromous fish species to the detriment of freshwater plant and animal communities that have since naturalized at this location: for this reason, this proposal has been dropped from consideration.

10. Caltrans is an active participant on the Humboldt Bay Trail Planning Team. Caltrans is supportive of the effort to develop separated non-motorized trails adjacent to Route 101 between Eureka and Arcata and have committed that no elements of the Arcata-Eureka Corridor project will preclude development of a bay trail. Route 101 shoulders will remain open to bicyclists both during and following project construction.

Sierra Club
North Group, Redwood Chapter
P.O. Box 238
Arcata, CA 95518

September 26, 2007

Rod Parsons
Eureka-Arcata 101 Corridor Project
Environmental Branch E-1
California Department of Transportation
PO Box 3700
Eureka CA 95502-3700

These comments on the Draft Environmental Impact Statement/Environmental Impact Report (EIR/EIS) for the Eureka-Arcata Route 101 Corridor Improvement Project are being submitted on behalf of the North Group, Redwood Chapter, Sierra Club, with nearly 1,300 members in Humboldt, Del Norte, Trinity, and western Siskiyou Counties.

Some of the concerns we have with the EIR/EIS are detailed below, in no particular order.

1. The document does not allow selection of a choice of options from among the alternatives offered. Page 32 notes that 19 alternatives were developed during the project design and planning process, but only 4 are presented here. The rationale for eliminating the former Alternative 5, "Safety Corridor as Long-Term Solution," because "there is no avenue to provide long-term continuous financial assurances for additional enforcement and education" is weak. 1 2

2. All alternatives (other than No Build) should not be based on a concept of increasing the speed limit from 50 to 65 mph, as this wastes fuel and increases potential damage from accidents. Saving 1-2 minutes driving from Eureka to Arcata is not worth it. 3

3. Alternatives in the EIR/EIS used collision data from 1994-1999, which was prior to establishment of the Safety Corridor. During the first year of the Safety Corridor, the document states that there were "45% fewer collisions, including 80% fewer collisions at intersections." But page 4 asserts that the effectiveness of the Safety Corridor is expected to decrease over time and traffic is expected to increase approximately 50% by the year 2031 (note that on page 43, the increase is stated to be 30%!). 4

We take issue with both these assertions. What is the source of the traffic figures? (These projections are not supported by either historic growth patterns or projections by the state Department of Finance for population growth.) The population of Humboldt County certainly will not increase 30-50% over the next 24 years, so most of the increased traffic would come from out of the area. Decreased effectiveness of the Safety Corridor is attributed to "habituation," which would not occur with nonresidents. 5

Twenty-nine Safety Corridors in California were evaluated. The EIR/EIS notes the number of lanes for each, but not their length or topography. The particular one mentioned on page 117 -- Highway 17 from Los Gatos to Santa Cruz -- is nothing like the Eureka-Arcata corridor. It is approximately 20 miles long (rather than 4-5 miles, depending on whether a signal is installed at Airport Road), winds through steep topography (rather than being flat and straight), for much of it opposing lanes are separated merely by a guard rail (rather than a wide, grassy median), and carry extremely heavy traffic flow during rush hours. Experience with other Safety Corridors should not be automatically applied to the Eureka-Arcata Corridor. 6

4. Closing the medians would increase vehicle miles traveled (and fossil fuel consumption) to reach businesses along the corridor. It will add traffic to Myrtle Avenue/Old Arcata Road (between Bayside and Indianola Cutoffs), already dangerous for bicyclists, pedestrians, and drivers due to lack of shoulders, narrowness, curves, and myriad intersecting roads and driveways. (How many cars/day currently use the Bayside Cutoff to access Highway 101?) 7

5. Removing 50% or more of the trees within 30 feet of the roadway will increase the monotony or "visual Valium" of the road (page 138, "less variation in the landscape"), resulting in more driver inattention and higher speeds. Page xiii admits that all three alternatives would have moderate to high visual impact from tree removal. Cutting trees that screen roadside development from view would change the character of the highway from rural to urban landscape. The project area should be considered a scenic corridor rather than a portion of a freeway, with the 50 mph speed limit retained. 8 2

6. This stretch of Highway 101 is very close to Humboldt Bay, yet the impact of rising sea level from climate change has not been addressed in the EIR/EIS. 9

7. The sketches of the Indianola Interchange do not make it clear how lengthy off- and on-ramps, plus two bridges, would fit within the horizontal plane. Placing 300,000 cubic meters of fill would put approximately 600,000 tons weight on top of bay fill. What is the likelihood of liquefaction following a strong earthquake? A 25-foot-high fill would impact views of the Bay. 10

8. Alternatives should incorporate a bicycle lane or multi-use trail along the corridor. Alternative mass transit projects that could reduce vehicular traffic growth rather than accommodate it need to be considered seriously. 11

9. Are any of the billboards recommended for "shielding" by guardrails those that the Humboldt Bay National Wildlife Refuge has asked to be removed as illegal? 12

10. A significant portion of the funding for the three alternatives would come from STIP money that could instead be spent on local transportation infrastructure. 13

The North Group would support the signalization of the intersection of Airport Road, to slow traffic, provide a time gap for left turns farther north, decrease miles driven due to backtracking, and reduce impacts on long-time businesses located on Jacobs Avenue. We would also support extension of existing acceleration and deceleration lanes to meet highway standards, larger turn pockets to reduce potential for collisions, and bridge widening. 14

Because of the way that the EIR/EIS presents the alternatives, North Group Sierra Club must choose Alternative 7, the No Build Alternative. We join with City and County elected officials, business owners, bicyclists and trail supporters, conservation organizations, even the Times-Standard, who agree that none of the currently presented alternatives are acceptable and either have either opted for the No Build Alternative or called for preparation of a new EIR/EIS. 15

The EIR/EIS states that the final EIR on this project will respond to public comments. If that is the case, CalTrans should withdraw the draft EIR/EIS and release a revised draft that offers a wider selection of choices. 16

Sue Leskiw

Sue Leskiw, Secretary-Treasurer
North Group, Redwood Chapter, Sierra Club

Responses to Sierra Club:

1. A large number of alternatives were identified early in the planning process. All but three alternatives were dropped from consideration primarily because they either did not meet the project need and purpose or they were cost prohibitive or both. Evaluating numerous alternatives in detail is costly and time consuming: consequently three alternatives that met the project need and purpose were carried forward to the environmental evaluation process in the Draft Environmental Impact Report/Statement (EIR/S).

2. Alternative 5 was dropped from further consideration for more substantial reasons than speed limit enforcement concerns. See Group Response I-A for a discussion of maintaining the existing Safety Corridor and Group Response III-A-3 regarding speed enforcement.

3. See Group Response III-A-1 regarding maintaining the existing posted speed limits.

4. See Group Response I-A and Chapter 1 of the Final EIR/S for a discussion of more recent collision data.

5. See Group Response I-B for a discussion of projected traffic volumes on Route 101.

6. Drawing specific, firm conclusions based solely on safety corridor data that may or may not have similar characteristics to the Eureka-Arcata Safety Corridor would be inappropriate. However, the intent of presenting safety corridor data from other regions was presented as another means of evaluating the Eureka-Arcata Route 101 Safety Corridor in terms of identifying similar trends: the actual collision data for the subject safety corridor carries the most weight.

7. Since the Draft Environmental Impact Report/Statement (EIR/S) was approved in 2007, two modified alternatives were designed and evaluated in the Final EIR/S. One of these is the Modified Alternative 3A, which is identified as the Preferred Alternative in the Final EIR/S. This alternative includes closing all Route 101 medians (except at Airport Road), building a half signal at the Route 101/Airport Road intersection; and a constructing new Route 101 grade separation at Indianola Cutoff. The new half signal and grade separation would accommodate the heaviest demand traffic moves after the Route 101 medians are closed; consequently Modified Alternative 3A would minimize out-of-direction travel.

8. See Group Response III-B-2 regarding tree removal.

9. Future sea level rise and climate change are complex topics. Chapter 4 of the Final EIR/S has been extensively revised to address both topics.

10. Caltrans staff will conduct subsurface investigations to determine the soil and groundwater conditions at the Route 101/Indianola Cutoff. The data from the subsurface investigation will be used to properly design the grade separation and the type and amount of fill to support the grade separation. Caltrans follows a policy to design structures to withstand the anticipated Maximum Credible Earthquake (MCE) and resulting liquefaction, from close proximity faults. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period.

11. See Group Responses I-D, II-A, II-E, II-G, and II-H regarding public transit and non-motorized vehicle transit improvements.

12. To date, none of the billboards that are proposed for guardrail have been deemed unauthorized by the U.S. Fish and Wildlife Service.

13. The planning and design of the proposed project is already partially funded from the State Transportation Improvement Program (STIP). To qualify for funding in the STIP, projects must be included in the Humboldt County Association of Government (HCAOG) Regional Transportation Improvement Plan and consistent with the consistent adopted HCAOG Regional Transportation Plan. Further STIP funding for the proposed project will be determined by the HCAOG.

14. As mentioned in response 7, the Preferred Alternative would include a half-signal at Airport Road. The half-signal would only stop northbound Route 101 traffic, while still allowing left-turns from Airport Road to southbound Route 101. As part of Modified Alternative 3A, the existing acceleration and deceleration lanes would be extended and the southbound Jacoby Creek Bridge would be replaced by a wider bridge. Widening northbound Jacoby Creek Bridge and northbound Gannon Slough Bridge has been dropped from the project because of cost and potential impacts to sensitive fish species. Extending the left turn lanes will not be included in the proposed project since the Route 101 roadway medians would be closed which would eliminate the need for left-turn lanes.

15. The No Build Alternative is not acceptable because it would not meet the project need and purpose of improving safety and traffic operations as well as constructing long-term roadway maintenance and improvements.

16. The Final EIR/S does include responses to public comments and does include two modified alternatives. However since the two modified alternatives have fewer impacts than the initial alternatives evaluated in the Draft EIR/S, preparing a supplemental Draft EIR/S is not required.

TRAILS TRUST OF HUMBOLDT BAY

The Trail Starts Here!

September 27, 2007

CalTrans Program/ Project Management
Po Box 3700
Eureka, CA 95502-3700

Attention: Kim Floyd

The Purpose and Need Statement for the Draft Environmental Impact Report (DEIR/ DEIS) for the Eureka - Arcata Route 101 Improvement Project fails to address the need to provide traffic congestion reduction and a safe travel route for bicycle and pedestrian users of the corridor.Therefore, the range of alternatives presented in the document to address the Purpose and Need are inadequate and must be altered to include an alternative that will resolve these issues. 1

The Trails Trust of Humboldt Bay would like to see the integration of the Humboldt Bay Trail, as presented in the Humboldt Bay Trail Feasibility Analysis (HCAOG, 2007) into the DEIR. This proposed trail: 2

- Has been identified during public scoping events held by Caltrans as a crucial component of this project
- Allows for a safe alternative for non-motorized transport between the communities of Arcata and Eureka, which does not currently exist
- Encourages active transportation which may help reduce obesity
- Promotes a mode shift for travel which reduces congestion and automobile emissions
- Has many other economic, quality of life,educational and health benefits for our region

The board and membership of the Trails Trust for Humboldt Bay insists on the provision of a feasible and fundable multi-modal trail in the final alternative for this project. 3

Sincerely,

Rick Littlefield

Rick Littlefield
Vice Chairperson
Trails Trust of Humboldt Bay

Trails Trust of Humboldt Bay PO Box 6625 Eureka, CA 95502 www.trailstrust.org

Responses to Trails Trust of Humboldt County:

1. See Group Response I-D regarding project need and purpose, see Group Responses II-A, II-G, and II-H for non-motorized transit alternatives.

2. Caltrans staff acknowledges the importance of bicycling and its many benefits. Caltrans is an active participant on the Humboldt Bay Trail Planning Team. Caltrans is supportive of the effort to develop separated non-motorized trails adjacent to Route 101 between Eureka and Arcata and have committed that no elements of the Arcata-Eureka Corridor project will preclude development of a bay trail. For more information see Group Response I-D.

3. Caltrans staff acknowledges the extensive support for a separated multi-use trail. In fact, more than half the written comments received on the Draft EIR/S requested non-motorized or public transit improvements. However, as explained in previous responses, a multi-use trail would not meet the project need and purpose.

Appendix D – Transcript Comments

Transcript recorded at Caltrans Public Hearing, August 7, 2007, for the Eureka – Arcata Route 101Corridor Improvement Project

PARTICIPANT: My name is Charis Arlett, C-H-A-R-I-S, A-R-L-E-T-T.

I'm just curious why a pedestrian bike trail has not been taken into consideration when this much money is being spent. If it's really for safety, getting more people off the road and on bicycles would be safer. And I, for one, would ride my bike more often if I had somewhere truly safe to do it.

Coming from the Bay Area I used the Contra Costa trails down there a lot. It's fun and it was safe; and we have a beautiful place, I think, along the Bay for it. So I would like to see that considered a little more, please. That's it.

Response to Charis Arlett: For a discussion of bicycle improvements, please see Group Responses I-D, II-B, II-E, II-F, II-G, and II-H.

Transcript recorded at Caltrans Public Hearing, August 7, 2007, for the Eureka – Arcata Route 101Corridor Improvement Project

PARTICIPANT: Dennis Cahill, 2723 Graham Road, Bayside.

I have some comments, mostly negative. First of all, I was just talking to that lady, and I agree with her. I don't think that this is a public hearing. I thought it was a public hearing and I would be able to hear other people, and I would get the pros and cons. And I don't -- anyway, I'm disappointed. 1

Secondly, I'm opposed to it, and why? First of all, I think it's going to increase traffic on Old Arcata Road through Sunny Brae, Bayside and, especially, by Jacoby Creek School. And I've been working on the bike lanes there because they're unsafe and we're trying to improve that. And I think a lot more traffic is going to make it worse for the children. 2

Coming from Arcata, now they'll use that instead of the freeway. And you can only go 20 miles an hour when school is in session; and with more cars, and if they project more in the future, that's going to become very crowded. It's already horrible as it is. It's mostly twenty-five miles an hour.

Secondly, I'm frustrated because I've been traveling this over 30 years, almost 40 years, and when the speed limit was sixty-five it was very dangerous. Cars were zipping in and out. It was like an Indianola race track. Today, it's slower and it's safer, I think. Fewer cars are racing by trying to pass you all the time, and most cars are going over the speed limit anyway. The average -- I came in tonight. I went fifty. Everybody passed me. I'd say the average is fifty-five to sixty, which is five to ten miles over. And like some people said over there, when the speed limit was sixty-five, it's going back to where they're going seventy to seventy-five. 3

I think it's less safe for bicyclists. I'm a bicyclist. I passed two tonight coming in, and I felt it was a lot safer for them with me only going fifty rather than going sixty-five. 4

Old Arcata Road is dangerous. I hardly ever take it because it's so narrow, and that means more cars will have to use Indianola to come off. Also, if they -- cutting off Bayside cutoff coming from Arcata is bad enough, but I think it would be horrendous if they cut -- closed it or the other on/off ramps going north. I think they are needed -- they need to let you come on and off the off-ramps, at least going north or south, if the median is closed. 2

In other words, you can still -- like, if you're coming from Arcata, you can still go off Bracut to the right even though they wouldn't let you go across the median. At Bayside cutoff, you can go on coming north even though they have the median cut off.

I like it the way it is, and that's about it. Like I say, I appreciate being able to express my comments, but I think of a public hearing where people can hear each other and they get an idea of how the public feels. I had no idea you were doing this.

And also, the slower speeds mean less accidents. So that's it. I appreciate your time.

Responses to Dennis Cahill:

1. Comment noted. Caltrans staff regrets the inability to hear individual concerns and questions presented to an audience and panel. During the planning of the hearing, Caltrans staff decided the most effective outreach and presentation approach would be to provide an informal question and answer format at the meeting. Individual written questions and concerns can be found in this Volume of the Final (EIR/S).

2. See Group Response III-A-4.

3. The Draft Environmental Impact Report/Statement did mention raising the speed limit within the Route 101 Eureka – Arcata Corridor to 65 mph; however this proposal has been dropped. See Group Responses III-A-1 and 2 for more information.

4. Since the Draft Environmental Impact Report/Statement (EIR/S) was approved in 2007, the proposed project has been revised to address bicyclists' concerns. See Group Response I-D for more information. For a discussion of bicycle improvements, please see Group Responses II-B, II-E, II-F, II-G, and II-H.

Transcript recorded at Caltrans Public Hearing, August 7, 2007, for the Eureka – Arcata Route 101Corridor Improvement Project

PARTICIPANT: Mrs. Nova Cramer, N-O-V-A, C-R-A-M-E-R.

My concern is saving the eucalyptus trees along the freeway route. I've lived here all my life, attended Arcata/Eureka schools. My mother was born in Eureka, and I have a great love for those eucalyptus trees. I know safety is important, but so are those trees. Having lived here all my life and admiring those eucalyptus trees, I have much enjoyed looking at them over all the billboards that have been there through the years since the 1930s. And I cannot imagine those trees being a problem where they're so narrow and take up so little room. They obscure nothing, in my estimation. That's all.

Response to Nova Cramer: See Group Response III-B-2.

Transcript recorded at Caltrans Public Hearing, August 7, 2007, for the Eureka – Arcata Route 101Corridor Improvement Project

PARTICIPANT: I'm Neil Hawking.

I'd like to start out with a little background concerning my thoughts. When I first moved back to the area a little less than a year ago, coming back from Phoenix, they have a lot of overpasses and interchanges and all that. I thought to myself driving through the 50-mile-an-hour zone -- which I wasn't too familiar with before I moved away -- thinking that they should have already put an overpass in and consolidated some of those highway-type crossings at Bayside and Indianola cutoff. They should have consolidated those and done one or two overpasses, converted those into overpasses.

Hearing about this project, I was interested and decided to come down and check it out. I think by far the best solution would be to put an overpass in where they're considering putting it in. I wasn't too keen on the stoplight at first, but, you know, that would be a fine solution. 1

Anyhow, that would also help, I think, with safety issues. You'd be able to raise the speed limit again to sixty-five. That would possibly bring traffic that I would think spills over to Old Arcata and Highway 255 to bypass the 50-mile-an-hour zone, which probably creates some other traffic problems, speeding on those -- to avoid the highly patrolled 50-mile-an-hour zone. 2

Anyway, it would also bring our area up to -- seemingly more up-to-date highway system, probably the best solution than any other in foggy conditions. You wouldn't have any highway crossings; you know, people crossing the highway from Bayside or Indianola, so you wouldn't have to worry about any of that on foggy days because it would be impossible to have traffic accidents with the overpass. 3

The only thing I would be concerned about

would be to make sure that you have some sort of proper access to the frontage road, the airport road, going south on the 101, just proper access, in general, to all the old exit roads without having to go too far out of the way to be able to get where you're going. 4

These slope easements that are going in adjacent to the Simpson sawmill and Bracut are a great idea there at the existing railroad right-of-way. 5

Southbound Jacoby Creek bridge has needed a replacement for years. All these upgrades can only be for the better. As far as I'm concerned, they can start this project tomorrow to get our community moving towards a more convenient and safe route to and from Arcata and in between. I wish you good luck on this project getting all the permits and getting started.

Thank you.

(The proceedings were adjourned.)

Responses to Neil Hawking:

1. Modified Alternative 3A, the Preferred Alternative identified in the Final Environmental Impact Report/Statement, includes an interchange at Indianola Cutoff, which is approximately halfway between Eureka and Arcata. Modified Alternative 3A also includes a half signal that would allow left turns to and from Route 101.

2. Comment noted. Caltrans staff concurs that setting the posted speed too low would encourage drivers to divert to parallel routes such as State Route 255; however the plan to raise the speed limit to 65 mph has been dropped. See Group Responses III-A-1 and 2 for more information.

3. Modified Alternative 3A includes closing all existing Route 101 median openings, except at the Airport Road intersection as noted in response 1.

4. As noted in response 1, Modified Alternative 3A, includes a half signal allowing left turns from southbound Route 101 to Airport Road and Jacobs Avenue. The half signal at Airport Road along with the proposed interchange at Indianola Cutoff, are expected to substantially reduce out of direction travel.

5. Initially slope easements would have been required to extend the acceleration and deceleration lanes at the California Redwood (Simpson) mill; however the project has been redesigned to realign the Route 101 southbound lanes towards the median and thus avoid the need for slope easements.

Appendix E – Form Letters

Form Letter #1

August 31, 2007

Caltrans
Attn: Kim Floyd, Project Manager,
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Eureka-Arcata Corridor
01-Hum-101, PM 79.9/86.3
EA 01- 36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Ms. Floyd,

This letter is being sent in strong support of Alternative 3 as described in the subject document. I am an employee of Mid-City Motor World, which is located on the 101 corridor.

My ability to get to work in the future will be directly (and negatively) effected by the closure of present access locations.

The closure of medians will reduce my access, increase the miles traveled and increase the amount of time and energy involved getting to and from work. This is not acceptable given the possibility to maintain at minimum the access at Airport Road and Indianola Cutoff.

I support the efforts of the Business Owners along the Corridor with their efforts in keeping their businesses viable and accessible. I ask that you do whatever you can to absolutely minimize the effects of your project on the businesses, their employees and customers along the corridor.

Thank you for the opportunity to comment and provide our thoughts.

Sincerely,

Employee of Mid-City Motor World
John Dalton

Cc: Mr. Spencer Clifton, Humboldt County Association of Governments
427 F St. Suite 220, Eureka, CA 95501

Mayor Virginia Bass, City of Eureka
531 K St., Eureka, CA 95501

Response to John Dalton:

Caltrans has identified Modified Alternative 3A as the Preferred Alternative in the Final Environmental Impact Report/Statement (EIR/S). Modified Alternative 3A has most of the features of Alternative 3, including a half signal at Airport Road and Route 101. See Chapter 2 in the Final EIR/S for details.

Form Letter #2

July 29, 2007

Caltrans
Attn: Kim Floyd, Project Manager,
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Eureka-Arcata Corridor
01-Hum-101, PM 79.9/86.3
EA 01- 36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Ms. Floyd,

This letter is being sent in strong support of Alternative 3 as described in the subject document. We are one of the many regular customers of various businesses along the 101 corridor.

We think that our ability to support those businesses and their employees in the future will be directly (and negatively) effected by the closure of present access locations.

We want to continue our support of the businesses. The closure of medians will reduce our access, increase the miles traveled, and increase the amount of time and energy that is involved. This is not acceptable given the possibility to maintain at minimum the access at Airport Road.

We support the efforts of the Business Owners along the Corridor with their efforts in keeping their businesses viable and accessible. We ask that you do whatever you can to absolutely minimize the effects of your project on the businesses, their employees and customers along the corridor.

Thank you for the opportunity to comment and provide our thoughts.

Sincerely,

Customer of The Mill Yard and Bracut Storage

Cc: Mr. Spencer Clifton, Humboldt County Association of Governments
427 F St. Suite 220, Eureka, CA 95501

Mayor Virginia Bass, City of Eureka
531 K St., Eureka, CA 95501

Response to Mill Yard and Bracut Storage Customer:

Caltrans has identified Modified Alternative 3A as the Preferred Alternative in the Final Environmental Impact Review/Statement (EIR/S). Modified Alternative 3A has most of the features of Alternative 3, including a half signal at Airport Road and Route 101. See Chapter 2 in the Final EIR/S for details.

Form Letter #3

August 27, 2007

Caltrans
Attn: Kim Floyd, Project Manger,
P.O. Box 3700
Eureka, CA 95502-3700

Subject: Eureka- Arcata Corridor
01-Hum-101, PM 79.9/86.3
Ea 01-36600, 363300
Draft Environmental Impact Statement
Environmental Impact Report

Dear Ms. Floyd,

I am a consumer who utilizes businesses along the safety corridor and am deeply concerned that access to these businesses will be nearly eliminated through the closure of the access medians. Closing the medians will result in longer traveling time and distance, increase gas usage, not to mention the increased traffic caused by the out of direction travel. I find the above, frustrating and unacceptable.

I have had the opportunity to read the three remaining alternatives being considered for the 101 corridor project and strongly agree with the business owners that alternative 3 is the most sound and logical choice. A traffic light at Airport Rd, with an interchange at Indianola Rd., will allow the businesses to remain viable and for me the consumer, to have access to them. I do know, that if all medians are closed on the 101 corridor my support of the businesses will markedly decrease.

Thank you for your time and consideration in this matter, and I hope you will choose the above alternative to save the businesses and residents in the Corridor

Sincerely,

Erzv Willoughby, DVM
Happy Dog Customer

CC: Mr. Spencer Clifton, Humboldt County Association of Governments
427 F St. Suite 220, Eureka, Ca 95501

Mayor Virginia Bass, City of Eureka
531 K St., Eureka, CA 95501

Response to Erzv Willoughby, DVM:

Caltrans has identified Modified Alternative 3A as the Preferred Alternative in the Final Environmental Impact Report/Statement (EIR/S). Modified Alternative 3A has most of the features of Alternative 3, including a half signal at Airport Road and Route 101. See Chapter 2 in the Final EIR/S for details.