



APPENDIX

Grass Valley & Nevada City Workshop
August 3, 2010

SIDEWALKS

SIDEWALKS ARE EITHER PLACED NEXT TO THE VEHICLE LANES OR ARE SET BACK FROM THE VEHICLE LANES. WIDER SIDEWALKS CAN ACCOMODATE MORE PEDESTRIANS. PLACE YOUR STICKER NEXT TO YOUR SIDEWALK OF PREFERENCE

• Adjacent Sidewalks

Adjacent sidewalks are next to vehicle lanes.



Place
Stickers
Here

• Bifurcated Sidewalks

Bifurcated sidewalks are separated from vehicle lanes by a landscaped buffer.



Place
Stickers
Here



INTERSECTION FEATURES

PLACE YOUR STICKER NEXT TO YOUR FEATURES OF PREFERENCE

• Crosswalks

A crosswalk is a designated pedestrian crossing of a roadway. They are usually enhanced with paint, signage, and lighting.



Use reflective paint in addition to blue paint

Place
Stickers
Here

• Push-Buttons

To receive a "Walk" signal at a crosswalk, pedestrians use a push button.



Place
Stickers
Here

• Curb Ramps

Curb ramps make crosswalks and sidewalks accessible for wheelchairs, strollers, and bikes. The yellow "truncated domes" alert blind and vision impaired pedestrians as they approach a street.



Place
Stickers
Here

• Countdown Timers

Countdown timers give pedestrians "Walk" and "Don't Walk" signals and inform them how long they have to cross the street.



Place
Stickers
Here

S. Robinson & N. Main

INTERSECTION FEATURES

PLACE YOUR STICKER NEXT TO YOUR FEATURES OF PREFERENCE

- **Crosswalks**

A crosswalk is a designated pedestrian crossing of a roadway. They are usually enhanced with paint, signage, and lighting.



w/ reflective paint in addition to delineative



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Curb ramps make crosswalks and sidewalks accessible for wheelchairs, strollers, and bikes. The yellow "truncated domes" alert blind and vision impaired pedestrians as they approach a street.

• Countdown Timers

Countdown timers give pedestrians "Walk" and "Don't Walk" signals and inform them how long they have to cross the street.



Place
Stickers
Here

S Auburn @
Main



CROSSWALK ENHANCEMENTS

CROSSWALKS CAN BE ENHANCED WITH SEVERAL DIFFERENT FEATURES. CROSSWALK ENHANCEMENTS AIM TO IMPROVE SAFETY BY IMPROVING VISIBILITY, MINIMIZING CROSSING DISTANCE, AND ENSURING THAT MOTORISTS YIELD FOR CROSSING PEDESTRIANS. NO MATTER HOW ENHANCED A CROSSWALK IS, PEDESTRIANS SHOULD ONLY CROSS WHEN THEY ARE SURE THAT IT IS SAFE. PLACE A STICKER NEXT TO YOUR ENHANCEMENT OF PREFERENCE.

• Bulbouts and Refuge Islands

Bulbouts and refuge islands decrease crossing distance, improve visibility, and allow pedestrians to stop half-way.



Place
Stickers
Here

• Enhanced Striping

The pattern of paint in crosswalks can vary. Yellow crosswalks denote a crosswalk near a school.



Place
Stickers
Here

• Warning Lighting

Warning lighting is almost always yellow and is used to improve yielding among motorists. Warning lights can be placed overhead, at the side of the street, in the center of the street, or in the pavement.



Place
Stickers
Here

• Pedestrian Signal

Most crosswalk enhancements aim to ensure that motorists yield for pedestrians. Traffic signals require vehicles to stop at a red light to allow pedestrians to cross.



Place
Stickers
Here

Don't mark the
side of the road
if it's not
needed

Children
is key

Warning Signal
lights
needed

The
warning sign
is needed

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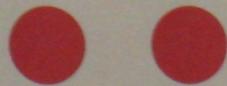
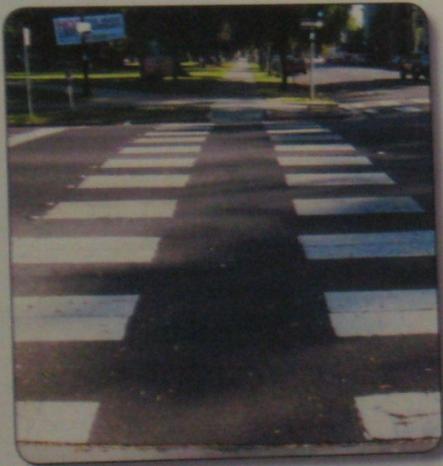
Place
Stickers
Here

*The
prota post
intended*

S
RES. CROSSWALK ENHANCEMENTS AIM TO IMPROVE SAFETY BY
SURING THAT MOTORISTS YIELD FOR CROSSING PEDESTRIANS.
ULD ONLY CROSS WHEN THEY ARE SURE THAT IT IS SAFE.

Enhanced Striping

The pattern of paint in crosswalks can vary. Yellow crosswalks denote a crosswalk near a school.



Place
Stickers
Here

Don't block the
box @ Brunswick +
E Main

Consistency
is key

Pedestrian Signal



Here

• Pedestrian Signal

Most crosswalk enhancements aim to ensure that motorists yield for pedestrians. Traffic signals require vehicles to stop at a red light to allow pedestrians to cross.



Place
Sticke
Here

Shorter signal
lengths
needed



OTHER ENHANCEMENTS FOR WALKING

PLACE YOUR STICKER NEXT TO YOUR ENHANCEMENTS OF PREFERENCE

• Advanced Stop Bars

Advanced stop bars are placed in front of crosswalks. They keep vehicles from encroaching into the crosswalk when stopped at a red light.



●
● Place
● Stickers
Here

• Advanced Yield Lines - "Sharks Teeth"

Advanced yield lines are placed in front of crosswalks. They remind motorists to yield to pedestrians.



Place
Stickers
Here

• Pedestrian Scramble

Pedestrians usually have to cross two roadways to get from one corner of a signalized intersection to another. A "scramble phase" allows pedestrians to cross diagonally.



● Place
Stickers
Here

• Turn Radius

When going around a corner, motorists drive slower if the radius of the curb is smaller. Lower vehicle speeds are safer for pedestrians.

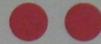


● Place
● Stickers
● Here

WHAT ARE THE ISSUES IN NEVADA COUNTY?

PLACE A STICKER NEXT TO THE ISSUE WHICH MOST CONCERNS YOU

I Would Walk More if Sidewalks Were Available and Better Connected



Place Stickers Here

I Would Walk More if it Were Easier to Get Across the Street



Place Stickers Here

I Don't Feel Safe Walking



Place Stickers Here

My Destinations are too Far Away to Walk



Place Stickers Here

I Would Walk More if the Weather Were Better

Place Stickers Here

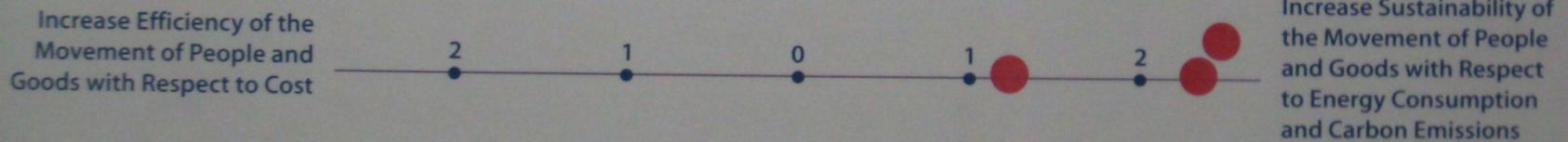
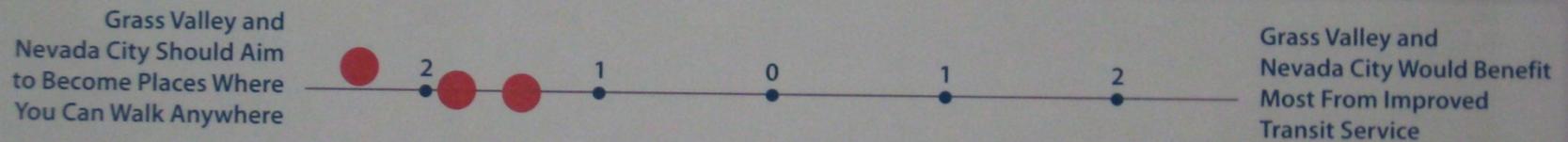
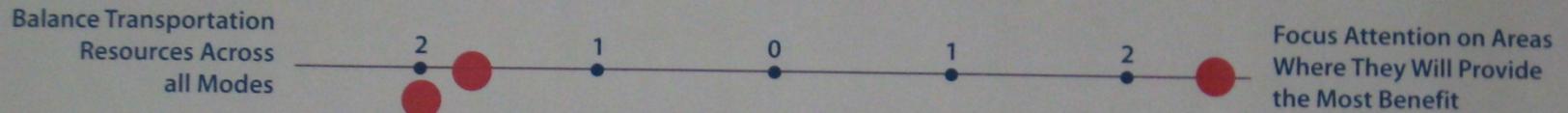
Driving is Easier than Walking

Place Stickers Here



TRANSPORTATION TRADEOFFS

HOW WOULD YOU RESOLVE THE TENSION BETWEEN DIFFERENT DESIRES?
PLEASE PLACE A STICKER WHERE YOU THINK THE BALANCE SHOULD BE STRUCK.



PLEASE MARK "HOT SPOTS" AND LOCATIONS FOR IMPROVEMENT!

MAPPING: NEVADA CITY

CHAS. PRYOR
and Associates
10000 N. 10th St.
Phoenix, AZ 85020



Truckee Workshop

August 4, 2010

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SUGGESTION FOR
MAJIC HOLE
Place
Stickers
Here

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WHAT ARE THE ISSUES IN NEVADA COUNTY?

PLACE A STICKER NEXT TO THE ISSUE WHICH MOST CONCERNS YOU

I Would Walk More if Sidewalks Were Available and Better Connected

Place Stickers Here 

I Would Walk More if it Were Easier to Get Across the Street

Place  Stickers Here

I Don't Feel Safe Walking

Place  Stickers Here

My Destinations are too Far Away to Walk

Place  Stickers Here

I Would Walk More if the Weather Were Better

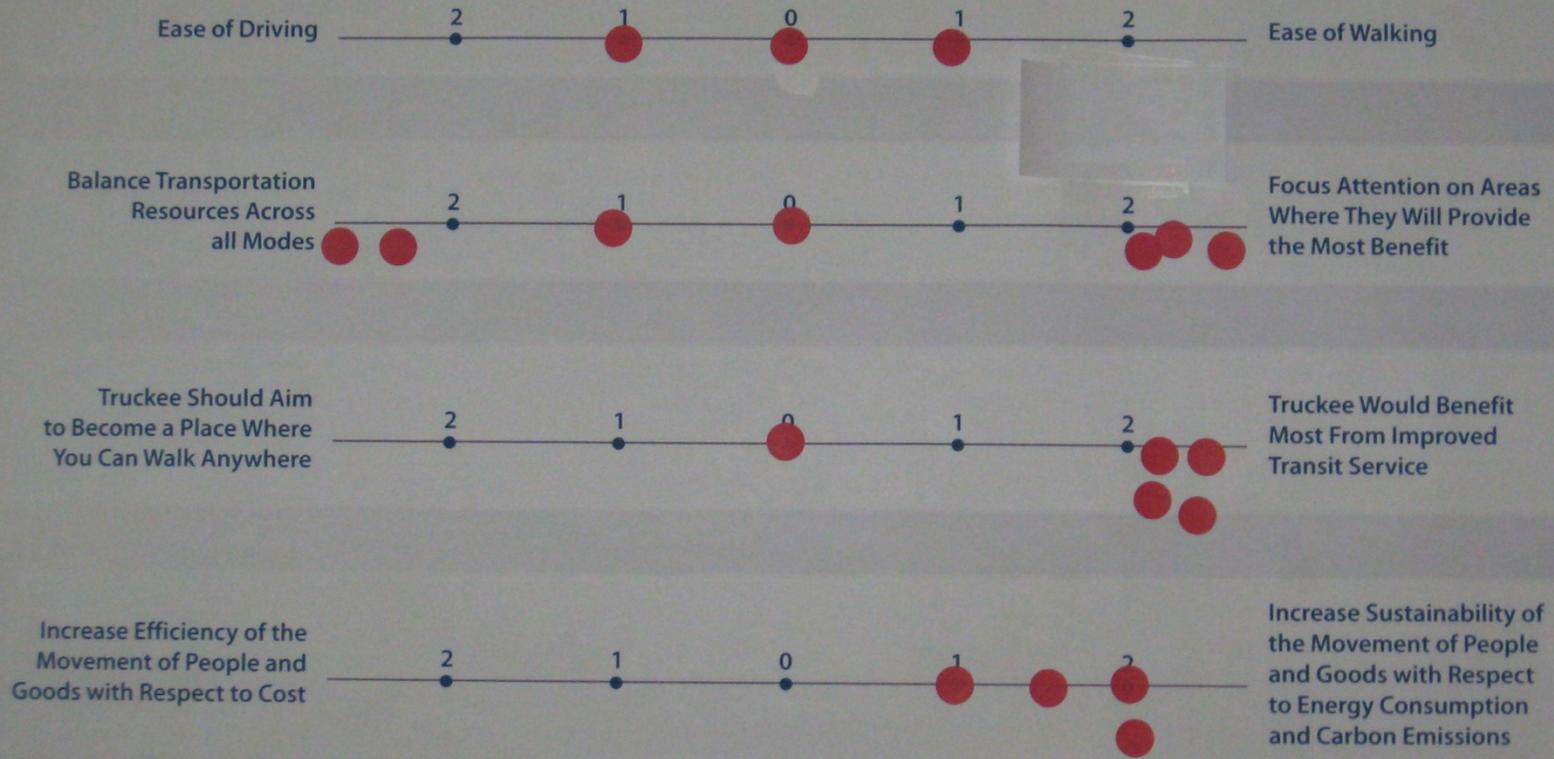
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Driving is Easier than Walking

Place  Stickers Here

TRANSPORTATION TRADEOFFS

HOW WOULD YOU RESOLVE THE TENSION BETWEEN DIFFERENT DESIRES?
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MAPPING: DOWNTOWN TRUCKEE

AB1600 - roundabouts or signals @ Bridge & Donner Pass, W River

CLEAR SNOW FROM SW'S
 CLARIFY WHO IS REQUIRED TO CLEAR SNOW FROM SW



Brickelltown Streetscape Project (on hold)

PROPOSED BIKE LANE

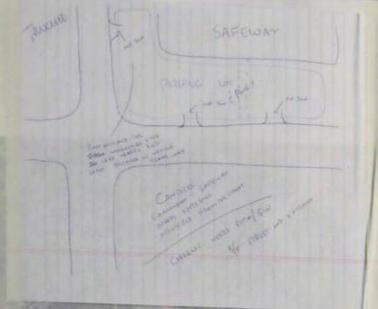
PROPOSED LEGITIMATE TRAIL

NEW Pedestrian Connections
 C-Park Alternative Proposed
 PEDRIOLIT TO PARK (EXISTING)

close gap in SW

add X-mark

PPING: TRUCKEE



Priority improvements along Donner Pass Rd
Planned Gateway streetscape

SB25 improvements planned for ES + HS

CLASS I TRAIL BURE PROPRIED FOR MOUNTAIN HOLE

PAVE PATH FROM COLLEGE TO ROUNDABOUT

HOSPITAL MAY BE PROVIDING MEDIAN ON DONNER PASS

TRUCKEE OVERLOOKING CAMPUS (LONG TERM)

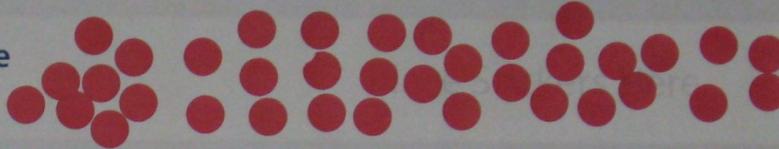
3rd milling on broken up. lots of driveway, not planned

Evening Markets

WHAT ARE THE ISSUES IN NEVADA COUNTY?

PLACE A STICKER NEXT TO THE ISSUE WHICH MOST CONCERNS YOU

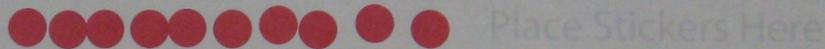
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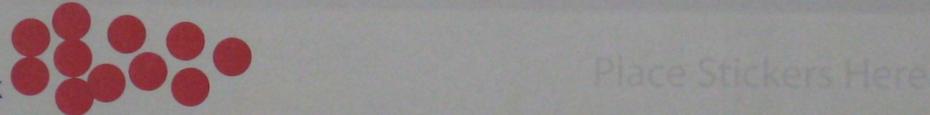
I Would Walk More if it Were Easier to Get Across the Street



I Don't Feel Safe Walking



My Destinations are too Far Away to Walk



I Would Walk More if the Weather Were Better



Driving is Easier than Walking



MAPPING: DOWNTOWN GRASS VALLEY

Better illuminated crosswalks



- Missing sidewalk
- Existing sidewalk
- - - Sidewalk portions missing

MAPPING: GRASS VALLEY



MAPPING: DOWNTOWN NEVADA CITY



MAPPING: NEVADA CITY



MAPPING: DOWNTOWN TRUCKEE



MAPPING: TRUCKEE



Map of Truckee, Nevada
 City of Truckee
 Public Domain

← TRAIN TO SV ALPINE & T.L.
 Bike lane 1/4 lane under I-80

PRIVATE PROPERTY

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

Colfax Avenue Safe Routes to School

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Bulbout small (curb, sf concrete, wheelchair access, demo)	3	EA	\$ 15,000	\$ 45,000
2	Bulbout medium (curb, sf concreet, wheelchair access, demo)	3	EA	\$ 20,000	\$ 60,000
3	Crosswalk striping (high visibility)	120	LF	\$ 40	\$ 4,800
4	Traffic Control & Mobilization (10%)	1	LS	\$ 11,000	\$ 11,000
5	Design of Improvements (10%)	1	LS	\$ 11,000	\$ 11,000
Subtotal					\$ 131,800
Contingency (20%)					\$ 26,360
TOTAL					\$ 159,000

Notes and assumptions:

1. This construction cost estimate is preliminary based on aerial graphics and is for planning purposes only.
2. Costs do not include drainage improvments
3. Costs do not include utility relocation
4. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

West Main Street Traffic Calming

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Bulbout medium (curb, sf concreet, wheelchair access, demo)	4	EA	\$ 20,000	\$ 80,000
2	Stop Bar Striping (12")	70	LF	\$ 6	\$ 420
3	Crosswalk striping (standard) (LF of x-walk)	150	LF	\$ 12	\$ 1,800
4	Traffic Control & Mobilization (10%)	1	LS	\$ 9,000	\$ 9,000
5	Design of Improvements (10%)	1	LS	\$ 9,000	\$ 9,000
Subtotal					\$ 100,220
Contingency (20%)					\$ 20,044
TOTAL					\$ 121,000

Notes and assumptions:

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3. Costs do not include utility relocation
4. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

Ridge Road Safe Routes to School

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Bulbout small (curb, sf concrete, wheelchair access, demo)	1	EA	\$ 15,000	\$ 15,000
2	Concrete Sidewalks	2,400	SF	\$ 10	\$ 24,000
3	Remove Asphalt	2,400	SF	\$ 5	\$ 12,000
4	Curb and gutter	600	LF	\$ 30	\$ 18,000
5	Signage	4	EA	\$ 300	\$ 1,200
6	Pedestrian Refuge Island	4	EA	\$ 10,000	\$ 40,000
7	Accessible ramp	1	EA	\$ 3,100	\$ 3,100
8	Crosswalk striping (high visibility)	100	LF	\$ 40	\$ 4,000
9	Traffic Control & Mobilization (10%)	1	LS	\$ 12,000	\$ 12,000
10	Design of Improvements (10%)	1	LS	\$ 12,000	\$ 12,000
Subtotal					\$ 141,300
Contingency (20%)					\$ 28,260
TOTAL					\$ 170,000

Notes and assumptions:

1. This construction cost estimate is preliminary based on aerial graphics and is for planning purposes only.
2. Costs do not include drainage improvements
3. Costs do not include utility relocation
4. Sidewalks are 4 feet wide
5. Driveways do not need accessible ramps, ramps assumed only at crosswalks
6. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

City Hall Crosswalk

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Bulbout small (curb, sf concrete, wheelchair access, demo)	1	EA	\$ 15,000	\$ 15,000
2	Bulbout medium (curb, sf concreet, wheelchair access, demo)	1	EA	\$ 20,000	\$ 20,000
3	Crosswalk striping (high visibility)	40	LF	\$ 40	\$ 1,600
4	Traffic Control & Mobilization (10%)	1	LS	\$ 4,000	\$ 4,000
5	Design of Improvements (10%)	1	LS	\$ 4,000	\$ 4,000
Subtotal					\$ 44,600
Contingency (20%)					\$ 8,920
TOTAL					\$ 54,000

Notes and assumptions:

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3. Costs do not include utility relocation
4. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestrian Improvement Plan
Cost Estimate - For Planning Purposes Only

South Nevada City Safe Routes to School

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Concrete Sidewalks	24,000	SF	\$ 10	\$ 240,000
2	Curb and gutter	6,000	LF	\$ 30	\$ 180,000
3	Accessible ramp	6	EA	\$ 3,100	\$ 18,600
4	Bulbout large (curb, sf concrete, wheelchair access, demo)	1	EA	\$ 25,000	\$ 25,000
5	Retaining Wall	1,680	SF	\$ 125	\$ 210,000
6	Earthwork for retaining wall	375	CY	\$ 15	\$ 5,625
7	Crosswalk striping (high visibility)	75	LF	\$ 40	\$ 3,000
8	Crosswalk striping (standard) (LF of x-walk)	35	LF	\$ 12	\$ 420
9	Traffic Control & Mobilization (10%)	1	LS	\$ 69,000	\$ 69,000
10	Design of Improvements (10%)	1	LS	\$ 69,000	\$ 69,000
Subtotal					\$ 820,645
Contingency (20%)					\$ 164,129
TOTAL					\$ 985,000

Notes and assumptions:

1. Sidewalks are 4 feet wide
2. This construction cost estimate is preliminary based on aerial graphics and is for planning purposes only.
3. Costs do not include drainage improvements
4. Costs do not include utility relocation
5. Driveways do not need accessible ramps, ramps assumed only at crosswalks
6. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

Donner Pass Road Safe Routes to School Improvements

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Concrete Sidewalks	30,240	SF	\$ 10	\$ 302,400
2	Curb and gutter	3,780	LF	\$ 30	\$ 113,400
3	Accessible ramp	9	EA	\$ 3,100	\$ 27,900
4	Signage	8	EA	\$ 300	\$ 2,400
5	Pedestrian Refuge Island	8	EA	\$ 10,000	\$ 80,000
6	Traffic Control & Mobilization (10%)	1	LS	\$ 53,000	\$ 53,000
7	Design of Improvements (10%)	1	LS	\$ 53,000	\$ 53,000
Subtotal					\$ 632,100
Contingency (20%)					\$ 126,420
TOTAL					\$ 759,000

Notes and assumptions:

1. Sidewalks are 8 feet wide
2. This construction cost estimate is preliminary based on aerial graphics and is for planning purposes only.
3. Costs do not include drainage improvements
4. Costs do not include utility relocation
5. Driveways do not need accessible ramps, ramps assumed only at crosswalks
6. Costs assume no right-of-way acquisition is needed.

Fehr & Peers

Nevada County Pedestian Improvement Plan
Cost Estimate - For Planning Purposes Only

Donner Pass Road Connectivity

Item	Description	Qty.	Unit	Unit Cost	Total Cost
1	Concrete Sidewalks	41,400	SF	\$ 10	\$ 414,000
2	Curb and gutter	5,175	LF	\$ 30	\$ 155,250
3	Accessible ramp	26	EA	\$ 3,100	\$ 80,600
4	Signage	4	EA	\$ 300	\$ 1,200
5	Pedestrian Refuge Island	4	EA	\$ 10,000	\$ 40,000
6	Retaining Wall	1,500	SF	\$ 125	\$ 187,500
7	Earthwork for retaining wall	139	CY	\$ 15	\$ 2,085
7	Traffic Control & Mobilization (10%)	1	LS	\$ 89,000	\$ 89,000
8	Design of Improvements (10%)	1	LS	\$ 89,000	\$ 89,000
Subtotal					\$ 1,058,635
Contingency (20%)					\$ 211,727
TOTAL					\$ 1,271,000

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5. Driveways do not need accessible ramps, ramps assumed only at crosswalks
6. Costs do not include geometric changes to freeway ramps
7. Costs assume no right-of-way acquisition is needed.