Workspace Planning and Design: Survey of State Practice

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Executive Summary

Background

Caltrans' Division of Business Operations is developing a long-range facility plan that involves constructing new facilities or relocating to newer buildings, and designing office space that addresses workforce trends and growth. To inform its development of this plan, Caltrans is seeking information about the practices employed by state departments of transportation (DOTs) in designing new office space, including the accommodations made to address a changing workforce.

To assist with this information-gathering effort, CTC & Associates conducted an online survey of state DOTs to learn about the practices employed in designing office space. A limited literature search supplemented the survey results. The survey questions are provided in Appendix A. The full text of survey responses is presented in a supplement to this report.

Summary of Findings

This Preliminary Investigation gathered information in two areas:

- Survey of practice.
- Related resources.

Survey of Practice

Sixteen state DOTs participated in an online survey distributed to members of the AASHTO Committee on Human Resources. Key findings from respondents are highlighted below in five topic areas:

- Office space needs.
- General workspace design.
- Staffing and workspace design.
- Agency experience with workspace design alternatives.
- Facilities planning.

Office Space Needs

Respondents were asked to describe their current and future office space needs. Only Colorado DOT has moved into new office space within the past three years. DOTs in four states—Delaware, Iowa, North Dakota and Utah—have redesigned current office space within the past three years; Arizona and Minnesota DOTs plan to redesign current office space within the next three to five years. Texas DOT plans to move into new office space in the next three to five years due to an expiring lease.

General Workspace Design

Workforce demographics and increases in staffing were most often cited by respondents when asked to identify the factors that would be most important when designing new office space. The most important design features, as cited by respondents, were safety and security, acoustic privacy and innovative technology. Respondents highlighted other important design elements,

including consistency in the design elements and their application, a modern feel to the design, and multipurpose spaces.
The brief case study that appears on page 10 offers details about Arizona DOT's plans to redesign office workspace to allow for versatility, easy navigation and collaboration among employees in a technology-friendly environment.

Office Space Standards

For most respondents, job function or job title determines the size and design of a workspace. Three states—Connecticut, Minnesota and New York—apply standard cubicle/workstation sizes. A table summarizing the office space standards applied by survey respondents appears on page 11.

Staffing and Workspace Design

Respondents described how staffing needs and policies affect workspace design choices:

- *Staff mobility*. All responding states but Alabama and Delaware use laptop computers for employee workstations to allow for staff mobility. Nine agencies permit staff to work in agency offices other than an employee's home office.

- *Telecommuting*. Of the nine states permitting telecommuting, two—Iowa and Utah—have adopted formal telecommuting policies (see page 13). Arizona DOT is subject to a mandated state telecommuting program that includes the goal of active participation by 20 percent of state employees in Maricopa County. None of the responding states appear to permit full-time telecommuting.

- *Designing for a future workforce*. When asked to identify the most significant changes in workspace design that will be needed to accommodate the workforce of the future, respondents cited accessibility; collaborative workspaces; employee health and related amenities; flexible workspaces; mobility; privacy; and technology.

Agency Experience With Workspace Design Alternatives

Respondents described their experiences with four workspace design alternatives:

- *Cubicles*. All but the Arkansas and Nebraska respondents commented on the use of cubicles in their agency's workspace design. Standard cubicle sizes ranged from 6 feet by 8 feet (Minnesota) to 8 feet by 10 feet (North Dakota). Respondents described the height of cubicle walls, the use of partitions and sit-to-stand desks, and opportunities for storage. Cubicles are used to provide an efficient use of space, with several respondents noting that they also provide employees some degree of privacy. A larger number of respondents cited the lack of privacy as a disadvantage of cubicles.

- *Open space concept*. Respondents noted that open spaces facilitate communication and increase collaboration among employees, and can reduce the space footprint dedicated to each employee. Disadvantages include the lack of privacy, an increase in noise and other distractions, and resistance from some staff members.

- *Communal spaces*. The advantages cited by respondents for this workspace design were similar to those cited for the open space concept (encouraging collaboration and fostering engagement among staff members). Other advantages include allowing for impromptu meetings, which can minimize the need for scheduled meetings, and

reducing work silos. Disadvantages were also similar to those cited in connection with open spaces—staff member resistance, noise and other distractions.

- *Other workspace design strategies*. Respondents described hotel (shared) workspaces that are made available to staff members who spend a lot of time in the field or to consultants, and small conference rooms that have been added to the workspace to provide an alternative work area to meet and collaborate. These types of workspaces accommodate temporary employees and many types of work.

Facilities Planning

Respondents were asked about any collaboration required with another state agency when planning and obtaining new office spaces. Respondents offered little with regard to best practices for collaborative facilities planning, with only one state—Alabama—maintaining a centralized state office building planning group. Some respondents collaborate with state administrative agencies to plan new workspaces, while in other states interagency collaboration is quite targeted, specifically relating to technology or furnishings.

Related Resources

Public agency practices are highlighted in a sampling of publicly available resources. Among these practices is an innovative and modern workspace model developed by the state of Washington to address increasing real estate costs and improve space efficiency. Other publications include space and technology guidelines and typical workstation layouts from the state of Minnesota. The state of Oregon offers a range of publications that address facilities planning, including a planning process manual, a space optimization study and a space programming tool.

Domestic and international practices in workspace and office design are highlighted in publications that address such topics as the benefits and impacts of collaborative, open-plan and co-working workspaces; developing engaging workspaces; and the impact of workspace design on employee satisfaction and performance.

Gaps in Findings

Portions of the survey received a limited response from survey participants, specifically related to respondents' experiences with collaborative facilities planning. Follow-up inquiries with the agencies that reported some type of collaboration in workspace planning could produce useful information. Follow-up inquiries might also garner further details of respondents' workspace design specifications.

Next Steps

Moving forward, Caltrans could consider:

- Consulting with Colorado DOT to learn more about how the agency prepared for and executed the recent move into its current office space.
- Contacting Arizona and Minnesota DOTs to learn more about the planning efforts underway or expected in connection with a new office redesign in the next three to five years.

- Comparing and contrasting respondents' practices and recommendations for workspace design to identify common themes.
- Identifying the workspace design issues or practices of greatest interest to Caltrans and soliciting additional feedback from the survey respondents who reported experience with those design practices.
- Examining in detail the facility planning guidance included in the **Related Resources** section of this report.

Detailed Findings

Survey of Practice

Survey Approach

Caltrans' Division of Business Operations (DBO) manages the office building portfolio for Caltrans' districts and headquarters locations. DBO is developing a long-range facility plan that involves constructing or relocating to newer buildings and designing office space that addresses workforce trends and growth. As part of the process to obtain new office space, Caltrans is working with the Department of General Services and Department of Finance to assess space needs and office design.

To inform its development of a facility plan, Caltrans is seeking information about the practices employed by state departments of transportation (DOTs) in designing new office space, including the accommodations made to address a changing workforce. CTC & Associates distributed an online survey to members of the American Association of State Highway and Transportation Officials (AASHTO) Committee on Human Resources to gather information about agency workspace design practices. The survey questions are provided in Appendix A. The full text of survey responses is presented in a supplement to this report.

Summary of Survey Results

Sixteen state DOTs responded to the survey:

- Alabama.
- Arizona.
- Arkansas.
- Colorado.
- Connecticut.
- Delaware.
- Iowa.
- Kentucky.
- Minnesota.
- Nebraska.
- New York.
- North Dakota.
- South Carolina.
- South Dakota.
- Texas.
- Utah.

(Nebraska DOT responded to only the first two survey questions.)

Survey results are summarized below in five topic areas:

- Office space needs.
- General workspace design.
- Staffing and workspace design.
- Agency experience with workspace design alternatives.
- Facilities planning.

Note: Respondents were advised that the survey questions were specific to workspace needs associated with office buildings and did not apply to facilities such as labs, traffic management centers or maintenance facilities.

Office Space Needs

Respondents were asked to describe their current and future office space needs. Only Colorado DOT has moved into new office space within the past three years. The table below summarizes survey responses.

Respondents' Office Space Needs

Workspace Status	State	Reason for Move or Redesign
Moved into current office space within the past three years	Colorado	• Promote collaboration, wellness and well-being. • Provide access to daylight and views with a better location. • Downsize and consolidate space; existing building would not accommodate a redesign given its age.
Redesigned current office space within the past three years	Delaware, Iowa, North Dakota, Utah	*North Dakota*. The DOT-owned building was renovated to address asbestos throughout the building. *Utah*. Office space was redesigned to provide more natural lighting and reduce electric costs.
Plans to move into new office space within the next three to five years	Texas	Lease expiring.
Plans to redesign current office space within the next three to five years	Arizona, Minnesota	*Arizona*. • Too much office space and the need to consolidate space. • Staff members from leased spaces relocated to existing structures; the central campus redesigned to create flexible and efficient workspaces. *Minnesota*. The agency has not planned or obtained new office space in the past 30 years.
No plans to move in the next three to five years	Alabama, South Dakota	N/A
No plans to move in the next 10 years	Arkansas, Connecticut, Kentucky, Nebraska, New York, South Carolina	*Connecticut*. The agency's current headquarters was constructed in late 1993. At that time, shared computer access was a normal part of office design. Several upgrades completed since then provided data connections to all employees.

General Workspace Design

Respondents offered information about the factors and features that contributed to agency workspace design choices, as well as general standards for the design of office space.

Factors Impacting Design

Respondents were presented with a list of factors and asked to identify those that would be most important when designing new office space. Workforce demographics were cited most often by respondents, followed by an increase in staffing. The table below summarizes survey responses.

Factors Important in Designing New Office Workspace

State	Decline in Staffing	Increase in Staffing	Mobility (Telecommuters)	Program or Project Needs	Workforce Demographics
Alabama				X	X
Arizona	X	X	X	X	X
Arkansas				X	X
Colorado					X
Connecticut	X	X	X		X
Delaware			X	X	X
Iowa	X	X			X
Kentucky				X	X
Minnesota		X	X		X
New York		X			
North Dakota					X
South Carolina		X		X	
South Dakota		X			
Texas		X	X		X
TOTAL	**3**	**8**	**5**	**6**	**11**

Respondents also noted the significance of lighting (Arizona, North Dakota and Utah); modern furnishings (Delaware and Minnesota); and a centralized location with transit access (Colorado). The Minnesota respondent reported an interest in creating a design that synthesizes furniture, technology and business practices that are adaptable to future changes.

Important Design Features

Respondents were asked to select the features they deemed important in the design of a new workspace from among the features listed below:

- Acoustic privacy (providing individual privacy when needed).
- Aesthetics and design.
- Collaborative workspace (areas conducive to ad hoc and small group meetings).
- Flexible configurations.
- Healthy and natural environment (more outdoor space, natural lighting).
- Innovative technology (easy connections for devices and laptops, advanced Wi-Fi connections, smartboards).
- Multipurpose space.
- Open plan (lower panels for cubicles, glass doors or walls to offices, fewer or no dividers).
- Physical comfort (furniture and equipment).
- Quality of meeting spaces (number, size and location).
- Safety and security.

Safety and security was cited most often by respondents, followed by acoustic privacy and innovative technology. The table below summarizes responses.

Features Important in Designing New Office Workspace

State	Acoustic Privacy	Aesthetics and Design	Collaborative Workspace	Flexible Configurations	Healthy and Natural Environment	Innovative Technology	Multipurpose Space	Open Plan	Physical Comfort	Quality of Meeting Spaces	Safety and Security
Alabama	X		X	X	X	X	X			X	X
Arizona	X	X	X	X	X	X	X	X	X	X	X
Arkansas	X	X		X	X	X	X	X	X	X	X
Colorado			X	X	X	X	X	X	X	X	X
Connecticut	X	X				X			X	X	
Delaware	X	X	X		X	X	X	X	X	X	X
Iowa			X	X		X		X			X
Kentucky	X	X			X	X		X			X
Minnesota	X		X		X	X	X				X
New York			X	X	X				X		X
North Dakota	X	X			X			X	X	X	X
South Carolina	X			X			X			X	X
South Dakota	X	X	X	X		X			X	X	X

Features Important in Designing New Office Workspace											
State	Acoustic Privacy	Aesthetics and Design	Collaborative Workspace	Flexible Configurations	Healthy and Natural Environment	Innovative Technology	Multipurpose Space	Open Plan	Physical Comfort	Quality of Meeting Spaces	Safety and Security
Texas				X		X	X	X	X	X	X
Utah	X	X			X						
TOTAL	**11**	**8**	**8**	**9**	**10**	**11**	**8**	**8**	**9**	**10**	**13**

Other Important Design Elements

Respondents provided additional information about other important design elements:

- *Consistency*. North Dakota DOT used the same colors, fabrics and cubicle types throughout the building to allow for the movement of pieces to other divisions or floors as needed.
- *Modern feel*. Delaware DOT abandoned the "institutional" look for a light, modern, slightly minimal approach to furnishings.
- *Multipurpose spaces.* Arizona DOT will use multipurpose spaces to reduce office square footage. These spaces are expected to take the form of versatile, three-walled informal spaces and more traditional conference rooms of varying sizes to encourage staff collaboration in these designated areas rather than at individual workstations. Reconfigurable furniture will also be available to make the space more flexible. Conference room usage will also be tracked to justify the need to build more meeting rooms if needed.

Case Study: Arizona Department of Transportation

The Arizona DOT respondents provided a significant level of detail about agency plans to redesign office workspace to allow for versatility, easy navigation and collaboration among employees in a technology-friendly environment. These plans are summarized below.

Arizona DOT will apply behavioral-based design ideas when redesigning its office space within the next three to five years. By incorporating natural lighting, colors and landscape artwork, the agency is focused on employee health and the nature-related aspects of the design, and hopes to provide a space that allows for versatility, easy navigation and collaboration with a technology-friendly configuration. Specific elements of the planned workspace design include:

- Allowing space for continuity of collaboration from a conference room to a conversational area or from a waiting area to a conference room.
- Providing benches in primary traffic areas to encourage interactions.
- Adding subtle treescape scenes on wall coverings and backlit artwork depicting the natural landscape in areas without access to natural lighting.

- Adding an art wall display of the agency's historical connections and diversity of activities.
- Adding different colors to entrances that continue into a very long corridor and signage to direct visitors to restrooms.
- Providing furniture in a conference space that can be reconfigured.
- Using up-to-date technology in conference spaces with easy connection and charging for tablets and laptops.
- Providing video teleconferencing capabilities for meetings to save time and travel expenses.
- Providing technological support for hearing-impaired guests.
- Placing conference and meeting rooms in close proximity to security staff.
- Providing better quality and energy-efficient lighting such as LED.
- Providing a less sterile environment by addressing acoustical issues and using traditional design colors.

Office Space Standards

Respondents were asked to describe minimum or maximum office space (cubicles or workspaces) specifications that vary based on program type, job type or other criteria. For most agencies, job function or title determines workspace design. Three states—Connecticut, Minnesota and New York—apply a standard cubicle/workstation size. The table below summarizes survey responses.

Office Space Standards

Criterion	State	Description
Job function	Arizona	The agency begins with a strategic plan to limit the number of offices and office size. Job function requirements instead of tenure or job position will determine whether an individual receives an office or workstation.
	Delaware	• Engineers use collaborative areas. • Much of financial and administrative work is confidential and requires privacy.
	Iowa	Dependent on duties and team collaboration.
	Utah	Workspace is determined by the meeting space needed to accommodate frequent visitors.

Office Space Standards		
Criterion	**State**	**Description**
Job title	Colorado	• *Director-level positions*: 140-square-foot office. • *Direct reports to director-level positions*: 120-square-foot office. • *Professional engineer III positions*: 120-square-foot office. • *Remaining staff*: 64-square-foot workstation.
	Kentucky	Executive management staff and directors are given larger and/or private office space.
	North Dakota	Standard 8-foot-by-10-foot cubicles with specific features (i.e., wardrobe locker, lockable overhead); supervisors given office size based on position.
	Texas	All cubicle spaces are uniform; managers given an office.
Consistent sizing	Connecticut	• 8-feet by 8-feet minimum for cubicles. • 12-feet by 12-feet minimum for offices.
	Minnesota[1]	6 feet by 8 feet or 8 feet by 8 feet for cubicles.
	New York	Previously, job titles determined office space. Downsizing associated with leased office space has led to the use of standardized workstation sizes to accommodate more employees.

1 Some office plans are based on job positions. For example, staff members who demonstrate a need to frequently review large, paper-based plans are provided a larger cubicle.

Staffing and Workspace Design

Respondents addressed the use of laptops and staff mobility among agency offices, the opportunity to telecommute, and the significant changes in workspace design that will be needed to accommodate the workforce of the future.

Staff Mobility

All respondents but Alabama and Delaware use laptop computers for employee workstations to allow for staff mobility. Nine agencies permit staff to work in agency offices other than an employee's home office:

- Some Alabama DOT employees are required to work in both home and field offices. A laptop or Microsoft Surface Pro is provided for their use.
- Arizona DOT hires contractors and consultants who sometimes work at sites that are not agency facilities. The agency tries to better define workspaces as full-time or drop-in use to use space more efficiently.
- Colorado DOT periodically allows staff to work at other locations for business reasons.
- Iowa DOT's telework policy addresses staff mobility; see *Related Resources* below.

- Though each Kentucky Transportation Cabinet employee has an assigned work location, employees may also work at a district office when the need arises.
- New York State DOT maintains flexibility as it relates to operational needs.
- North Dakota DOT has only a few positions that have multiple office locations.
- South Dakota DOT has four regional and 12 area offices. The agency tries to accommodate employee preferences if work can be done in a location other than the employee's home office.
- Some Texas DOT job descriptions require employees not to hold a permanent location.

Minnesota DOT has no formal policy and is examining the impact of staff mobility on satellite offices.

Telecommuting

The policies and practices of the nine agencies permitting telecommuting are summarized in the table below.

Telecommuting Among Respondents

State	Policy or Practice
Arizona	Mandated for all members of state agencies, boards and commissions with the goal of 20 percent of state employees in Maricopa County actively participating.
Arkansas	Requires inspectors and crew leaders to communicate remotely via laptop.
Colorado	Considered a privilege, not a right, and must be approved by supervisors and based on performance levels (satisfactory or above). Full-time telecommuting privileges are not available.
Delaware	Permitted for certain groups of computer technicians or other key personnel (division directors, managers, security officers).
Iowa	Permitted based on time and cost-effectiveness for the department for positions that can be performed at an alternate site without diminishing the quality of work, productivity or level of service. See *Related Resources* below for this policy.
Minnesota	Permitted based on the type of work and with supervisor approval. An update of agency policy is underway to address telework and performance management.
North Dakota	Allowed if it benefits the employee and department; may be limited to a few days a week.
Texas	Permitted at the discretion of the division or section director.
Utah	Considered a management option that may be made available to some employees when a mutually beneficial situation exists for the state, department and employee.

Telecommuting Among Respondents	
State	**Policy or Practice**
Utah	Agency policy indicates that telecommuters "generally work at their Department office from two to three days per week and a secondary location or alternative work site one to two days per week. The secondary work location is generally a home office, although other alternatives are possible." See *Related Resources* below for this policy.

Related Resources:

Telework, Policy No. 200.05, Iowa DOT Policies and Procedures, Iowa Department of Transportation, July 2017.
See Attachment A.
This policy establishes basic parameters for employees to telework.

Telecommuting, UDOT 05-76, Utah Department of Transportation, December 2013.
See Attachment B.
This policy describes when and how Utah DOT employees can perform assigned work outside of the office, generally within their home.

Designing for a Future Workforce

Respondents identified the most significant changes in workspace design that will be needed to accommodate the workforce of the future. The issues raised by respondents ranged from collaborative workspaces to mobility and privacy. The table below summarizes responses.

Workspace Design Changes Needed to Accommodate Future Workforce		
Design Issue	**State**	**Description**
Accessibility	Minnesota	Greater accessibility for employees with disabilities.
Additional space	South Dakota	Space for additional workforce needs.
Collaborative workspaces	Colorado, Connecticut, Delaware, Iowa, New York	*Colorado*. Break rooms and conference rooms that allow for collaboration and work-from-anywhere environments. *Connecticut*. Improved meeting locations. *Iowa*. More collaboration sites. *New York*. Open, flowing workspace areas with common areas available for team gatherings or multiple program conferencing.
Consistency	Arizona, North Dakota	*Arizona*. Consistency and supportive workspace. *North Dakota*. Consistency, with a policy that provides for one final approval.

Workspace Design Changes Needed to Accommodate Future Workforce		
Design Issue	**State**	**Description**
Employee health and related amenities	Arizona, Connecticut, Delaware, Kentucky, Minnesota	*Arizona*. Unspecified amenities for all employees. *Connecticut*. Ergonomics. *Delaware*. Aesthetically pleasing open areas, natural lighting and soft seating areas with network connectivity. *Kentucky*. Workspace that is more conducive to overall physical health and well-being. *Minnesota*. More fluid work area to attract and retain the incoming workforce.
Facility issues	Arkansas, North Dakota	*Arkansas*. Better heating, ventilation and air conditioning controls (pinpoint areas). *North Dakota*. Lighting is key.
Flexible workspaces	Colorado	The ability to work in flexible environments.
Mobility	Minnesota, Texas	*Minnesota*. Greater mobility options. *Texas*. Ability to do work from any location in an agency using wireless connectivity.
Privacy	Arizona, North Dakota, Utah	*Arizona*. Privacy booths and meeting rooms that displace the walled office. *North Dakota*. Use of "white noise" to muffle conversations throughout a given area. *Utah*. Cubicles that still allow for privacy in conversation and of computer monitors.
Technology	Arkansas, Connecticut	*Arkansas*. Network connectivity. *Connecticut*. Technology, cell phone and tablet reception.

Agency Experience With Workspace Design Alternatives

Below are descriptions of respondents' experiences with four workspace design alternatives:

- Cubicles.
- Open space concept.
- Communal spaces.
- Alternative workspace design strategies.

The advantages and disadvantages of each workspace design alternative are presented in the tables below. Respondents also provided details of the cubicles used by their agencies. Additional information about respondents' cubicle use begins on the next page.

Cubicles

All but the Arkansas and Nebraska respondents commented on the use of cubicles in their agency's workspace design. Standard cubicle sizes ranged from 6 feet by 8 feet to 8 feet by 10 feet. Respondents offered varying levels of detail, from detailed specifications to more general descriptions of the cubicles used.

The table below describes the cubicles used by respondents. Immediately following are tables describing the advantages and disadvantages of cubicles as reported by respondents.

Using Cubicles in a Workspace Design

Category	State	Description
Detailed cubicle specifications	Colorado	• Total of 64 square feet. • 48-foot dividing wall running parallel to the window with 55-inch spines running perpendicular from the window. • Sit-to-stand desks with dual monitor arms and LED task lighting. • Two sets of file drawers, one bookshelf and a side work surface.
General cubicle specifications	Alabama	Standard cubicles with 6- to 7-foot walls.
	Minnesota	• 6-feet by 8-feet and 8-feet by 8-feet standard footprints; larger as needed based on the type of work. • Smaller cubicles are used for part-time, teleworking and hoteling employees. • Cubicle wall heights no taller than 66 inches without an approved exception; shorter heights wherever possible.
	New York	Standard 6-feet by 9-feet workstations for the majority of the workforce.
	North Dakota	• 8-feet by 10-feet cubicles for full-time staff; 8-feet by 8-feet cubicles for temporary employees. • Wardrobe locker, shelving and counter space are consistent across cubicle types.
General cubicle description	Arizona	• Consistent and universal design, size and layout with maximization of technology. • Lower partition heights and glass to encourage interaction and collaboration and connection to natural lighting. • Cubicles are built along exterior walls; walled space is built within the central core to allow staff member access to natural lighting.

Using Cubicles in a Workspace Design		
Category	**State**	**Description**
General cubicle description	Connecticut	• System furniture uses partitions, which allows for "great ergonomic space." • Sound-absorbent cloth-covered portable partitions (of high quality for longevity). • Larger cubicle areas are typically fitted with freestanding furniture. • Agency has trended toward a paperless environment, which has reduced "by quite a bit" the storage needed for paper filing.
	Delaware	Sit-to-stand desks with multifunctional lateral files serve as additional seating; frosted glass toppers allow for privacy while also allowing for natural light to flow through.
	Iowa	Modular frame-and-tile system furniture with varying wall heights to allow privacy or collaboration.
	Kentucky	Open work environment with cubicles.
	South Carolina	Low partition modular workstations.
	South Dakota	Typical cubicle types.
	Texas	Future cubicles are expected to be flexible with much smaller storage capacity.
	Utah	Square cubicles vary in size; larger work areas used for staff with frequent and numerous visitors.

The two tables below describe the advantages and disadvantage of cubicles reported by respondents.

Cubicle Advantages		
Category	**State**	**Description**
Access to daylight	Colorado	Provides employees with access to daylight and views; all private offices are located in the core of the building.
Cost-effective	Arizona	Smaller workstations are less expensive.
Efficient use of space	Alabama, Arizona, Delaware, Minnesota, North Dakota, South Carolina, Utah	N/A
Facility management	North Dakota	Facilitates heating and cooling.
Flexibility	Connecticut, Iowa	N/A
Increased collaboration	Colorado, South Dakota	N/A

Cubicle Advantages		
Category	**State**	**Description**
Privacy	Alabama, Connecticut, Iowa, Minnesota, New York, North Dakota	*Minnesota*. Allows the employee some space that can be personalized. *New York*. Provides some type of secure, confidential workspace specific to that employee. *North Dakota*. Creates limited privacy with open interaction given the cubicle height of 54 inches.

Cubicle Disadvantages		
Category	**State**	**Description**
Distractions	Minnesota	Requires all employees to behave in a way that is respectful to all surrounding employees. This is often a learning opportunity, as sound and motion can be distractions.
Lack of open feeling	Iowa	Creates a closed area, not an open feeling.
Lack of privacy	Alabama, Arizona, Colorado, Connecticut, Delaware, New York, North Dakota, South Carolina, South Dakota, Utah	*Alabama*. Not as private as an office. *Arizona*. Lack of privacy for personal calls or for highly confidential calls. Privacy areas such as phone rooms are being incorporated into remodeled spaces, and nonreservable meeting rooms will also be available. *Colorado*. From an agency perspective, there are no disadvantages. For a small percentage of the staff, there is a lack of privacy. *Connecticut*. Lack of privacy, especially for telephone calls. *Delaware*. Some lack of privacy. *New York*. Cubicles lack privacy and can alienate employees from each other. *North Dakota*. Privacy, limited security; not appropriate for supervisory duties. *Utah*. Does not allow for privacy of conversations, and visitors can sometimes see a staff member's computer monitor.
Lack of storage space	Connecticut	Storage buildup in individual areas.
Limited communication	Texas	Little communication happens across cubicle walls.
Noise	Kentucky, South Dakota	N/A

Open Space Concept

The table below summarizes the advantages and disadvantages of the use of open space in a workspace design reported by eight respondents.

Using the Open Space Concept in a Workspace Design		
State	**Advantages**	**Disadvantages**
Arizona	• Allows for greater interaction and collaboration. • Facilitates the agency's response to evolving workspace requirements by requiring less remodeling and reconfiguration.	Legacy interpretations of workspace needs create resistance, primarily by senior staff.
Colorado	Increases collaboration and reduces work silos.	Some minimal noise distractions.
Connecticut	• Fosters open communication (depends on the type of business the office performs). • Reduces buildup of paper and other items that must be stored.	General lack of privacy depending upon the type of work performed.
Delaware	Gives the appearance of a larger space.	Lack of privacy; noise.
Iowa	Allows for collaboration and community space needs such as storage or printers/copiers.	Not everyone needs or wants to collaborate; some staff members want their own space to personalize and perform tasks.
Kentucky	More economical; facilitates communication.	May cause more distractions and reduce privacy.
Minnesota	• Reduces space footprint dedicated to each employee. • Increases communication and collaboration between employees. • Improves access to natural light.	Requires all employees to behave in a way that is respectful to all surrounding employees. This is often a learning opportunity, as sound and motion can be distractions.
Texas	Provides for open communication across a work area and transparency regarding available personnel.	Increased noise pollution.

Communal Spaces

The table below summarizes the advantages and disadvantages of the use of communal spaces in a workspace design reported by seven respondents.

Using Communal Spaces in a Workspace Design

State	Advantages	Disadvantages
Arizona	Promotes interaction; a creative space propagates creative thinking.	Older workers may be unfamiliar with these spaces and can be resistant to their use.
Colorado	Increases collaboration and reduces work silos.	Some minimal noise distractions.
Connecticut	Fosters engagement among staff members.	Space is not always utilized and can become an unofficial lunch area.
Delaware	Encourages idea exchanges; convenient for employee lunches or breaks.	None provided.
Iowa	Allows for collaboration and communication within and across teams.	Some areas can be used for storage or printer/copier areas.
Minnesota	• Provides ad hoc meeting and collaboration spaces, which were heavily requested. • Provides different types of space for individual employees to work. • Improves accessibility and work productivity among employees who choose to use it.	Requires all employees to behave in a way that is respectful to surrounding employees. This is often a learning opportunity, as sound and visual motion can be distractions. Also, without established rules for usage, these spaces could potentially be abused.
Texas	Allows for impromptu meetings, which can minimize scheduled meetings.	None provided.

Other Workspace Design Strategies

The table below describes other workspace design strategies respondents are employing to meet staffing needs and lists each strategy's advantages. No disadvantages were noted by respondents.

Other Workspace Design Strategies

State	Workspace Design Strategy	Advantage
Colorado	Hotel (shared) workspaces available to staff members who spend a lot of time in the field.	Reduces space need.
Delaware	Private hotel space/booths with doors, sound-proofing, data and phone connectivity, and ergonomic seating.	Accommodates temporary employees or consultants with private office areas for phone calls and workspaces.
Iowa	Spaces to house employees and external consultants together in a combination cubicle and open office area.	Accommodates many types of work.

Other Workspace Design Strategies		
State	**Workspace Design Strategy**	**Advantage**
North Dakota	• Workrooms consolidated into designated areas with networked copiers and printers, and refrigerators and ice machines. • Many small conference rooms added to provide an alternative work area to meet and collaborate.	• Multipurpose spaces away from cubicles but conveniently located on the same floor. • Presentation boards and projectors help facilitate meetings.

Facilities Planning

Respondents were asked about any collaboration required with another state agency when planning and obtaining new office space, and asked if they had identified any best practices through previous collaborative efforts. Below is a brief summary of respondents' experiences with collaborative facilities planning:

Centralized Planning

- Alabama maintains a centralized state office building planning group.

Collaborative Planning

- Kentucky Transportation Cabinet must work in collaboration with the Kentucky Finance and Administration Cabinet, the "primary support agency for state government, [which] provides central state agency fiscal management and operates state tax processes."
- New York State DOT must work with the New York State Office of General Services when planning new office workspace. The respondent noted that it is helpful to work with staff members who have previous experience in space planning.
- In South Carolina, the state's Department of Administration and Office of Real Property Services assists with the purchase of land, buildings and leases.
- Texas DOT collaborates with the Texas Facilities Commission.

Targeted Collaboration and Coordination

- Collaboration is required for those buildings in which Colorado DOT is co-located with Colorado State Patrol. The respondent recommended that one agency take the lead and act as the project manager, with other agencies reporting through the lead agency.
- South Dakota DOT must work with the Bureau of Information and Telecommunications for computer and other technical assistance, and with the Bureau of Administration on furnishings and other logistical necessities.

Communication Rather Than Coordination

- In Utah, the DOT contacted Utah's Division of Facilities Construction Maintenance to keep this group apprised of DOT activities and changes.

Related Resources

Below is a sampling of publicly available resources that are organized into two topic areas:

- Public agency practices.
- Workspace and office design.

Public Agency Practices

Among the public agency practices highlighted below is an innovative and modern workspace model developed by the state of Washington to address increasing real estate costs and improve space efficiency. The Modern Office Destination project involved creating a co-working space located in downtown Seattle that can be used by any state employee.

Federal Agencies

Case Study: How GSA Saved $24 Million Through Workplace Transformation, AgilQuest Corporation, 2015.
https://resources.agilquest.com/case-studies/casestudy-gsa1800f
From the executive summary: When the General Services Administration—the U.S. agency that manages nearly 375 million square feet of federal office space—opened their renovated headquarters at 1800 F Street NW in Washington, D.C. in the fall of 2013, less than half of the building's employees showed up. It was the intended result of an initiative that began with an Executive Order mandating that federal agencies shed unused office space, cut costs, and, in response to the Telework Enhancement Act of 2010, find a way to move government employees to more flexible styles of work.

Related Resources:

> **"Work Is What You Do, Not Where You Are: How GSA's 1800 F Street Project Is Transforming the Government Workplace,"** AgilQuest Corporation, *Work Design Magazine*, November 2015.
> https://www.dropbox.com/s/x13pcvcojp80c3n/GSA%20Final%20PDF.pdf?dl=0
> This case study describes the consolidation of General Services Administration (GSA) buildings and workspaces and includes a discussion of the future government workplace.
>
> **GSA 1800F Case Study From *Work Design Magazine***, AgilQuest Corporation, January 2016.
> https://youtu.be/hpma_aSTYgw
> This video is described as a "[c]ase study on the workplace transformation project at GSA headquarters in Washington DC to reduce real estate, increase office space utilization, save taxpayer money, reduce energy consumption, reduce carbon footprint and more."

Maryland

Facility Program Manual, Department of Budget and Management and Department of General Services, State of Maryland, July 2017.
https://dbm.maryland.gov/budget/Documents/capbudget/Instructions/facilityprogmanual.pdf
From the manual: The program development process is intended to guide the agency's decision making process in formulating its budget request. It is also used by project managers and designers to execute the facility that will best meet the agency's needs. DBM [Department of

Budget and Management] has found two aspects of the program in particular that are often inadequately developed: evaluation of alternatives and quantification of the project's need and benefits. When these aspects of the program are insufficient, the review and approval processes usually take much longer.

Minnesota

Space Management, Minnesota Department of Administration, undated.
https://mn.gov/admin/government/real-estate/space-management/
From the web site:

> Admin's space management team provides information to administrators and managers on space utilization and space needs to make cost-effective facility planning-related decisions. This process includes a systematic method of inventorying, allocating, planning, designing, and maintaining space. Our goal is to provide flexibility, functionality and efficiency while meeting agency space requirements.

Publications available on this web site provide space and technology guidelines and typical workstation layouts.

Oregon

Facilities Planning, Department of Administrative Services, State of Oregon, 2018.
https://www.oregon.gov/das/Financial/Facplan/Pages/Index.aspx
From the web site: Facilities planning ensures the statewide capital planning process effectively evaluates the needs and conditions of state facilities, establishes and implements guidelines and standards for acquiring, managing and maintaining state facilities and provides financing and budgeting strategies to allocate resources to facility needs. Our unit establishes criteria for evaluating proposed state-owned facilities, maintains related databases of state-owned property, and oversees data collection, analysis and benchmarking related to the utilization and stewardship of existing facilities.

Related Resources:

> **Statewide Facilities Planning Process Manual**, Chief Financial Office, Department of Administrative Services, State of Oregon, 2017-2019.
> https://www.oregon.gov/das/Financial/Facplan/Documents/SFPP%20Manual%2017-19.pdf
> This manual describes the state's facilities planning process.
>
> **Portfolio Workplace and Space Optimization Study for the State of Oregon**, Department of Administrative Services, State of Oregon, undated.
> https://www.oregon.gov/das/Financial/Facplan/Documents/Space%20Guideline%20Study.pdf
> *From the executive summary*: The State of Oregon is investigating ways to reduce real estate and facility occupancy costs and improve and enhance workplace performance and employee productivity. The State also would like to provide its employees with an appropriate mix of workspace alternatives that accommodate varying job functions and activities across and within agencies. To support this initiative, JLL [Jones Lang LaSalle Inc.] developed recommendations associated with space utilization that will reduce costs, enhance the work environment, improve organizational and employee satisfaction, and promote the attraction and retention of talent. To facilitate the implementation of the recommendations, JLL worked with the State to identify new and/or improved policies and

practices and developed a programming toolkit in support of implementation. JLL also outlined industry best practices to include new workplace standards and space options, automated analysis tools, and change management.

Strategic Facilities Planning Process/Guide, Facilities Planning Unit, Chief Financial Office, Department of Administrative Services, State of Oregon, undated.
https://www.oregon.gov/das/Financial/Facplan/Documents/Agency%20SFPP.pdf
This visual process guide walks an agency through the six steps of developing a facility and space needs plan. The process begins by having the agency review its mission, values and principles. Key questions are asked throughout the step-by-step guide to examine components of a facility and space needs plan.

State of Oregon Space Programming Tool, State of Oregon, October 2015.
https://www.oregon.gov/das/Financial/Facplan/Documents/State%20of%20Oregon%20Space%20Programming%20Tool%2010%2027%2015.xlsx
This Excel workbook provides a space program template and space program comparison example. The tool also allows users to conduct a scenario and sensitivity analysis. *From the tool's instructions page*:

> The user can enter up to (3) separate space programs for the purpose of analyzing how much more or less dense the resulting space programs are given varying inputs. This is accomplished by entering different space types and their associated quantities, area sizes (length x width) and sharing ratios from program to program. Upon doing so, the tool auto-calculates the resulting USF [usable square feet] and RSF [rentable square feet] and advises if a particular space program falls within the allowable range.
>
> The user can also enter financial information associated with approved budgets pertaining to rent and operating expenses (rent/opex) and net capital expenses (capex). Additionally, information associated with market rents for up to (3) separate buildings or submarkets can be added. Upon doing so, the tool will auto-calculate financial totals and will advise if a particular space program falls within the allowable range.

Washington

Building a Modern Work Environment, Office of Financial Management, State of Washington, 2017.
https://www.ofm.wa.gov/facilities/building-modern-work-environment
From the web site: Advances in technology, changing customer and employee demographics, implementation of new business initiatives and LEAN process improvements, limiting our environmental impact, shifting employee expectations, and rising real estate costs—these are all factors in building a modern work environment. The state of Washington's workplace strategy initiative is an effort, directed by Governor Inslee through Executive Order 16-07 and led by OFM [Office of Financial Management], to help agencies identify, experiment with and adopt innovative ways to support its business by modernizing the physical environment, providing greater workplace flexibility and enabling a more mobile workforce. The focus is on looking at how, when and where people do their best work and on providing the necessary options and tools.

Related Resources:

Modern Office Destination Washington Introductory Video, Office of Financial Management, State of Washington, undated.
https://www.youtube.com/watch?v=5jDkPpUxSJQ
This video provides an overview of the first-in-the-nation coworking facility in Seattle, Modern Office Destination Washington (MOD WA).

"Change Your Space, Change Your Culture," *Thinking Outside the Cubicle*, Presentation #1, Mabel Casey, Washington State Office of Financial Management, May 2016.
https://www.youtube.com/watch?v=rhl7m6Ywda8&index=1&list=PLWIxlU5yW8011zQxiiS_iTupJbo4wSy44
This work session presents innovative ideas for building a modern work environment.

"The Next, Next Generation Workplace," *Thinking Outside the Cubicle*, Presentation #3, Kay Sargent, Washington State Office of Financial Management, May 2016.
https://www.youtube.com/watch?v=MZOLGnNMrGU&index=3&list=PLWIxlU5yW8011zQxiiS_iTupJbo4wSy44
This presentation addresses workplace design for future generations.

Facilities, Office of Financial Management, State of Washington, 2017.
https://www.ofm.wa.gov/facilities
This web site provides access to a range of facility-related information, including the state's Facilities Portfolio Management Tool, a "secure vendor hosted, web-based facilities portfolio management technology tool. The solution captures and retains basic facilities data (such as the facility owner, location, type, condition and size of each facility), leases contract data, space use data, photos and related documents."

Six-Year Facilities Plan, Office of Financial Management, State of Washington, 2017.
https://www.ofm.wa.gov/facilities/state-agency-facility-oversight/six-year-facilities-plan
This web site provides information about the agency's six-year facility planning process. The Office of Financial Management is required by state law to "transmit facility needs to the Legislature through the state six-year facilities plan on January 1 of each odd-numbered year after alignment with the Governor's biennial budget proposal."

Workspace and Office Design

The citations below are organized into two categories:

- Domestic practices.
- International practices.

Domestic Practices

Innovation Spaces: The New Design of Work, Julie Wagner and Dan Watch, Brookings Institution and Project for Public Spaces, April 2017.
https://www.brookings.edu/wp-content/uploads/2017/04/cs_20170404_innovation_spaces_pdf.pdf
From the introduction: From cities to small towns to suburban corridors, innovation spaces are transforming the landscape. Over the past 10 years, these spaces—such as research institutes,

incubators, accelerators, innovation centers, co-working spaces, start-up spaces and more—have grown at a considerable pace across the United States and globally. Yet what easily gets missed is that these innovation spaces are physical manifestations of broader economic, cultural and demographic forces, elevating what matters in today's economy. At the same time, the ambition to remain cutting edge has driven leaders of industry, and their architects, down the path of creative experimentation in design. In doing so, the last decade of design has embodied a shift away from 'style' and more toward embracing core values aimed to help people flourish under new economic and demographic conditions.

"Workspaces That Move People," Ben Waber, Jennifer Magnolfi and Greg Lindsay, *Harvard Business Review*, October 2014.
https://hbr.org/2014/10/workspaces-that-move-people
From the article: We've already begun to collect this kind of performance data using a variety of tools, from simple network analytics to sociometric badges that capture interaction, communication, and location information. After deploying thousands of badges in workplaces ranging from pharmaceuticals, finance, and software companies to hospitals, we've begun to unlock the secrets of good office design in terms of density, proximity of people, and social nature. We've learned, for example, that face-to-face interactions are by far the most important activity in an office. Birnbaum [Scott Birnbaum, a vice president of Samsung Semiconductor] is on to something when he talks about getting employees to "collide," because our data suggest that creating collisions—chance encounters and unplanned interactions between knowledge workers, both inside and outside the organization—improves performance.

"Balancing 'We' and 'Me': The Best Collaborative Spaces Also Support Solitude," Christine Congdon, Donna Flynn and Melanie Redman, *Harvard Business Review*, October 2014.
https://hbr.org/2014/10/balancing-we-and-me-the-best-collaborative-spaces-also-support-solitude
From the article: Companies have been trying for decades to find the balance between public and private workspace that best supports collaboration. In 1980 our research found that 85% of U.S. employees said they needed places to concentrate without distractions, and 52% said they lacked such spaces. In response, thousands of high-walled cubicles took over the corporate landscape. By the late 1990s, the tide had turned, and only 23% of employees wanted more privacy; 50% said they needed more access to other people, and 40% wanted more interaction. Organizations responded by shifting their real estate allocation toward open spaces that support collaboration and shrinking areas for individual work. But the pendulum may have swung too far: Our research now suggests that once again, people feel a pressing need for more privacy, not only to do heads-down work but to cope with the intensity of how work happens today.

Change Your Space, Change Your Culture: How Engaging Workspaces Lead to Transformation and Growth, Rex Miller, Mabel Casey and Mark Konchar, John Wiley and Sons, Inc., September 2014.
Book description at https://www.wiley.com/en-us/Change+Your+Space%2C+Change+Your+Culture%3A+How+Engaging+Workspaces+Lead+to+Transformation+and+Growth-p-9781118937815
From the book description: *Change Your Space, Change Your Culture* is a guide to transforming business by rethinking the workplace. Written by a team of trail-blazing leaders, this book reveals the secrets of companies that discovered the power of culture and space. This insightful guide reveals what companies lose by viewing office space as something to manage or minimize. With practical tips and implementation details, the book helps the reader see that the workspace is, in fact, a crucial driver of productivity and morale.

Workplace Innovation Today: The Coworking Center, Andrea P. Foertsch, National Association of Industrial and Office Properties (NAIOP) Research Foundation, January 2014.
https://www.naiop.org/-/media/Research/Research/Research-Reports/Workplace-Innovation-Today-Coworking-Spaces/Workplace-Innnovation-Today.ashx?la=en
From the executive summary: Coworking—a new concept emerging from a more than 50-year foundation of innovative workspaces—is revolutionizing the concept of workplace. Interim developments like incubators, innovation centers and accelerators have contributed to the entrepreneurial ecosystem. But coworking centers have combined new functions and new operating models in interdisciplinary and collaborative ways that have spawned precipitous growth in the creation of—and participation in—these centers. All indicators point to the continued growth and diversification of coworking centers, which also are beginning to impact the functions and facilities of mainstream corporate workplaces.

International Practices

"Refurbishment of an Open-Plan Office—Environmental and Job Satisfaction," Valterri Hongisto, Annu Haapakangas, Johanna Varjo, Riikka Helenius and Hannu Koskela, *Journal of Environmental Psychology*, Vol. 45, pages 176-191, March 2016.
Citation at https://doi.org/10.1016/j.jenvp.2015.12.004
From the abstract: The purpose of this study was to provide evidence that there is a relationship between the quality of the physical environment and employee satisfaction.

A quasi-field experiment was conducted in an open-plan office of 135 employees. The office was refurbished in various ways to achieve e.g. [sic] better thermal conditions, visual and acoustic privacy, ergonomics, interior design and lower spatial density. All employees were sent a questionnaire twice: before and after the refurbishment. The physical measurements were also conducted twice.

Significant improvements were found in nearly all inquired aspects of environmental satisfaction. They could be logically traced to the physical changes provided by the refurbishment. The improvements could also be supported by the physical measurements. Both environmental and job satisfaction were improved. Qualified change management, involvement of employees and carefully designed refurbishment agenda were together believed to be the main reasons for the improvement of job satisfaction.

"Enhancing Staff's Satisfaction With Comfort Toward Productivity by Sustainable Open Plan Office Design," Arezou Shafaghat, Ali Keyvanfar, Mohamed Salim Ferwati and Tooran Alizadeh, *Sustainable Cities and Society*, Vol. 19, pages 151-164, December 2015.
Citation at https://doi.org/10.1016/j.scs.2015.08.001
From the abstract: The sustainable building assessment tools (SBATs) measure the user's satisfaction and comfort, independently. However, staff's physical and psychological satisfaction with comfort was not dependently investigated by SBATs, particularly, incorporating with staff's performance and productivity in open-plan office buildings. The current research aimed to determine [if] the Open Plan Office Design (OPOD) features and sub-features meet the staff's satisfaction with comfort toward productivity enhancement. The research was designed in two phases. Phase one was to identify OPOD features and sub-features within positive and negative approaches. Through a systematic review process and content analysis, the research identified twenty-seven OPOD sub-features involved in eight features. Phase two was to determine the Factor Actual Weight Consensus of those identified OPOD sub-features through pre and final weight-value analysis stages. The research [determined that] the 'Flexible Space' (F.P.5) received the weight-value 0.215[,] which is the highest amongst other positive OPOD

sub-features. In the negative category, the 'Auditory Distraction' (F.N.2) got the highest weight-value [of] 0.591. In contrast, there are OPOD sub-features [that] received very low weight-values, such as the 'Thermal Discomfort' (F.N.7), 'Exposure to Viruses' (F.N.11), and 'Sick Building Syndrome' (F.N.12)[, which] received 0.040. [Analysis] of OPOD sub-features aids open-plan office building assessment auditors [in] benchmark[ing] the strengths and weakness[es] of their design in comparison with the ideal one.

"The Association Between Office Design and Performance on Demanding Cognitive Tasks," Aram Seddigh, Cecilia Stenfors, Erik Berntsson, Rasmus Bååth, Sverker Sikström and Hugo Westerlund, *Journal of Environmental Psychology*, Vol. 42, pages 172-181, June 2015.
Citation at https://www.sciencedirect.com/science/article/pii/S0272494415300013
From the abstract: The physical office environment has been shown to be associated with indicators of both health and performance. This study focuses on how memory performance is affected in normal working conditions compared to a quiet baseline (with low amount irrelevant stimuli) in different office types, including cell offices, small open-plan offices, medium-sized open-plan offices and large open-plan offices. The results showed that the drop in performance from the quiet baseline to normal working conditions was higher in larger, compared to smaller, open-plan offices. However, contrary to our hypothesis we found that cell offices might have negative effects on performance comparable to those of large open-plan offices. These results indicate that employees in small open-plan offices, in comparison to large, have better possibilities to conduct cognitively demanding tasks and that cell offices might not be as advantageous as previously thought.

"Workspace Satisfaction: The Privacy-Communication Trade-Off in Open-Plan Offices," Jungsoo Kim and Richard de Dear, *Journal of Environmental Psychology*, Vol. 36, pages 18-26, December 2013.
Citation at https://doi.org/10.1016/j.jenvp.2013.06.007
From the abstract: Open-plan office layout is commonly assumed to facilitate communication and interaction between co-workers, promoting workplace satisfaction and teamwork effectiveness. On the other hand, open-plan layouts are widely acknowledged to be more disruptive due to uncontrollable noise and loss of privacy. Based on the occupant survey database from Center for the Built Environment (CBE), empirical analyses indicated that occupants assessed Indoor Environmental Quality (IEQ) issues in different ways depending on the spatial configuration (classified by the degree of enclosure) of their workspace. Enclosed private offices clearly outperformed open-plan layouts in most aspects of IEQ, particularly in acoustics, privacy and the proxemics issues. Benefits of enhanced 'ease of interaction' were smaller than the penalties of increased noise level and decreased privacy resulting from open-plan office configuration.

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Appendix A: Survey Questions

The following survey was distributed to members of the AASHTO Committee on Human Resources to gather information from state departments of transportation about the practices employed by state departments of transportation in designing new office space, including how to design office space to accommodate a changing workforce.

Office Space Needs

The survey questions below address workspaces in office buildings and not other facilities such as labs, traffic management centers or maintenance facilities.

1. Select the option below that best describes the office space currently occupied by your agency.
    - We moved into our current office space within the past three years.
    - We redesigned our current office space within the past three years.
    - We plan to move into new office space within the next three to five years.
    - We plan to redesign our current office space within the next three to five years.
    - We do not have plans to move in the next three to five years.
    - We do not have plans to move in the next 10 years.
2. Identify the reason(s) for your agency's move to new office space by selecting all that apply.
    - We have not recently moved to new office space and have no plans to do so.
    - Better location.
    - Building cannot accommodate a redesign.
    - Building too old.
    - Lease expired/expiring.
    - Not enough office space.
    - Too much office space/consolidate space.
    - Other (please describe).

General Workspace Design Elements

1. What factors are (or would be) important to your agency in creating the design of a new office workspace? Select all that apply.
    - Decline in staffing.
    - Increase in staffing.
    - Mobility (telecommuters).
    - Program or project needs.
    - Workforce demographics.
    - Other (please describe).

2. What features are (or would be) important to your agency in creating the design of a new office workspace? Select all that apply.
    - Acoustic privacy (providing individual privacy when needed).
    - Aesthetics/design.
    - Collaborative workspace (areas conducive to ad hoc and small group meetings).
    - Flexible configurations.
    - Healthy and natural environment (more outdoor space, natural lighting).
    - Innovative technology (easy connections for devices and laptops, advanced Wi-Fi connections, smartboards).
    - Multipurpose space.
    - Open plan (lower panels for cubicles, glass doors or walls to offices, fewer or no dividers).
    - Physical comfort (furniture and equipment).
    - Quality of meeting spaces (number, size and location).
    - Safety and security.
    - Other (please describe).
3. Has your state or agency specified standards for allowable space? That is, does your agency work from minimum or maximum specifications for cubicles or workspaces by program type, job type or other criterion?
4. Please briefly describe how office space designs vary based on program type, job type or other criterion.

Staffing and Workspace Design

1. Does your agency permit telecommuting for agency employees?
2. Does your agency use laptop computers for employee workstations to allow for employee mobility?
3. Does your agency allow employees to work in agency offices other than an employee's home office (headquarters, district or region) on a regular basis?
4. What do you feel will be the most significant changes in workspace design that will be needed to accommodate the workforce of the future?

Agency Experience With Workspace Design Alternatives

1. Are cubicles included/expected to be included in your agency's workspace design?

    1A. Please describe the types of cubicles used/expected to be used in your agency.

    1B. In your agency's experience, what are the advantages of cubicles?

    1C. In your agency's experience, what are the disadvantages of cubicles?
2. Is an open space concept included/expected to be included in your agency's workspace design?

2A. In your agency's experience, what are the advantages of an open space concept?

2B. In your agency's experience, what are the disadvantages of an open space concept?

3. Are communal spaces for collaboration included/expected to be included in your agency's workspace design?

    3A. In your agency's experience, what are the advantages of communal spaces?

    3B. In your agency's experience, what are the disadvantages of communal spaces?

4. Does your agency use/plan to use an alternative workspace strategy that does not appear above?

    4A. Please describe this alternative workspace strategy.

    4B. In your agency's experience, what are the advantages of this alternative workspace strategy?

    4C. In your agency's experience, what are the disadvantages of this alternative workspace strategy?

Facilities Planning

1. When planning and obtaining new office space, is your agency required to collaborate with another state agency?
2. Please describe any best practices your agency has identified through its experience collaborating with one or more agencies to develop new office workspace.

Wrap-Up

1. Do you have documents related to your agency's workspace design that you can share? These documents might include:

    - Facilities planning manual.
    - Strategic workspace planning documents.
    - Policies or other documents that describe and/or illustrate the space designs and requirements for your agency's office space (size requirements for cubicles, offices and meeting space, the number of meeting rooms and other space-related specifications).

    Provide links below to these documents or email them to maina.tran@ctcandassociates.com.

2. Please use this space to provide any comments or additional information about your previous responses.