Illinois Department of Transportation

State Departments of Transportation: Planning Function Reorganizations

Prepared by: The Urban Transportation Center at the University of Illinois - Chicago

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Illinois Department of Transportation

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About the Illinois Department of Transportation (IDOT)

Every day, IDOT strives to design and maintain a world class transportation system that enhances safety and the quality of life of its citizens and visitors by reducing congestion and increasing mobility. This system also facilitates and improves the inter-connectivity of all transportation modes for the efficient movement of people and goods to support the state's national and global competitiveness.

The challenges we face at times may seem insurmountable, but these challenges help us realize the potential that exists to transform communities and regions across the state through strategic infrastructure investments in all modes. IDOT's talented, professional, and diverse group of public servants understand the importance of innovation, diligence, hard work, and collaboration with all transportation stakeholders at all levels for the common good.

About the Urban Transportation Center (UTC)

The Urban Transportation Center (UTC) is a research unit dedicated to innovative transportation research and education that provides technical assistance on urban transportation planning, policy, operations, finance and management. Part of the College of Urban Planning & Public Affairs at the University of Illinois at Chicago (UIC), the UTC is a nationally-recognized innovator in research, education and engagement that benefits transportation networks in cities and metropolitan areas across America.

ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

States are being driven to function more like private sector businesses and operate more efficiently with fewer staff and a greater driven to function more like private sector businesses and operate more efficiently with fewer staff and a greater reliance on technology. That premise was the foundation for the *State Departments of Transportation: Planning Function Reorganizations* study.

The key goal of the study was to analyze organizational change within state Departments of Transportation. Researchers conducted a literature review and scheduled surveys and conversations with state DOT leaders to identify factors behind department changes and how they were managed. Specific emphasis was focused on DOT planning departments. A total of 25 state DOT officials participated.

The study was conducted over a two-year period. Research focused on these three specific areas: 1) The specific work carried out by planning departments. 2) Department data usage. 3) Whether a departmental reorganization within the past decade had a bearing on overall operations.

An analysis of the research revealed these general conclusions:

- A change in political leadership may not usher in major organizational shifts.
- Planning departments should allocate sufficient time to revise the reporting structure.
- Special attention should be given to “informal” changes that can lead to better communication and more effective departmental interaction.

PROJECT BACKGROUND

State departments of transportation (DOTs) are under more pressure than ever to perform effectively and efficiently.

Not only do performance measures define state DOT's programmatic goals since the passage of The Moving Ahead for Progress in the 21st Century Act (MAP-21), but ever-shrinking budgets and technological innovations create an environment that expects greater output from fewer people. From a management standpoint, the public sector increasingly bears a stronger resemblance to its business sector counterparts: according to a 2009 AASHTO report, "the rise of change management as a business model for DOTs" has resulted in a decade-long push to increase coordination across agencies and streamline processes and peoples' roles in the process.[1]

While this drive to streamline operations may reflect the best intentions of top state leadership, be they elected or appointed to their positions, the depth and diversity of state DOT operations in the 21st century makes such efforts more difficult than ever. From capital investment to community relations, engineering to economic development, state DOTs are responsible for a broad swath of functions.

Planning departments, while small relative to functions such as operations and safety, are responsible for a complex and wide-ranging number of areas, making it difficult for planning to situate itself among the oftentimes competing or even contradictory priorities of

1 "Alternative Organizational Processes in State Departments of Transportation." (2009). American Association of State Highway and Transportation Officials (AASHTO). Washington, DC.

other departments. Significantly, planning departments are often key players in determining where funding gets allocated throughout the DOT, an unenviable position and required constant juggling of multiple goals.

Within this environment, and given the vast scale of state DOTs, how much of an impact do changes such as departmental reorganizations – particularly for modest-sized departments like planning – actually have, particularly if they are top-down initiatives driven by leadership at the state level? Wide-scale modification to a state DOT's structure would be nearly impossible in most instances, but small efforts to shift around staff and functional elements within the DOT happen with some frequency, as even a cursory perusal of state DOT organizational charts over the years reveals.[2]

This report aims to explore the roots of organizational change in state DOTs and highlights specific examples of how it is managed, with particular emphasis placed on planning departments. Broadly the research team sought to explore the ways that organizational change management manifests state DOTs, with emphasis placed on the endemic issues facing these departments and the transportation professionals who lead them, including how structural changes effect staff recruitment, retention, and morale. Also relevant is the level of transparency before, during, and/or after change occurs: is there clarity in the process, or do ambiguity and uncertainty prevail?

From there, the research team refined the topic of inquiry, focusing on the key steps that state DOT leadership have carried out in pursuit of increased efficiency and better performance of the planning function via a departmental reorganization. Of particular significance was an understanding of the role that governors and secretaries of transportation have played in initiating these reorganizations, even if their precise motivations were hard to pinpoint.

Taking on such initiatives is particularly challenging in public agencies where multiple departments have overlapping duties. This report's exploratory assessment of the decisions that go into structuring – and restructuring – state-level planning departments, begins to reveal the dotted lines in organizational charts and contributes to the necessary conversation around how a state DOT balances the mandate to control costs, the demands of new technologies, and the expectations of their workforce.

2 The Bureau of Transportation Statistics' National Transportation Library maintains an up-to-date list of State DOT Organizational Charts, as well as select historical data: https://transportation.libguides.com/statedotorgcharts

OVERVIEW AND RESEARCH QUESTIONS

Loss of staff, changing federal regulations, political pressures, and a shifting focus on multi-modal travel has encouraged many state Departments of Transportation (DOTs) to explore reorganizing their staffing structures.

Loss of staff, changing federal regulations, political pressures, and a shifting focus on multi-modal travel has encouraged many state Departments of Transportation (DOTs) to explore reorganizing their staffing structures.

This report is an attempt at understanding how these factors amongst others affect the role of planning within a DOT. The research explores effective employee organization in State DOTs with the goal of providing recommendations to IDOT's planning department.

The research focuses on the effectiveness of state-level DOT restructuring efforts. Particular emphasis is placed on the people, policies, and politics that result in departmental reorganizations, as well as the role that organizational change management plays in the day-to-day operations of these planning departments.

Two key research questions inform this research:

- How effective are state-level DOT restructuring efforts at achieving stated organizational change management goals in planning departments?
- How are departments tracking and measuring these changes over time?

The goal of this project is to provide to IDOT insights from other DOTs that could be used to inform organizational change management practices, as well as recommendations on best practices in departmental reorganizations.

The research team began the exploration of the research questions by conducting a literature review that broadly examined concepts of organizational theory, organizational change, and organizational evaluation, then focused in more narrowly on organization studies of departments of transportation.

LITERATURE REVIEW

Though their ubiquity may suggest that the formation and structuring of organizations is simple, creating a structure that caters to the specific needs and goals of an organization is highly complex.

When considering the structures of State Departments of Transportation (DOTs) and their planning departments, aligning the agency for success in a changing industry with limited resources requires intentional consideration of both organizational theory and best practices, as well as how organizational effectiveness should be measured and how organizations can change to maintain that effectiveness.

ORGANIZATIONAL THEORY

Systems thinking is the framework of thought used to holistically approach complex things, examining the parts of the whole as well as how these parts connect to one another. There are four primary paradigms of systems thinking: Hard Systems Thinking (HST), Soft Systems Thinking (SST), Critical

Systems Thinking (CST), and Multimodal Systems Thinking (MST)[1]. While HST takes a functionalist approach with clear definitions and quantitative tools, SST employs an interpretive approach that recognizes the social reality of people and their different perceptions, values, and beliefs. CST uses an emancipatory approach in how it encourages administrators and planners to engage with the public in decision making processes by recognizing the roles of motivation, power, knowledge, and legitimation. Thus, a combination of SST and CST best support the goals and vision of state DOTs and aid the process of determining a suitable organizational structure.

As public sector agencies, DOTs are fundamentally different from private sector agencies and how those organizations are structured. Key differences include the organization's interest (who benefits), access to facilities, resources, and information, and whether the organization acts with full agency or as an agent for a larger

1 Khisty, C. Jotin, Jamshid Mohammadi and Adjo A Amedkudzi. 2012. Systems Engineering With Economics, Probability, And Statistics. 2nd ed. Ft. Lauderdale, FL: J. Ross Pub. Pp 461-521

community[2]. Public sectors are also prone to greater external influence, hierarchies, and rules, and tend to observe a more rigid and top-heavy organizational structure. Thus, this creates a difference in the way public and private sector organizations operate internally, with private sectors employing a more lateral structure and public sectors vertical.

This difference not only affects the roles of the individuals involved in the organization, but also the means by which they interact, whether as a managed network or with defined manager-subordinate roles[3]. While the needs and goals of private and public sector organizations differ, best practices can be drawn from both in order for an organization such as a state DOT to best adapt its structure for effectiveness in a changing society.

ORGANIZATIONAL CHANGE

To determine the shape or make changes to the existing shape and structure of organizations, DiMaggio and Powell define three mechanisms of isomorphic change in organizations: coercive, mimetic, and normative.[4] Coercive isomorphism refers to formal and informal external political influence or societal expectation, however these changes are not always adaptive or flexible and sometimes may not be in good faith. Mimetic processes respond to uncertainty by modeling based on another system, which allows an organization to face the ambiguity with a low-expense solution. The purpose of this study best aligns with normative change, in that professionalization and research are used to identify best practices for an organization to adopt.

ORGANIZATIONAL EVALUATION

Currently, there is still no definitive consensus on how organizational effectiveness ought to be evaluated. Four commonly used models for evaluation metrics include:

- The Goal Model: Does the organization achieve what it wants?
- The System-Resource Model: Can the organization adapt and survive in dynamic environments?
- The Multi-Actor Model: Can the organization satisfy the needs of all stakeholders?
- The Cultural Model: Does the organization generate or perpetuate a culture which continues to enhance the organization?[5]

Another method of evaluating organizational effectiveness is with the Competing Values approach which considers the strain between flexibility and stability, individual and the whole, and means and ends. With this approach, the organization must define its own values regarding

2 Perry, James L., and Hal G. Rainey. 1988. "The Public-Private Distinction In Organization Theory: A Critique And Research Strategy". The Academy Of Management Review 13 (2): 182-201. doi:10.2307/258571. http://www.jstor.org/stable/pdf/258571.pdf

3 McNulty, Terry, and Ewan Ferlie. 2004. "Process Transformation: Limitations To Radical Organizational Change Within Public Service Organizations". Organization Studies 25 (8): 1389-1412. doi:10.1177/0170840604046349. http://journals.sagepub.com/doi/pdf/10.1177/0170840604046349

4 DiMaggio, P., & Walter Powell. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 48(2), 147-160. http://www.jstor.org/stable/2095101

5 Gregory, Amanda. "Critical Reflections on the Past, Present and Future Development of Organizational Evaluations." In Critical Issues in Systems Theory and Practice, edited by Keith Ellis, Amanda Gregory, Bridget R Mears-Young, and Gillian Ragsdell, 479-486. New York: Plenum Press, 1995.

authority and structure versus diversity and adaptability, getting tasks done versus individual consideration and development, and process versus the final product. While these elements are not mutually exclusive, Quinn and Rohrbaugh list these elements as recognized dilemmas in organizational literature and thus, organizational effectiveness can be defined as "a valued-based judgement about the performance of an organization."[6]

In their study about organizational effectiveness, Georgopoulos and Tannenbaum subscribe more closely to goal oriented effectiveness. However, rather than measuring productivity alone, they also noted the significance of organizational flexibility and the strain and tension on the individuals within the organization. Thus, the effectiveness of an organization is measured by its ability to "fulfill its objectives without incapacitating its means and resources and without placing undue strain upon its members."[7] In this way, effectiveness is defined not as the output of an organization in a specific moment in time, but by also accounting for its sustainability.

When analyzing the long term success of an organization, it is perhaps then more logical to employ a resource approach to organizational evaluation. Unlike other methods that look at the output of the organization in a vacuum, the resource approach must consider not only the organization but also its relationship to the environment around it. In this way, organizational effectiveness can be defined by the organization's "bargaining position" in a resource-driven system[8]. The types of resources in this system also vary in liquidity, stability, relevance, universality, and substitution. For example, a low turnover rate is a resource of high stability and also suggests high employee moral which is low in liquidity. Political influence and support is a valuable resource of high relevance, but it can be very unstable. Thus, Yuctman and Seashore suggest that organizational effectiveness is the art of maximizing the organization's bargaining position at the "optimal point of resource procurement." This then allows the organization to not only meet existing needs for efficient operation, but also be aligned to procure the resources necessary to meet future needs.

DOT ORGANIZATION STUDIES

In 2005, The National Cooperative Highway Research Program commissioned a study about the different organizational structures that state DOTs have been adopting. The 2009 AASHTO study of Alternative Organizational Processes in State Departments of Transportation recognized the external and internal changes in transportation planning and implementation that will require adaptation from state DOTs. Such stimuli include, but are not limited to, increased inclusion of non-highway modes, change and turnover in leadership, shift toward being more customer-centric, and

6 Quinn, Robert E. and John Rohrbaugh. 1981. "A Competing Values Approach to Organizational Effectiveness." Public Productivity Review 5 (2): 122-140. doi:10.2307/3380029. http://www.jstor.org/stable/3380029.

7 Georgopoulos, Basil S. and Arnold S. Tannenbaum. 1957. "A Study of Organizational Effectiveness." American Sociological Review 22 (5): 534-540. doi:10.2307/2089477. http://www.jstor.org/stable/2089477.

8 Yuchtman, Ephraim and Stanley E. Seashore. 1967. "A System Resource Approach to Organizational Effectiveness." American Sociological Review 32 (6): 891-903. doi:10.2307/2092843.

increased emphasis on performance measures.[9] The study recommended that states identify the problems they are trying to address and then consider whether or not reorganization is a solution to a DOT's identified problem. The study then concluded that successful organization changes relied on a well-structured implementation plan that involved leaders at all levels and communicated effectively with employees.

Another report released by AASHTO around the same time, Effective Organizational Structures and Management Practices for Achieving Environmental Stewardship and Streamlining in Transportation Agencies, studied the impact of organizational structures on incorporating environmental principals and responding to new environmental mandates.[10] The report emphasized that strong organizational connections need to be made between the DOT's environmental goals and the agency's other key functions, in order to continually highlight that the environment is a key concern for the DOT as a whole.

These studies, while extensive in their data collection and evaluation, provided only part of the picture of the driving factors behind organizational changes. In order to help complete that picture, and discover the aspects of change management that weren't reflected in organizational charts or strategic planning documents, the research team turned its attention to hearing directly from the transportation professionals who work at state DOTs.

9 Alternative Organizational Processes in State Departments of Transportation, First Edition. 2009. AASHTO.

10 "Effective Organizational Structures and Management Practices for Achieving Environmental Stewardship and Streamlining in Transportation Agencies." (2009). Association of State Highway and Transportation Officials (AASHTO). Washington, DC.

METHODOLOGY

Data collection for this research consisted of two parts: 1) an online survey administered via UIC's Qualtrics tool, and 2) phone interviews conducted by the research team.

MATERIALS

At the beginning of the survey, respondents completed an informed consent form that contained information about the purpose of the study, who was conducting it, and how the data collected would be used. Interview respondents verbally consented to their participation.

The "Informed Consent" document required by the Institutional Review Board (IRB) at UIC is included in **Appendix A.** The web-based survey can be found at the end of this report in **Appendix B**. Full survey results can be found in **Appendix C**.

PARTICIPANTS

The online survey was sent to 50 transportation professionals, each representing a different state. These professionals were identified by the UIC research team via an online search. Participants were recruited via emails sent by the UIC research team, with follow-up correspondence from IDOT.

The survey design allowed respondents to skip over a question if they did not have that information available; no questions required responses. Of the 50 individuals who received an email asking them to take the survey, 20 completed the survey (see **Figure 1**); five individuals started the survey but, to varying degrees, did not finish it.

For the purposes of this study, information submitted via the survey – regardless of level of completion – has been assessed and included in the findings; even incomplete survey responses provided useful data for the sake of comparisons among state DOTs.

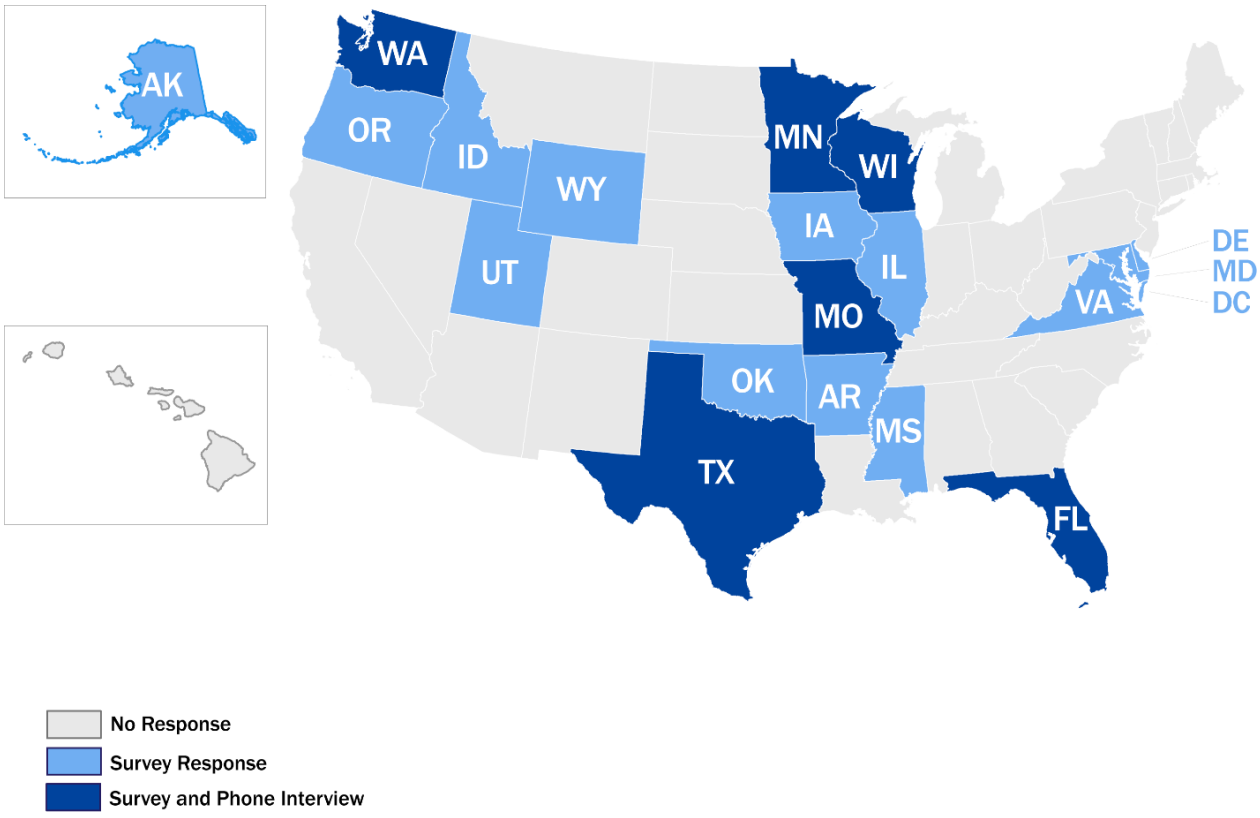


Figure 1. Participating states

Additional information on the structure of each survey respondents' network can be found in **Table 1**. All data in this table is from the survey results.

Separately, five peer states that are members of Mid America Association of Transportation Officials (MAASTO) – Indiana, Michigan, Minnesota, Missouri, and Ohio – were identified for targeted outreach for follow-up phone interviews, as well as New York and Texas. These seven states were believed to be most closely aligned with IDOT's department structure and were therefore ideal research subjects.

Names, titles, and contact information for approximately 30 individuals across these seven states were either provided by IDOT or added by the research team based on web searches. Phone interview participants were then recruited via emails sent by the UIC research team, with follow-up correspondence from IDOT.

Indiana was subsequently dropped from the list upon consultation with IDOT. Of the remaining six states, Minnesota, Missouri, and Texas completed the phone interview.

In order to increase participation in the phone interviews, the research team identified transportation professionals in Florida and Washington as high-quality prospects. These individuals were subsequently emailed and interviewed, bringing the total number of completed phone interviews to five. All participated in the interview on a voluntary basis.

DESIGN AND PROCEDURE

The research team identified the initial contact at each state via an online search for publicly available information on heads of planning functions at state DOTs. A spreadsheet containing this information is stored in a shared folder on the University-provided Box.com service. Box.com encrypts data in transit and in storage and the folder is shared only among the named researchers.

A spreadsheet of potential phone interview respondents provided by IDOT was also stored in Box.com and is maintained separately from survey responses and interview notes, although researchers with access to both sets of data are able to associate survey data with the interview respondent's corresponding state. Not all phone interview respondents were the individual in their state who took the online survey.

Phone interviews were scheduled via email correspondence with a member of the research team. Each interview was recorded and digital files of these recordings are stored in Box.com. Each recording was then securely transcribed by Rev.com. Word documents of each interview are stored in Box.com.

Because of the use of human subjects, this research was submitted to the Institutional Review Board (IRB) for "Exempt Review," defined as follows: "When it is determined that the involvement of human subjects is in one of the six exempt categories listed in the Regulations [45 CFR 46.101(b)], it is exempt. The exempt categories include certain educational practices and tests, innocuous surveys of adults, study of existing data, public service programs and food evaluations. Any research study involving human subjects thought to be exempt must be submitted to the OPRS for an exemption determination. Exemption review is performed by senior OPRS staff and designated IRB members."

The research team submitted a Claim of Exemption and Research Protocol, as well as informed consent language, as part of the IRB application. The research team's request for an exempt review was granted by IRB. The specific exemption under 45 CFR 46.101(b) is Category 2.

*Table 1. Survey responses by state**

State	Reorg in last 10 yrs?	Who or What Initiated Reorg	Parts of DOT affected	Length of Transition
Alaska	No response	-	-	-
Arizona	No response	-	-	-
Arkansas	Yes	Head of DOT	Primarily the planning branch	Less than 6 months
Delaware	No response	-	-	-
District of Columbia	Yes	DOT planning department		More than 2 years
Florida	Yes	New leadership, Shift in goals		1 - 2 years
Idaho	Yes	Division split with new positions	Planning and Program Management Split	Less than 6 months
Illinois	No	-	-	-
Iowa	No	-	-	-
Louisiana	No response	-	-	-
Maryland	No	-	-	-
Michigan	Yes	Shift in goals	Environmental clearance and NEPA were moved from Bureau of Planning to the Bureau of Development	6 months - 1 year
Minnesota	Yes	New leadership	Multimodal Planning & Program Management Division	Less than 6 months
Mississippi	No	-	-	-
Missouri	Yes	Head of DOT	All districts and divisions	1 - 2 years
Oklahoma	Yes	Head of DOT, New leadership	The Planning & Research Division was split into two separate Divisions. Planning was renamed to the Strategic Asset & Performance Management (SAPM) Division. Under SAPM a new branch was created, Planning & Performance Branch.	1 - 2 years
Oregon	Yes	Head of DOT, DOT planning department, Public influence	Moved some of the modal and programming/funding functions into a new section under the division - called Active Transportation Section. At the same time, Asset Management was moved from the division to another division of the agency.	Less than 6 months
Pennsylvania	No response	-	-	-
Texas	Yes	Head of DOT, New leadership, Performance measures, Shift in goals	Divisions within the department were re-organized and re-aligned	6 months - 1 year

State	Reorg in last 10 yrs?	Who or What Initiated Reorg	Parts of DOT affected	Length of Transition
Utah	Yes	DOT planning department, New leadership	Because of changes in state code, UDOT now has two deputy directors: one over operations and engineering, one over planning and investment. The purpose was to refocus the organization on the planning function. The Planning, Environmental Services, and Programming divisions report directly to the new Deputy of P&I	6 months - 1 year
Virginia	Yes	New leadership, Other	Within the Planning Division; Earlier reorganizations were agency-wide and over 10 years ago	Less than 6 months
Washington	Yes	The results of a "healthy organization" review revealed that changes were needed	The Multimodal Planning Division	1 - 2 years
West Virginia	No response	-	-	-
Wisconsin	No	-	-	-
Wyoming	Yes	Head of DOT, DOT planning department, Performance measures, Asset Management Requirement	Within Planning - consolidating local grants, absorb performance management and asset management requirements; Within DOT - elevate ownership of IT to executive level, and create a CFO	6 months - 1 year

*A dash ("-") indicates that respondent did not answer that survey question.
Source: Planning Department Reorganization Online Survey, 2018-2019

SURVEY RESULTS

"We have made great strides in becoming fully an intermodal planning and programming division, but we are still trying to break down aspects of modal silos."

-Survey Respondent

The survey focused on three main areas: what functions planning departments carry out, how these departments use data, and how a departmental reorganization within the last 10 years (if there was one) has affected the ways the department functions (see **Appendix B** for a complete list of survey questions). A total of 25 states completed at least some portion of the online survey.

The survey design allowed respondents to skip over questions if they did not have that data available. Subsequently, responses received are selective in nature, meaning that some DOTs answered many questions and others, only a few. Response rate totals often do not add up to 25, and thus the data are not in a position to be normalized across the board. For example, if a response below states "nine out of 23 respondents said yes to this question," that indicates that out of 25 total respondents, 23 of them answered that particular question, and of those 23, nine responded in the affirmative.

ORGANIZATIONAL CONDITIONS

The vast majority of the online survey respondents (20 out of 24) said their DOT had a department, bureau, division, or office dedicated to long range (10-30 years) planning efforts. Only eight out of 18 respondents said there are goals or a vision statement for the planning area separate from the entire DOT; all eight of those respondents belonged to states with offices dedicated to long range planning.

Only six out of 12 respondents said their planning department is organized by transportation mode (e.g. roads, transit,

bike, etc.). All six of those respondents also said that their DOTs had offices dedicated to long range planning. Moreover, four of those six respondents had said there are goals or a vision statement for the planning area separate from the entire DOT.

PLANNING DEPARTMENT FUNCTIONS

Slightly more than half of the respondents said their DOT planning department handles (a) capital investment and grants, (b) data, (c) freight and logistics, and (d) policy analysis. Substantially more than half of the respondents said that the functions of (a) community relations/public affairs, (b) engineering, (c) environmental sustainability, (d) operations, and (e) safety are handled within their DOT but not in the planning department.

Only half of the respondents said the planning department is in charge of the following data tasks: (a) data collection, (b) data processing, (c) data maintenance and updating, (d) data analysis, (e) data management, and (f) data inquiries. More than half of the respondents said the following types of data are accessible to the public: (a) traffic counts, (b) crash and other safety data, (c) congestion, (d) infrastructure, and (e) demographic. The majority of the respondents said the public can access data through (a) an online portal, and 9b) email/phone request.

Almost all of the respondents said that their planning department interacts and communicates with other departments within their DOT in the following ways: (a) interdepartmental committees, (b) scheduled meetings, (c) data sharing, (d) emails, and (e) casual conversations.

Half of the states (9 out of 18) stated they have functionality gaps due to vacant positions within planning department. Top reasons for vacancies included budgetary issues, a lack of qualified applicants, high turnover, and recent organizational restructuring. Majorities of the respondents agreed the following skills and/or experience are most important in employees working in a planning capacity within DOT: (a) undergraduate (but not graduate) degree in planning or related discipline, (b) previous work in planning or related discipline, (c), GIS, (d) technical or plan writing, (e) presenting and public speaking, and (f) data analysis skills.

USE OF DATA

Most of the respondents (16 out of 19) said there is a person or team in charge of data in the planning department. All 16 respondents had also said that their DOTs had offices dedicated to long range planning, but only seven of them had said there are goals or a vision statement for the planning area separate from the entire DOT. In addition, only 5 of the 16 respondents had said their planning department is organized by transportation mode.

Eleven out of 16 respondents said the MAP-21 Federal Performance Management mandate has affected the amount or type of data the planning department uses. All 11 respondents had also said that their DOTs had offices dedicated to long range planning, but only four of them had said there are goals or a vision statement for the planning area separate from the entire DOT. In addition, only three of the 11 respondents had said their planning department is organized by

transportation mode. Thirteen out of the 23 respondents, all from DOTs with dedicated long-range planning efforts, said the MAP-21 Federal Performance Management mandate affected how the planning department uses data by a small amount, while two departments experienced substantial changes, and two more no changes at all.

IMPACT OF REORGANIZATION ON DEPARTMENTAL FUNCTIONS

The majority of the respondents (14 out 19) said their DOT or planning department has undergone a structural reorganization that affected the planning department in the last 10 years. In the majority of these cases, changes in the head of the DOT or other leadership resulted in the decision to reorganize. All 14 respondents had also said that their DOTs had offices dedicated to long range planning. Fully half of those respondents said there are goals or a vision statement for the planning area separate from the entire DOT. In addition, only four of the 14 respondents had said their planning department is organized by transportation mode. Interestingly, 12 of the 14 respondents said there is a person or team in charge of data in the planning department. Eight of the 14 respondents said the MAP-21 Federal Performance Management mandate has affected the amount or type of data the planning department uses.

A majority of the respondents (nine out of 15) said the MAP-21 Federal Performance Management mandate resulted in the developing and filling of new positions within the planning department. Six of those nine respondents had also said that their DOTs had offices dedicated to long range planning. Moreover, four of the 15 respondents said that they anticipate future changes in this regard. All five respondents who said their DOT had a department, bureau, division, or office dedicated to long range (10-30 years) planning efforts and has undergone a structural reorganization that affected the planning department in the last 10 years, also said there is a person or team in charge of data in the planning department, and that the MAP-21 Federal Performance Management mandate has affected the amount or type of data the planning department uses.

A majority of respondents (13 out of 25) said that the goal of the reorganization was to increase efficiency and effectiveness. Other top reasons were the need to increase focus on non-driving modes (e.g. biking, transit) and the need to provide more public accountability and transparency. In only two cases did the respondents say that neither staff nor management was consulted about the reorganization.

While the stated push for efficiency might presume a desire for planning departments to eliminate positions or otherwise shrink department size (by not hiring for vacant positions, for example), the departmental reorganizations actually took a variety of forms. There were instances where departments were combined, but there were also instances where the department was split up, as well as instances where the planning department changed divisions within the larger DOT structure. What nearly all of these reorganizations shared was the speed with which they were carried out: the vast majority were finished in under a year.

PHONE INTERVIEW RESULTS

"I think if you're organized, even in a clunky way, if you have the right people involved and the right kind of collaboration, the right expectations about how individuals are expected to work with one another in an organization, you'll still make it work well. As long as people know what the expectation is in the end."

-Phone Interview Respondent

Introduction

Before summarizing the interview design and presenting each response in a state profile format, this section presents comparative data that has been collected and collated by the research team both pre- and post-interview. This information is designed to provide context for the demographic, operational, and political characteristics inherent to the six respondents.

The states participating in phone interviews – Florida, Illinois, Minnesota, Missouri, Texas, and Washington - represent a diverse mix of size and transportation needs, as demonstrated in **Table 2**. All data is pulled from the Bureau of Transportation Statistic's website,[1] except for the ASCE Grade[2].

Additional information on each state is in the States Profiles section below.

1 Bureau of Transportation Statistics. (n.d.). Retrieved from https://www.bts.gov

2 For more on the definition and key criteria that comprise the American Society of Civil Engineers' (ASCE) infrastructure grading scale, see Infrastructure Report Card. (n.d.). What Makes a Grade? Retrieved from https://www.infrastructurereportcard.org/making-the-grade/what-makes-a-grade/

Table 2. Interview respondents select state characteristics

State	ASCE Grade[14] / Year	Demographic, Geographical, and Transportation Supply Information					
		Pop. (2016)	% Urban	% Rural	# of DOT Staff	Miles of Public Road	Transit Riders (in millions)
Florida	C / 2019	20,278,447	87	13	6,500	122,088	285.6
Illinois	C- / 2018	12,830,632	88	12	5,121	145,708	674.2
Minnesota	C / 2018	5,576,606	58	42	Data not available	138,767	103.6
Missouri	C- / 2018	5,988,927	70	30	5,100	131,900	68.2
Texas	C- / 2017	24,145,561	85	15	12,054	313,228	290.4
Washington	C / 2019	7,405,743	75	25	6,318	82,448	243.6

Additional Sources: ASCE Report Card, BTS

Likewise, the survey results indicate that the planning departments of those states that participated in the phone interviews are responsible for a wide variety of programs and tasks, from environmental sustainability to technology and innovation. **Table 3** summarizes the results of survey question 2, which asks "What are the primary functions of the planning department at your state DOT?".

Despite the variations depicted in the tables above, these six states demonstrate remarkably similar characteristics in terms of DOT structure and mode jurisdiction, as well as leadership process. Using data from AASHTO's 2016 report Transportation Governance and Finance: A 50-State Review of State Legislatures and Departments of Transportation[3], the research team complied additional data on the structure of the six interview respondents in Table 4.

The DOT leader is appointed in every state except Texas, where the state transportation commission elects an Executive Director. Four out of five of the appointed leaders are done so by the governor, with approval required by the legislature. In all six states, the legislature in fully or partly in charge of allocating federal transportation revenues to the state DOTs.

INTERVIEW DESIGN

Phone interviews were conducted over a period of several months in late 2018 and early 2019. Not every respondent interviewed was the individual who had completed the online survey, but all respondents were provided a link to the survey questions to review if they so desired. The complete phone interview script can be found in **Appendix B**.

The phone interviews were designed to focus on three themes related to the research questions:

Organizational conditions. This aspect addresses the primary functions of the planning department, its interaction with other departments within the DOT, and how the planning department operates within the broader organization.

Environmental context. This aspect captures how the department has changed over time in response to both internal and external factors. Of particular interest are whether there were structural reorganizations that has affected the planning department in last ten years; external factors such as change in state administration and/or political upheaval; new policies or legislation affecting transportation; or shifting agency priorities. This section also focuses on the role – if any - of performance management requirements set forth by MAP-21 and the FAST Act, particularly as they relate to the creation of new positions in planning.

Measuring and evaluating success. This aspect addresses how reorganizations have addressed or affected functionality gaps, as well as any mechanisms for staff feedback throughout and after the process.

Because much of the knowledge about departmental reorganizations is informally shared or based on individual recollection, respondents were not always able to provide precise dates

3 American Association of State Highway and Transportation Officials. (November 2016). Transportation Governance and Finance: A 50-State Review of State Legislatures and Departments of Transportation. Washington, DC.

Table 3. Primary functions of the planning department at phone interview respondents' state DOTs

State	Capital Investments and Grants	Community Relations / Public Affairs	Data	Economic Development	Engineering	Environmental Sustainability	Freight and Logistics
Florida			X	X			X
Illinois						X	X
Minnesota	X		X (plus another department)		X (plus another department)	X	X
Missouri	X		X (plus another department)				
Texas							
Washington		X (plus another department)	Planning	X (plus another department)			

State	Operations	Policy Analysis	Programming	Research	Safety	Technology and Innovation	Other
Florida						X	
Illinois							
Minnesota		X	X	X		X	Aeronautics, Passenger Rail, Waterways, Transit & Active Transportation
Missouri		X	X			X	asset management, STIP development, long range planning, performance management, transportation management systems, mapping
Texas		Planning				Planning	
Washington		X (plus another department)		X (plus another department)			

Source: Planning Department Reorganization Online Survey, 2018-2019

or historical data. However, those with many years of service in the state DOT often had deep institutional knowledge that helped to provide additional context for why and how restructurings occurred. As such, the interviews served as a unique opportunity to capture information that has not otherwise been recorded or discussed with non-DOT employees.

Table 4. Additional characteristics of interview respondent state DOTs

State	DOT Structure	Modes Over Which DOT Has Jurisdiction	DOT Leader	Appointment of DOT Leaders	State Legislative Roles in Allocating Fed. Trans. Rev. to State DOTs
Florida	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit, Rail (Freight and Passenger), Aviation, Ports and Waterways, Pedestrian and Bicycle, Other - Spaceports	Secretary of Transportation	Appointed by Governor with Legislative Approval	Legislatively Appropriated*
Illinois	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit, Rail (Freight and Passenger), Aviation, Ports and Waterways, Pedestrian and Bicycle	Secretary of Transportation	Appointed by Governor with Legislative Approval	Legislatively Appropriated in Part
Minnesota	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit, Rail (Freight and Passenger), Aviation, Ports and Waterways, Pedestrian and Bicycle	Commissioner of Transportation	Appointed by Governor with Legislative Approval	Legislatively Appropriated in Part Note: federal funds that flow through the state's Trunk Highway Fund are appropriated through the Biennial budget process, while federal funds that do not flow through that fund require legislative approval to be spent.
Missouri	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit, Rail (Freight and Passenger), Aviation, Ports and Waterways, Pedestrian and Bicycle	MoDOT Director	Appointed by Missouri Highways and Transportation Commission	Legislatively Appropriated in Part
Texas	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit*, Rail (Freight and Passenger), Aviation*, Ports and Waterways, Pedestrian and Bicycle	Executive Director of TxDOT	Elected by Texas Transportation Commission	Legislatively Appropriate
Washington	Organized Mainly by Functional Activity	Roads and Bridges, Public Transit, Rail (Freight and Passenger), Aviation, Ports and Waterways, Pedestrian and Bicycle	Secretary of Transportation	Appointed by Governor with Legislative Approval	Legislatively Appropriated in Part

* Please see state profile in AASHTO report for additional information.

STATE PROFILES

Because experiences varied widely among the phone interview respondents, the research team found it most useful to organize survey results into a series of state profiles that provide key insights and takeaways from the interviews, pairing that information with demographic and background data from the Bureau of Transportation Statistics' website. Additional state profiles for those states that participated in the online survey only can be found in **Appendix D**.

The snapshots reflect the most salient responses to the three themes outlined in the survey design, and are by no means exhaustive accounts of organizational change at these state DOTs and planning departments. However, some patterns did emerge among the interview results, particularly with regards to leadership changes and formal versus informal departmental reorganizations.

Illinois

Population (2016)
12,830,632

88% **Urban**
12% **Rural**

15	**MPOs**
9	**DOT Districts**
5,121	**DOT Employees**
NA	**Planning Employees**
$1.8b	**FY19 Budget**

57,914	**square miles of land**
145,708	**miles of public road**
596.9b	**ton-miles of freight flow**
674.2m	**transit riders**

Illinois Department of Transportation (IDOT)

The division that oversees long-range planning at IDOT is called the Office of Planning and Programming.

- Division functions: Environmental Sustainability, Freight and Logistics, Data, Research and Programming
- Planning division works closely with all their districts and central office and with entire department.
- Interaction and Communication:
  - *Regularly:* Emails, Casual Conversations
  - *As Needed:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding
- The IDOT Transportation Planning is organized by transportation mode.
  - Different modal teams work together with data sharing
- There are currently functionality gaps due to vacant positions in IDOT.
  - Primary causes: High turnover, Lack of qualified applicants

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Bureau of Planning.

- Reorganization year: 2014
- Reorganization initiation by: Senior staff
- Goals of reorganization: Increase efficiency and effectiveness, better collaboration
- Parts of planning department reorganized: Division of highway was broken into different areas, the aim was to have more multimodal approach.

Federal Mandates (*MAP21 and FAST Act*)

- MAP21 did not have any impact on reorganization, since IDOT already had performance measure management in place. There were new positions developed, but they were not filled due to some limitations.

Florida

Population (2016)
20,278,447

87% **Urban**
13% **Rural**

27	**MPOs**
7	**DOT Districts**
6,500	**DOT Employees**
NA	**Planning Employees**
$10.8B	**FY18-19 Budget**

54,252	**square miles of land**
122,088	**miles of public road**
1000.0	**ton-miles of freight flow**
285.6m	**transit riders**

Florida Department of Transportation (FDOT)

The division that oversees long-range planning at FDOT is called the Strategic Development Division. FDOT is the only DOT which have organizational change manager, which works within the functional area of transportation technology in the planning division.

- Division functions: Data, Economic development, Freight and logistics and Technology and Innovation
- Interaction and Communication:
    - *Regularly*: Interdepartmental committees, Scheduled meetings, Data sharing, Task force, Emails and Casual Conversations
- The FDOT Planning department is organized by transportation mode and different modal teams work together through sharing their data, scheduling meetings, Committee and Task force
- Currently there are functionality gaps due to vacant positions in FDOT.
    - Primary causes: Budgetary issues and retirement
    - Due to limited resources, in terms of people and money, since office of change management is really new and not many state government is practicing it. So, finding people with correct skill set could be a task.

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Strategic Development Division.

- Reorganization year: 2016
- Reorganization was initiation for: New leadership, shift in goals
- Goals of reorganization: Increase efficiency and effectiveness, Provide more public accountability and transparency, Resolve conflict outside of DOT
- Transition time needed: 1-2 years
- Part of planning department reorganized: The office of transportation technology was created which includes office of information technology, security management, policy and quality management office and civil integrated management office which manages all the data. The goal was to focus on technology.

Federal Mandate *(MAP21 and FAST Act):*

MAP21 has not been a huge driver for the organizational change. To evaluate the efficiency of change management functionality, FDOT has two resources solely focusing on Office of change management. Currently the office of change management does not work on performance measure, but they are working on creating goals for change management performance measures. FDOT has very specific production performance measure which is related to the actual building of transportation infrastructure.

Minnesota

Population (2016)	8	**MPOs**	79,626	**square miles of land**
5,576,606	8	**DOT Districts**	138,767	**miles of public road**
	4,500	**DOT Employees**	324.8b	**ton-miles of freight flow**
58% **Urban**	30	**Planning Employees**	103.6m	**transit riders**
42% **Rural**	NA	**FY17 Budget**		

Minnesota Department of Transportation (MNDOT)

The division that oversees long-range planning at MNDOT is called the Multimodal Planning and Program Management Division.

- Division functions: Capital Investment and Grants, Data, Engineering, Policy Analysis, Programming, Research, Technology and Innovation, Other (Aeronautics, Passenger Rail, Waterways, Transit & Active Transportation)
- Planning division works closely with their eight districts, office of bridges, material and road research, environmental stewardship, private management and technical support, communications, sustainability, organization, public engagement, finance, and multiple modalities.
- Interaction and Communication:
    - *Regularly*: Interdepartmental committees, Scheduled meetings, Data sharing, Task force, Provide Funding, Emails, Casual Conversations
- The MNDOT Transportation Planning department is organized by transportation mode and different modal teams work together through sharing their data, scheduling meetings, Committee and Task force
- Currently there are functionality gaps due to vacant positions in MNDOT.
    - Primary causes: Budgetary issues, Recent organizational restructuring

Structural Reorganization

There has been two structural reorganization within the last 10 years that has affected the Multimodal Planning and Program Management Division.

- Reorganization was initiation for: New leadership
- Overall goals of reorganization: Increase efficiency and effectiveness, Other (Increased focus on financial accountability)
- Transition time needed: Less than 6 months

1. Reorganization year: 2010
    - Parts of DOT reorganized: Multimodal Planning was created and the functions of Program Management Division was rearranged.
2. Reorganization year: 2013-2014
    - Parts of DOT reorganized: Consolidated the Office of Statewide Multimodal Planning and Office of Capital Programs and Performance Measures with data and research functions, as well as some aspects of finance.

Federal Mandates (*MAP21 and FAST Act*)

The federal mandates such as MAP21 and FAST Act was not the driving factor for reorganization within MNDOT. They had established performance based planning since over a decade now. The overtime changes in performance based planning practice have led to new staff positions.

Recommendations for others interested in implementing a reorganization:

- The skillset of the people you hire matter more than where the people are situated

Missouri

Population (2016)
5,988,927

70% **Urban**
30% **Rural**

8	**MPOs**
7	**DOT Districts**
5100	**DOT Employees**
NA	**Planning Employees**
$2.27b	**FY19 Budget**

69,707	**square miles of land**
131,90	**miles of public road**
214.8b	**ton-miles of freight flow**
68.2m	**transit riders**

Missouri Department of Transportation (MoDOT)

The division that oversees long-range planning at MoDOT is called Transportation Planning

- Division functions: Capital Investment and Grants, Data, Policy Analysis, Programming, Technology and Innovation, Other (asset management, STIP development, long range planning, performance management, transportation management systems, mapping)
- Planning division works closely with their seven districts, office of bridges, design, material and construction.
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Provide Funding, Emails, Casual Conversations
    - *As Needed:* Task Force
- The MoDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in MoDOT.
    - Primary causes: N/A

Structural Reorganization

There has been a structural organization in 2004 that has affected Transportation Planning.

- Reorganization initiation by: Head of DOT
- Goals of reorganization: Increase efficiency and effectiveness, better collaboration
- Parts of planning department reorganized: All districts and divisions and within transportation planning division functions, like program development, management system, policy development all was pulled into one division of planning.
- Transition time needed: 1 - 2 years

Functional changes within last ten years

- During 2010-2012, local programs was moved to design division from planning division, to work efficiently and in more timely mannered.
- 2013-2015, performance management division functioned within research for a while, after that it was moved to communications for a while and finally came to planning division.

Federal Mandates *(MAP21 and FAST Act):*

The federal mandates such as MAP21 and FAST Act was not the driving factor for reorganization within MoDOT. Missouri had robust performance management process in place long before MAP21 or FAST act came in.

Recommendations for others interested in implementing a reorganization

- To know what you are hoping to deliver, make clear goals
- Put more value on the individuals in your organization and the skills that they bring to the table
- If you have the right people involved and the right kind of collaboration, the right expectations about how individuals are expected to work with one another in an organization, one can still make it work well. As long as people know what the expectation is in the end.

Texas

Population (2016)
25,145,561

85% **Urban**
15% **Rural**

25	**MPOs**	268,596	**square miles of land**
25	**DOT Districts**	313,228	**miles of public road**
12,000	**DOT Employees**	1.2t	**ton-miles of freight flow**
100	**Planning Employees**	290.4m	**transit riders**
NA	**FY17 Budget**		

Texas Department of Transportation (TxDOT)

The division that oversees long-range planning at TxDOT is called the Strategic Planning Division.

- Division functions: Policy Analysis, Technology and Innovation
- Planning division works closely with engineering divisions which includes Design, Construction and Maintenance, project finance debt division, research division, IT division, government division for state and federal affairs, communication division. To a lesser degree Contract Services, multi-modal division, maritime, rail, public transportation and aviation division interacts with planning division as needed.
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations, Other (Initiate collaboration within the department)
- The TxDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in TxDOT.

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Strategic Planning Division.

TxDOT have an organization named sunset review, which was created by legislature whose purpose was to review every state agency periodically, essentially a broad audit of that department of all of its functions and missions and whether or not they feel it is doing its mission adequately and should the mission continue or whether the department continue to exist or not.

- Reorganization year: 2016
- Reorganization initiation by: Head of DOT, New leadership, Performance measures, Shift in goals
- Goals of Reorganization: Increase efficiency and effectiveness, Increase focus on non-driving modes (e.g. biking, transit), Provide more public accountability and transparency
- Part of DOT reorganized: Divisions within the department were re-organized and re-aligned because the business was not performing the same mission or its mission was changing and there was a dissatisfaction with the product.
- Transition time needed: 6 months to 1 year

The sunset review is conducting reviews for DOT since past 19 years. Once the recommendations are implemented, TXDOT needs to have a report on the progress of those things which they were going to improve and within how much time they will able to make those changes.

Federal mandates *(MA2P21 and FAST Act)*:

Federal mandates did not have any impact at a high level on the overall organizational structure. TXDOT was had been doing their performance management practice before MAP21 and FAST act, but it was not in a concerted way. With these mandate coming in, it had caused they to have more people working on performance management than they had before. There have been hiring of new employees but not just because of performance mandate but to take care of other functions also. TxDOT do not have any functionality gaps due to vacate position.

Recommendations for reorganizations

- To assess all the functions that transportation department should do and prioritize them. Since agencies sometimes do not have enough resources to do them all and then it reduces their performance.
- Before you undertake a reorganization, you should think about what you want to do and then think about how does your organization fit that and do you need to reorganize the whole thing, or maybe there's just a component of that.

Washington

Population (2016)
7,405,743

75% **Urban**
25% **Rural**

12	**MPOs**
6	**DOT Districts**
6,318	**DOT Employees**
100	**Planning Employees**
NA	**FY17 Budget**

71,362	**square miles of land**
82,448	**miles of public road**
582.4	**ton-miles of freight flow**
243.6m	**transit riders**

Washington State Department of Transportation (WSDOT)

The division that oversees long-range planning at WSDOT is called the Multimodal Planning division.

- Division functions: Community Relations/Public Affairs, Data, Economic Development, Policy Analysis, and Research.
- Planning division works closely with their MPOs, program management organization, development division, traffic operations division and modal offices as they develop their statewide plans with the region offices.
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Emails, Casual Conversations.
    - *As Needed:* Providing funding
- The WSDOT Transportation Planning is not organized by transportation mode.
- There are currently functionality gaps due to vacant positions in WSDOT.
    - *Primary Causes:* Budgetary issues and high turnover

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Multimodal Planning division.

- Reorganization initiation by: Leadership driven and the results of a "healthy organization" review revealed that changes were needed.
- Transition time needed: 1-2 years
- Goals of Reorganizations: Increase efficiency and effectiveness, other (Align priorities and resources; increase productivity and morale)

1. Reorganization year: 2017
    - Part of planning department reorganized: Multimodal Development and Delivery (M2D2) was created. The multimodal planning division reports to assistant secretary of M2D2. Prior to this planning department was report to assistant secretary of communities and economic development. The goal was to elevate and emphasize multimodal approaches and practical solutions rather than traditional ideology of focusing on project engineering and highway expansion.
2. Reorganization year: 2014
    - Pat of planning department reorganized: focus was on planning and on the agency's engagement with communities with the emphasize of partnership approach. For the state DOT, The idea was to move away from the reputation of coming in and dictating what should happen and rather partnering with regional and local government to build communities. The planning department was report to assistant secretary of communities and economic development. Prior to this planning department was report to department of finance.

Federal Mandates (MAP21 and FAST Act):

MAP21 has not been a huge driver for the organizational change, WSDOT had strong performance reporting program prior to those mandates. They have internally linked up different divisions to make sure they are working well with their MPO partners. There was no position developed, identified or filled to new performance management requirement.

Staff Reactions to Changes:

An employee engagement survey is carried out every fall, which has 70% response rate, where they have some questions related to changes.

CONCLUSION AND FINDINGS

"The funny thing I've told everybody, I don't think there's a single DOT in the US that's organized the same way."

-Phone Interview Respondent

Conclusion and Findings

A complete reorganization for a state DOT might seem a daunting task, particularly given how change often occurs incrementally and taxpayer dollars are at stake. However, as the exploratory research in this report demonstrates, not all reorganizations need be exhaustive, or exhausting. In addition, there is evidence that changes at the very top – a new Governor or head of the DOT, for example – do not necessarily result in any sudden shifts to how the institution functions, particularly for the at the non-managerial level. The impact is further reduced for planning departments, which tend to be among the smallest in state DOTs.

In conversations with IDOT, for example, the research team discovered that defining and realigning the staff reporting structure was one of the most time-consuming aspects of the agency's planning department reorganization, and the source of some inconvenience to management. Post-reorganization, however, the functions carried out by the various divisions and, by extension, individuals' duties, weren't any different than they were before the reorganization. In fact, at least one member of the leadership team actually saw a decrease in management duties by virtue of having fewer direct reports. In the end, the reorganization at IDOT was neither "good" nor "bad." It was simply a means by which to better reflect what individuals and departments were actually doing on a day to day basis, which had slowly shifted over the years.

In that way, departmental reorganizations can be viewed as just one of many tactics that comprise a comprehensive approach to organizational change management at state DOTs. Future research in this area could compare and contrast departments of transportation with other statewide public agencies. Is there something unique about structural changes at DOTs that might inform reorganizations in education, labor, or human services? Conversely, are other state-level agencies approaching organizational change management in a way that could improve the efficacy and efficiency of transportation functions?

Another topic of particular interest in light of the evidence collected in this exploration are those tactics that fall short of a formal reorganization but still affect change in the structure of the DOT. Special attention should be paid to instances of informal change, such as those that focus on improved coordination via tweaks to interdepartmental communication or efforts to dismantle work silos. In those instances, it's not the organizational chart that changes; the dotted lines among employees, however, take on greater significance.

Appendix A - IRB Consent Form

University of Illinois at Chicago – Urban Transportation Center

CONSENT FORM

Project Title: **State DOT Organizational Structure Comparison Study**

You are being asked to participate in the research conducted by UTC Director Dr. P. S. Sriraj, or by students of staff under the supervision of Dr. Sriraj.

Purpose of the Study: The primary objective of this study is to explore effective employee organization in State DOTs with the goal of providing recommendations to the Illinois Department of Transportation planning department. The research will be conducted through literature review about the effectiveness of DOT restructuring efforts and interviewing members of a selected number of DOT's planning staff about their current department structure and past restructuring efforts.

If you agree to participate in the research, you will be asked to participate in a semi-structured interview performed by a written questionnaire that is followed up with a telephone call. This interview will be aimed at addressing IDOT's goal of improving the efficiency and effectiveness of its planning department. The interview should take approximately two hours or less. Your name and any record of your personal participation will be kept confidential.

You understand that your participation in this study is entirely voluntary and that you can withdraw from the study at any time without penalty. The research team will exclude your name from any reports and will maintain your privacy whether you choose to participate in the study or not. You understand that the interview may be recorded for the purposes of transcription and that the recording will eventually be destroyed after the transcription and aggregation process.

You understand that your participation in this research will not pose any physical risks to you personally and that you can skip any questions you are not comfortable answering.

You understand that you will not directly benefit from participating in the research, but that the research may be of benefit to the efficiency of the transportation planning process in the state of Illinois.

If you have any questions about this study, feel free to ask them now or anytime throughout the study by contacting:

Dr. P.S. Sriraj, Director of the Urban Transportation Center
Urban Transportation Center
University of Illinois at Chicago
Phone: (312) 413-7568
e-mail: sriraj@uic.edu

If you have any questions about your rights as a research subject, you may write or call OPRS at the following address:

Office for the Protection of Research Subjects (OPRS)
1737, W. Polk Street, M/C 672
203 Administrative Office Building
Chicago, Illinois – 60612.
Phone: (312) 996 1711 or toll free: 866-789-6215
Email: uicirb@uic.edu

Agreement to Participate in Research:
I understand that in signing this consent form, I am agreeing to participate in the research and give Dr. P.S. Sriraj, and his associates, permission to present this work in written and oral form, without further permission from me.

_____	_____
Name (Please print)	Signature
_____	_____
Telephone	Date

Appendix B – Survey Questions

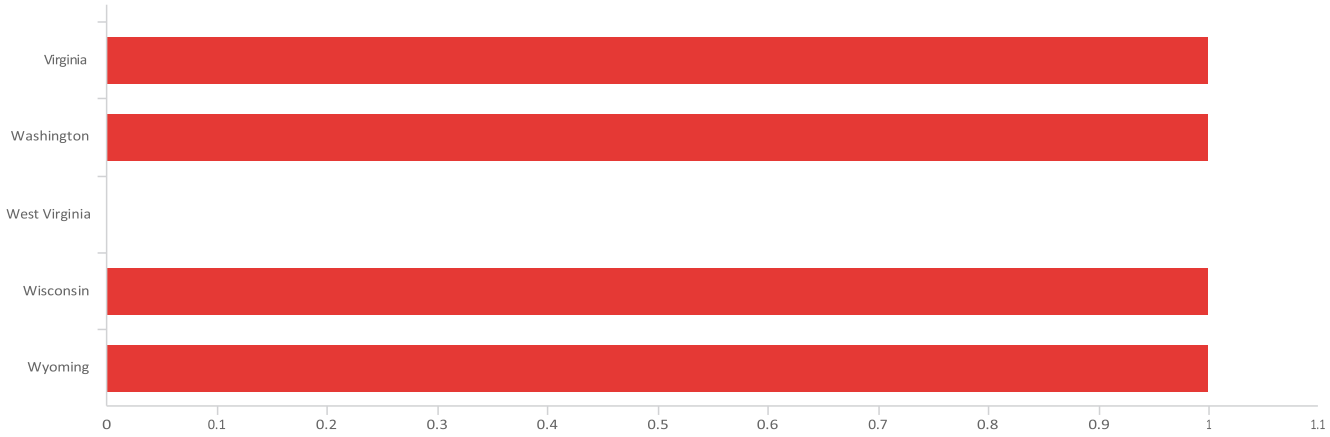
Note: These questions refer to how the department functions, and not the personal performance or beliefs of the employees within the department.

What is the logic behind the organization of your planning department?
What is the vision/priorities of the planning department, aside from or in addition to overall agency visions/goals?
How does the planning department function?
Is it organized modally? And if so, how do the different 'modes' work together?
What is the role of policy in the planning department?
Do you feel that planning is well integrated in the agency? Why or why not?
What is the history of the planning department's structure?
Have you recently undergone a reorganization of either the entire organization or the Planning department/bureau?
If so, what were the goals of reorganization?
What was the process of reorganization?
What initiated the organization?
How long did it take?
Who organized the process?
How was staff involved?
After reorganization, what were the lessons learned?
In what ways was the reorganization successful or unsuccessful?
What is the planning department doing to respond recent performance measures mandate?
How is data being used to inform decisions or changes?
How much and in what way is data accessible to the public?
What are the planning department's recent successes? Concerns?
Has staffing ever been a problem in the department?
How is the DOT addressing problems related to staffing?
What part do reorganization efforts play as a way of addressing staffing issues?
What skills are most desired in positions in the planning department?
What role do project managers, subject matter experts, formal planners, etc. play?

Appendix C – Survey Results

Q32 - Which State DOT are you representing?


Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont



#	Field	Choice Count	
1	Alabama	0.00%	0
2	Alaska	4.76%	1
3	Arizona	0.00%	0
4	Arkansas	4.76%	1
5	California	0.00%	0
6	Colorado	0.00%	0
7	Connecticut	0.00%	0
8	Delaware	4.76%	1
9	District of Columbia	4.76%	1
10	Florida	4.76%	1
11	Georgia	0.00%	0
12	Hawaii	0.00%	0
13	Idaho	4.76%	1
14	Illinois	4.76%	1
15	Indiana	0.00%	0
16	Iowa	4.76%	1
17	Kansas	0.00%	0
18	Kentucky	0.00%	0
19	Louisiana	0.00%	0

20	Maine	0.00%	0

21 Maryland
4.76% 1

#	Field	Choice Count	
22	Massachusetts	0.00%	0
23	Michigan	4.76%	1
24	Minnesota	4.76%	1
25	Mississippi	4.76%	1
26	Missouri	4.76%	1
27	Montana	0.00%	0
28	Nebraska	0.00%	0
29	Nevada	0.00%	0
30	New Hampshire	0.00%	0
31	New Jersey	0.00%	0
32	New Mexico	0.00%	0
33	New York	0.00%	0
34	North Carolina	0.00%	0
35	North Dakota	0.00%	0
36	Ohio	0.00%	0
37	Oklahoma	4.76%	1
38	Oregon	4.76%	1
39	Pennsylvania	0.00%	0
40	Rhode Island	0.00%	0
41	South Carolina	0.00%	0
42	South Dakota	0.00%	0
43	Tennessee	0.00%	0
44	Texas	4.76%	1

45	Utah	4.76%	1
46	Vermont	0.00%	0
47	Virginia	4.76%	1
48	Washington	4.76%	1
49	West Virginia	0.00%	0
50	Wisconsin	4.76%	1
#	Field		Choice Count
51	Wyoming	4.76%	1
			21

Showing rows 1 - 52 of 52

Q11 - What is your role/position in the DOT?

What is your role/position in the DOT?

Manager Asset Management and Policy

Functional supervisor for Planning Program Administration and Communications.

This is Em testing things out

Organizational Change Manager

Director of Planning

State Planning Engineer

Chief, Planning Section

Division Head of Transportation Planning and Policy

Director of the Strategic Planning Division

State Planning Engineer

Planning & Performance Branch Manager

Statewide Planning and Policy Manager

Planning Director

Planning chief, regional DOT office

Assistant Director, Office of Planning & Capital Programming, The Secretary's Office

Planning Team Leader, Office of Systems Planning

Planning Manager

Transportation and Mobility Planning Division Administrator

Assistant Commissioner

Planning Director

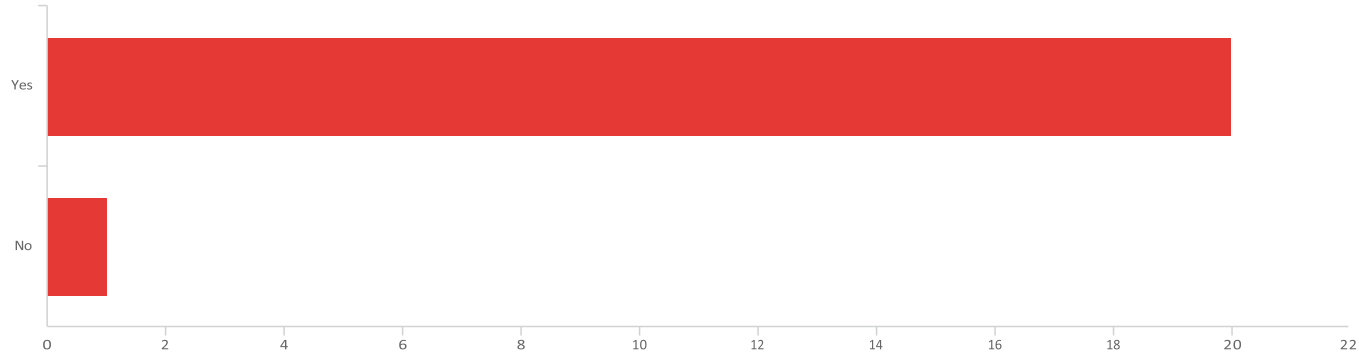
Director OPP

Q1 - Organization Please upload a copy of the current organizational chart for the entire DOT.

Organization Please provide a copy of current organizational chart for...

Thumbnail	Name	Size	Type
MDOT ORG CHART - PUBLIC FACING.pdf	MDOT ORG CHART - PUBLIC FACING.pdf	13.4KB	application/pdf
Florida Reorg Report.docx	Florida Reorg Report.docx	18.59KB	application/vnd.openxmlformatsofficedocument.wordprocessingml.document
	AHTD_Org_2017_2.jpg	305.75KB	image/jpeg
ODOTORGCHARTWeb.pdf	ODOTORGCHARTWeb.pdf	79.08KB	application/pdf
MDOT ORG chart.pptx	MDOT ORG chart.pptx	159.25KB	application/vnd.openxmlformatsofficedocument.presentationml.presentation
DeptOrgChart.pdf	DeptOrgChart.pdf	29.89KB	application/pdf

Q3 - Is there a department, bureau, division, or office in the DOT dedicated to long range (10-30 years) planning efforts?



#	Field	Choice Count	
1	Yes	95.24%	20
2	No	4.76%	1
		21	

Showing rows 1 - 3 of 3

Q33 - What is the planning portion of the DOT called?

What is the planning portion of the DOT called?

Bureau of Planning

Multimodal Planning

Strategic Development

Planning

Bureau of Planning and Economic Development

Transportation Planning and Policy Division - Multimodal and Project Planning Section

Strategic Planning Division

Planning Division

Planning & Performance

Transportation Development Division

There is a new area of UDOT, not depicted in the org chart link, called Planning and Investment. This area is overseen by a Deputy Executive Director, the Planning Division reports to the new Deputy Director of P&I.

Division of Planning & Program Development

This is done in the Secretary's Office, Office of Planning and Capital Programming

Planning, Programming & Modal Division > Office of Systems Planning > Planning Team

Planning Services

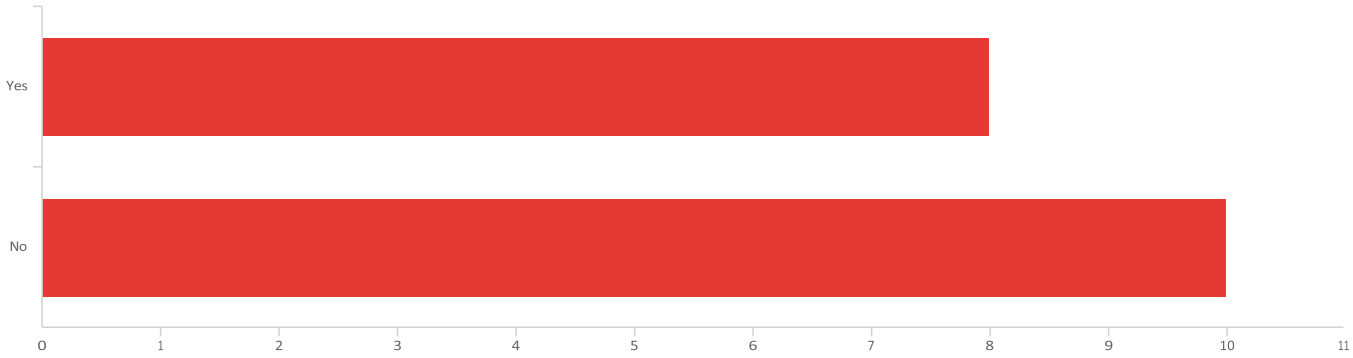
The OIPI, Office of Intermodal Planning and Investment, is an office within the Secretary of Transportation's Office. This Office is responsible for the VTrans effort, which is the statewide multi-modal long-range transportation plan.

Multimodal Planning & Program Management Division

Transportation Planning

Bureau of Planning

Q34 - Are there goals or a vision statement for the planning area separate from the entire DOT?



#	Field	Choice Count
1	Yes	44.44% 8
2	No	55.56% 10
		18

Showing rows 1 - 3 of 3

Q8 - What is the vision or goals statement for the planning portion?

What is the vision or goals statement for the planning portion?

Our MISSION is to inform decisions through expertise and innovation in planning, policy, data and analysis services to support a sustainable and integrated statewide multimodal transportation system. Our VISION is to guide transportation decisions through transparent, collaborative, and performance-based planning and support data and information needs to foster livable communities and economic vitality.

The Transportation Planning and Policy Division (TPP) is responsible for providing long range multimodal transportation planning for the state, conducting studies of transportation needs, assisting cities and counties in transportation planning, and publishing information and recommendations relative to transportation issues. The TPP Division coordinates transportation planning activities with metropolitan and regional planning agencies, other Department Divisions and Districts, federal partners, public citizens, and other stakeholders. The Division also maintains information for economic, financial and planning studies to support management's policy decisions. Tourist, city and county maps are produced, printed and distributed. The Highway Safety Improvement Program, Public Transportation Program, and railroad related activities are managed.

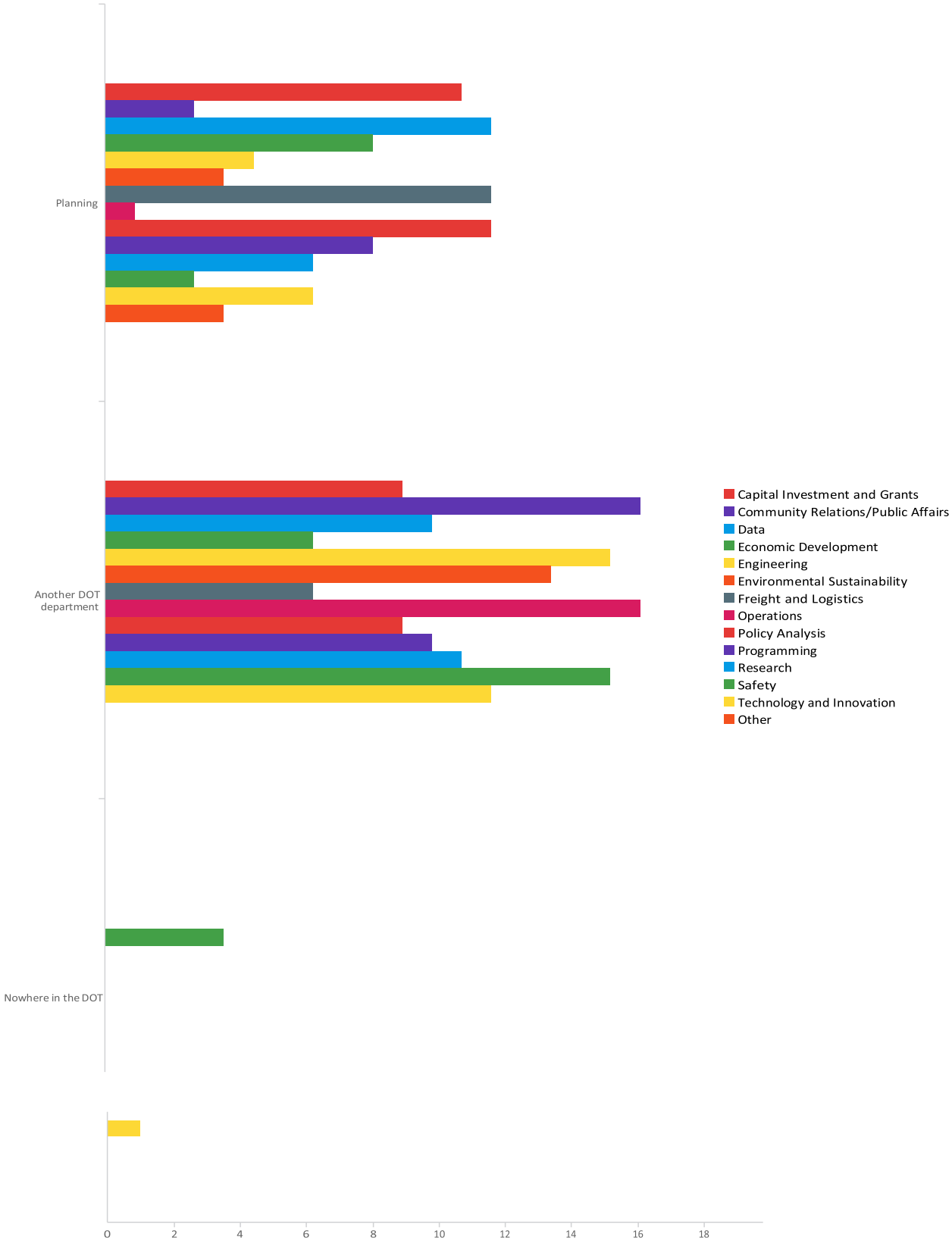
VISION Proactive innovators who drive well-coordinated and implementable strategic solutions MISSION Provide analysis, observations, and solutions to guide the Department through performance management, risk-based analysis, process improvement, knowledge management, continuity of operations, and a forward-thinking approach for a better future FUNCTIONAL AREAS • Performance Management • Future Innovation and Transformation Planning • Continuity of Operations and Disaster Preparedness • Risk Prevention and Mitigation • Rapid Process Improvement (RPI) • Knowledge Management GOALS • Drive performance-based decisions to administer Department programs (Supports all TxDOT Goals) o Establish a consistent, reliable and robust performance measurement structure to compare Division and District outcomes o Build and maintain a statewide catalogue of performance metrics across functional areas o Evaluate metrics across Divisions and Districts to identify challenges and opportunities o Monitor management activities that respond to performance-based decisions • Strengthen the future of the Department by promoting innovation and readiness (Deliver the Right Projects, Optimize System Performance, and Promote Safety) o Ensure Department continuity of operations through preparedness for disruptions and disaster events o Enhance the innovation forums to elevate Department readiness for future technologies o Promote research that accelerates Department transformation through innovation o Promulgate VVMGO alignment to statewide priorities and strategic initiatives • Further statewide knowledge and change management activities through coordinated solutions (Foster Stewardship and Optimize System Performance) o Evaluate high-risk programs to mitigate legal risks or preempt compliance issues o Promote a culture of continuous improvement through training and peer exchanges o Establish a Department program to identify, coordinate and implement cost efficiency techniques o Coordinate statewide activities to create, share, use and manage knowledge and information

Office of Systems Planning mission statement: "To prepare comprehensive, intermodal and modal transportation system plans for the state. These plans are used to direct transportation investments and administer statewide grant programs."

Vision: Safe, efficient, and seamlessly connected transportation throughout the Commonwealth of Virginia. Goals: Safety and Security – to provide a safe and secure transportation system System Maintenance and Preservation – to preserve and maintain the condition of the existing transportation system Mobility, Connectivity, and Accessibility – to facilitate the easy movement of people and goods, improve interconnectivity of regions and activity centers, and provide access to different modes of transportation Environmental Stewardship – to protect the environment and improve the quality of life for Virginians Economic Vitality – to provide a transportation system that supports economic prosperity Coordination of Transportation and Land Use – to promote livable communities and reduce transportation costs by facilitating the coordination of transportation and land use Program Delivery – to achieve excellence in the execution of programs and delivery of service

We lead the way through multimodal integration, data and information management, and transportation investment and programming

Q35 - Where do the following functions lie within the DOT? (select all that apply)



#	Field	Planning		Another DOT department		Nowhere in the DOT		Total
1	Capital Investment and Grants	54.55%	12	45.45%	10	0.00%	0	22
2	Community Relations/Public Affairs	14.29%	3	85.71%	18	0.00%	0	21
3	Data	54.17%	13	45.83%	11	0.00%	0	24
4	Economic Development	45.00%	9	35.00%	7	20.00%	4	20
5	Engineering	22.73%	5	77.27%	17	0.00%	0	22
6	Environmental Sustainability	21.05%	4	78.95%	15	0.00%	0	19
7	Freight and Logistics	65.00%	13	35.00%	7	0.00%	0	20
8	Operations	5.26%	1	94.74%	18	0.00%	0	19
9	Policy Analysis	56.52%	13	43.48%	10	0.00%	0	23
10	Programming	45.00%	9	55.00%	11	0.00%	0	20
11	Research	36.84%	7	63.16%	12	0.00%	0	19
12	Safety	15.00%	3	85.00%	17	0.00%	0	20
13	Technology and Innovation	33.33%	7	61.90%	13	4.76%	1	21
14	Other	100.00%	4	0.00%	0	0.00%	0	4

Other

Showing rows 1 - 14 of 14

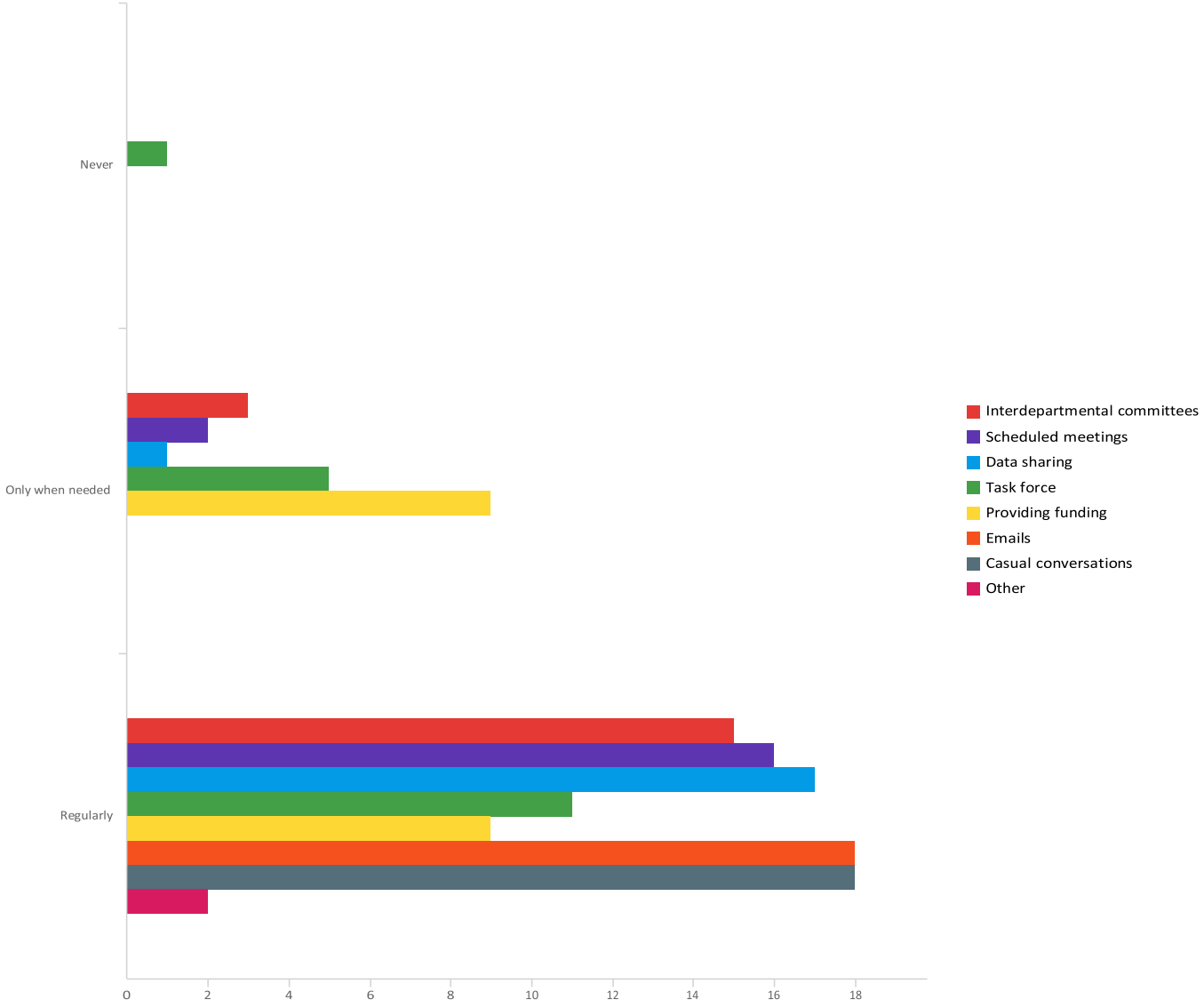
Traffic Forecasting

performance measurement

Aeronautics, Passenger Rail, Waterways, Transit & Active Transportation

asset management, STIP development, long range planning, performance management, transportation management systems, mapping

Q5 - How much does the planning department interact and communicate with other departments in the following ways:



#	Field	Never		Only when needed		Regularly		Total
1	Interdepartmental committees	0.00%	0	16.67%	3	83.33%	15	18
2	Scheduled meetings	0.00%	0	11.11%	2	88.89%	16	18
3	Data sharing	0.00%	0	5.56%	1	94.44%	17	18
4	Task force	5.88%	1	29.41%	5	64.71%	11	17
5	Providing funding	0.00%	0	50.00%	9	50.00%	9	18
6	Emails	0.00%	0	0.00%	0	100.00%	18	18

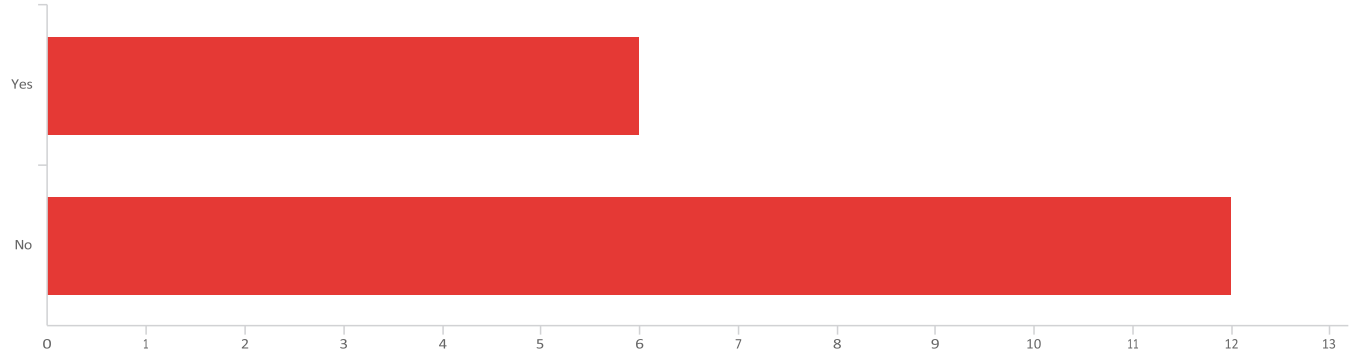
#	Field	Never		Only when needed		Regularly		Total
7	Casual conversations	0.00%	0	0.00%	0	100.00%	18	18
8	Other	0.00%	0	0.00%	0	100.00%	2	2

Showing rows 1 - 8 of 8

Other

Other
Transportation Projects
Initiating collaboration within the Dept

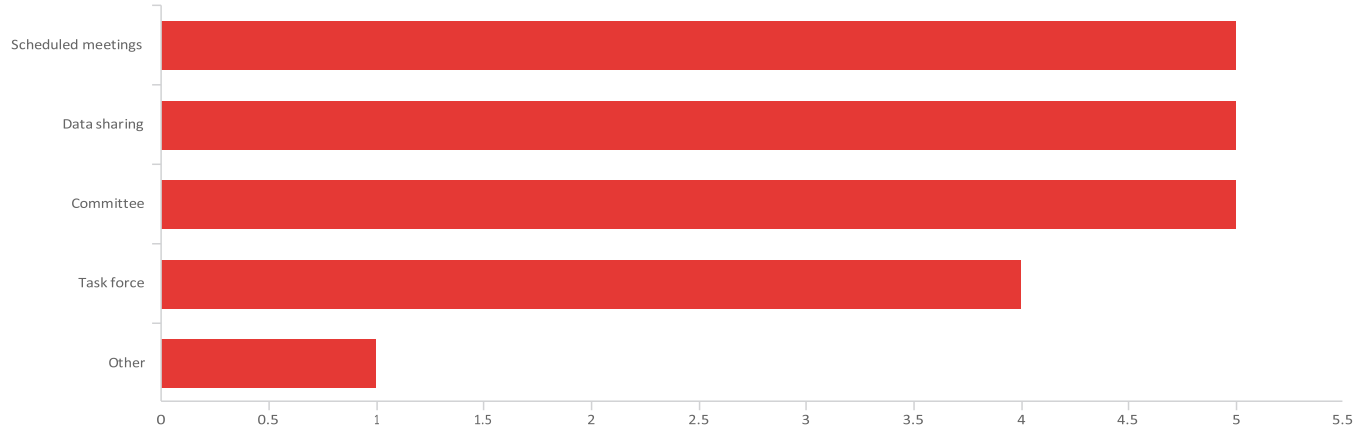
Q6 - Is the planning department organized by transportation mode (e.g. roads, transit, bike)?



#	Field	Choice Count	
1	Yes	33.33%	6
2	No	66.67%	12
		18	

Showing rows 1 - 3 of 3

Q7 - How do the different modal teams work together? (select all the apply)



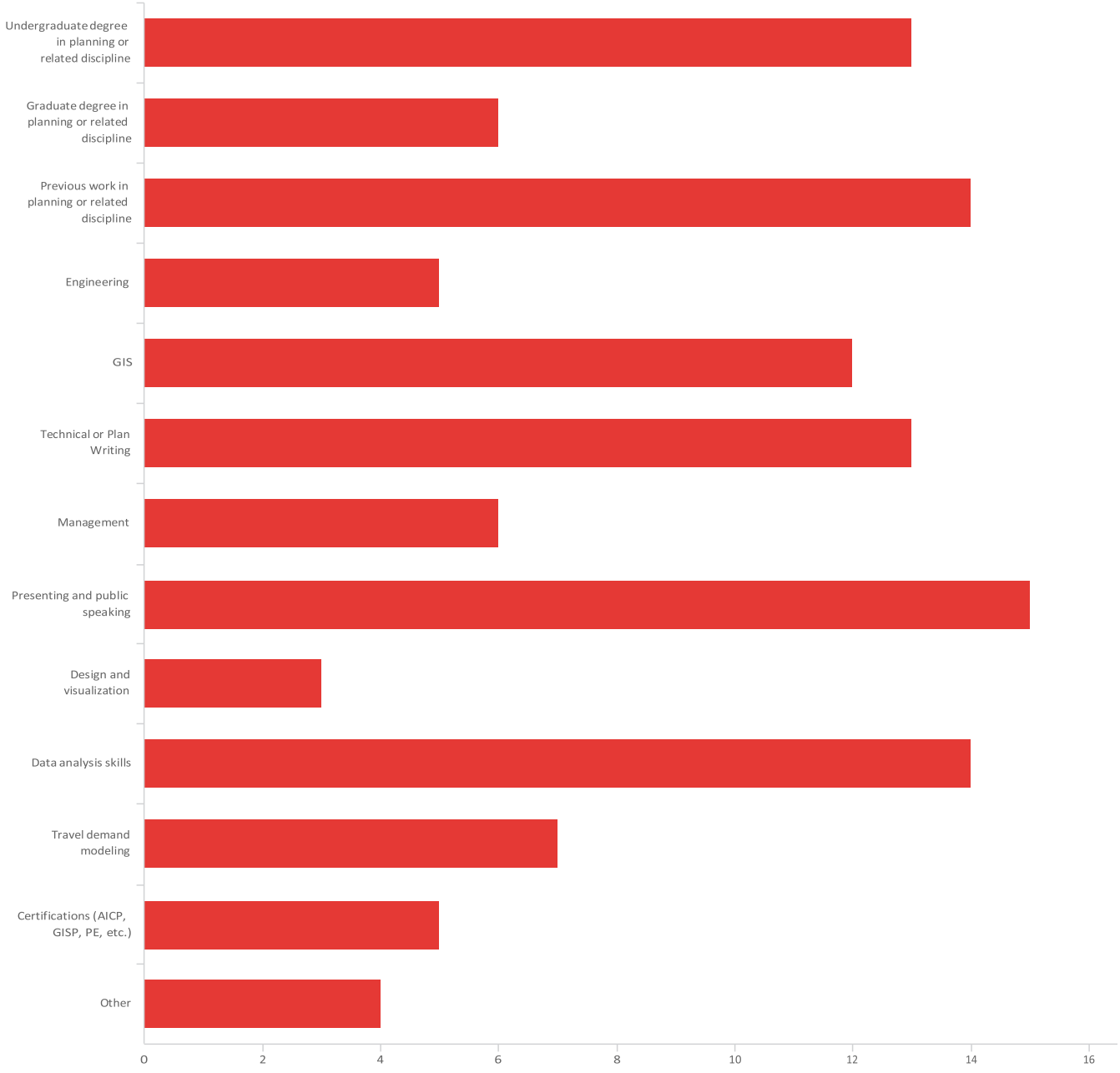
#	Field		Choice Count
1	Scheduled meetings	25.00%	5
2	Data sharing	25.00%	5
3	Committee	25.00%	5
4	Task force	20.00%	4
5	Other	5.00%	1
			20

Showing rows 1 - 6 of 6

Other

Other
Research

Q4 - Staffing and Collaboration What skills and/or experience are most important in employees working in a planning capacity? (select all that apply)



#	Field	Choice	Count
1	Undergraduate degree in planning or related discipline	11.11%	13
2	Graduate degree in planning or related discipline	5.13%	6
3	Previous work in planning or related discipline	11.97%.	14

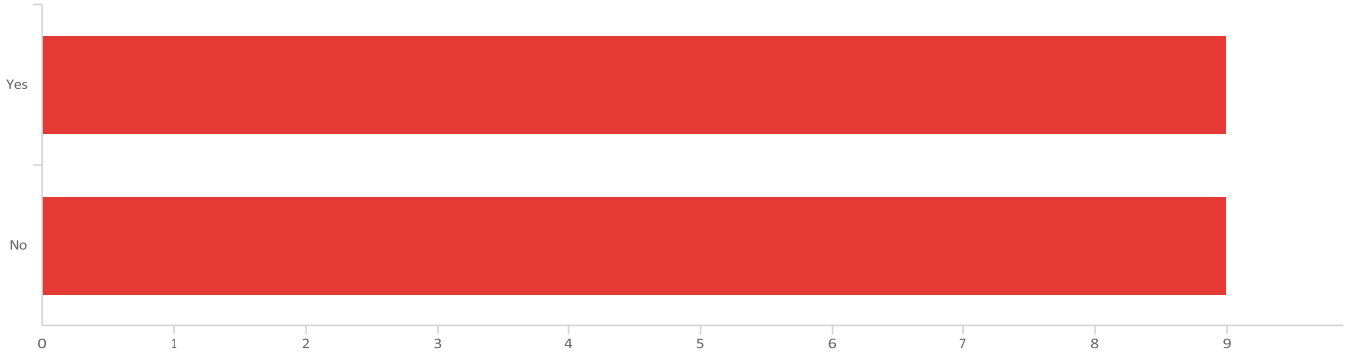
#	Field	Choice	Count
4	Engineering	4.27%	5
5	GIS	10.26%	12
6	Technical or Plan Writing	11.11%	13
7	Management	5.13%	6
8	Presenting and public speaking	12.82%	15
9	Design and visualization	2.56%	3
10	Data analysis skills	11.97%	14
11	Travel demand modeling	5.98%	7
12	Certifications (AICP, GISP, PE, etc.)	4.27%	5
13	Other	3.42%	4
			117

Showing rows 1 - 14 of 14

Other

Other
Project Management, communication skills
Performance Measures/Data Analytics
Project Management Skills
Work Ethic; communication

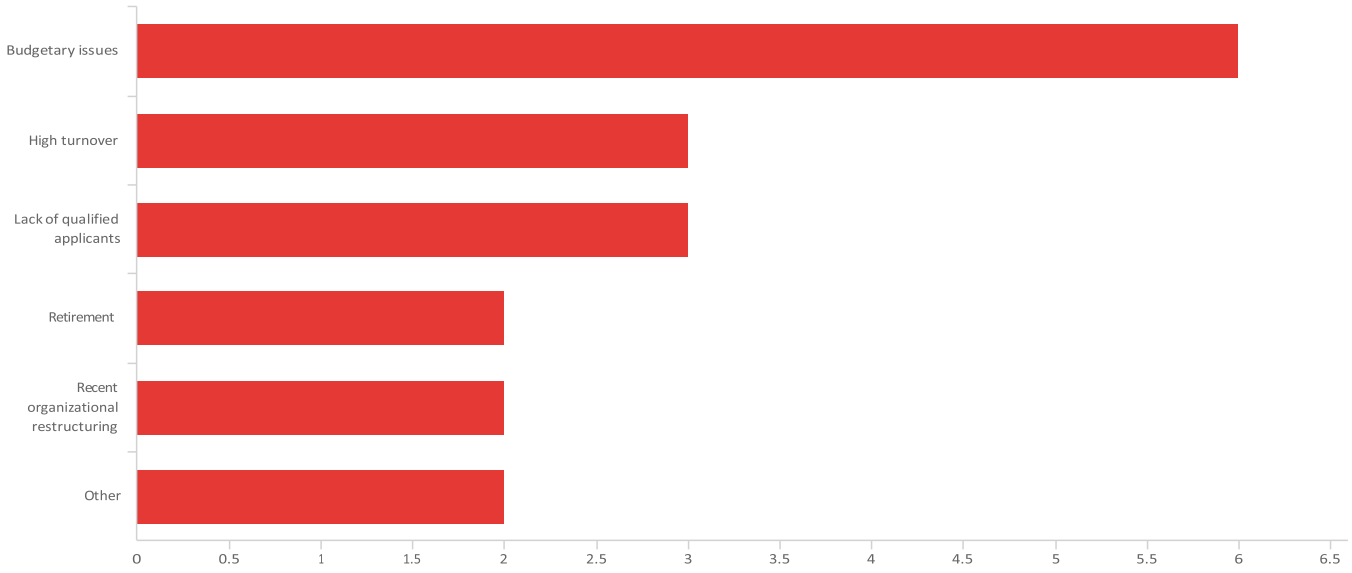
Q14 - Are there currently any functionality gaps due to vacant positions in the DOT?



#	Field		Choice Count
1	Yes	50.00%	9
2	No	50.00%	9
			18

Showing rows 1 - 3 of 3

Q15 - What are the primary causes for gaps in staffing? (select all that apply)



#	Field		Choice Count
1	Budgetary issues	33.33%	6
2	High turnover	16.67%	3
3	Lack of qualified applicants	16.67%	3
4	Retirement	11.11%	2
5	Recent organizational restructuring	11.11%	2
6	Other	11.11%	2
			18

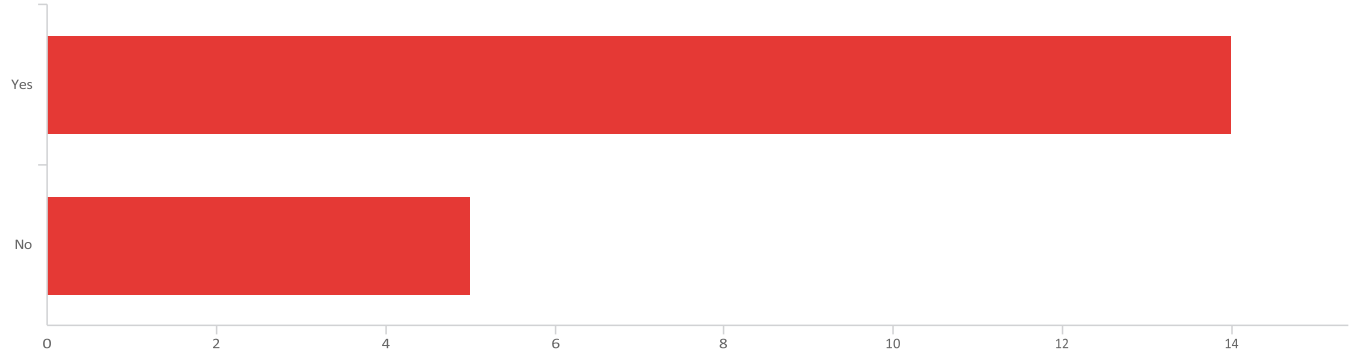
Showing rows 1 - 7 of 7

Other

I wouldn't say "high turnover," but a few people left and we haven't had the budget to fill all positions

in the process of reorganizing

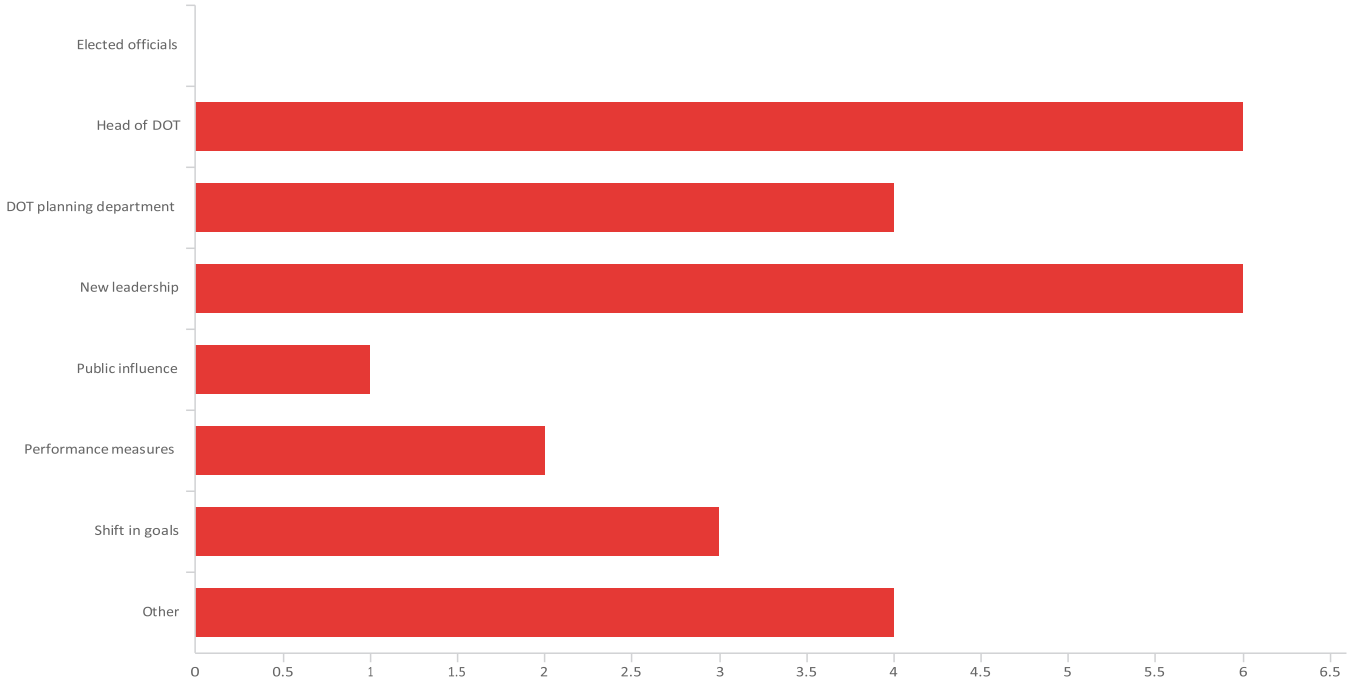
Q17 - Has the DOT or planning department undergone a structural reorganization that affected the planning department in the last 10 years?



#	Field		Choice Count
1	Yes	73.68%	14
2	No	26.32%	5
			19

Showing rows 1 - 3 of 3

Q20 - Who or what initiated the reorganization? (select all that apply)

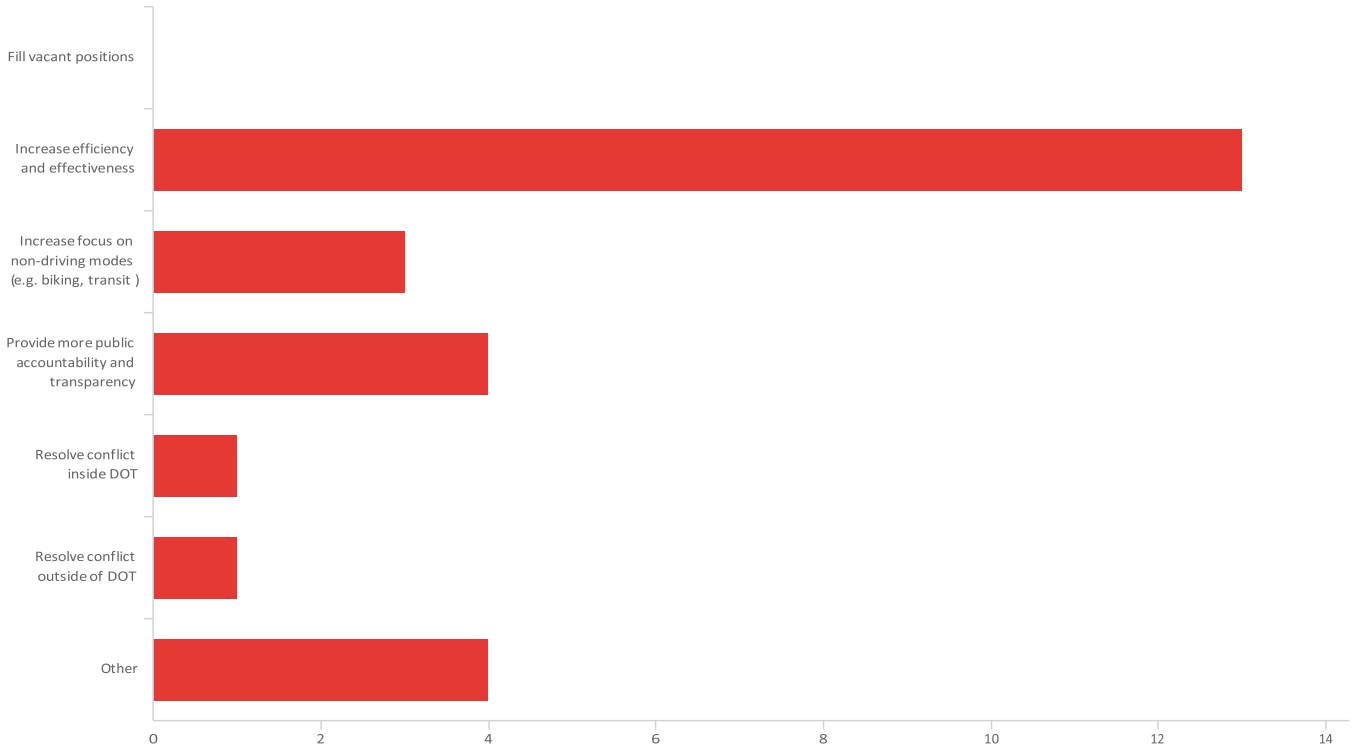


#	Field	Choice Count	
1	Elected officials	0.00%	0
2	Head of DOT	23.08%	6
3	DOT planning department	15.38%	4
4	New leadership	23.08%	6
5	Public influence	3.85%	1
6	Performance measures	7.69%	2
7	Shift in goals	11.54%	3
8	Other	15.38%	4
	Showing rows 1 - 9 of 9		26

Other

The results of a "healthy organization" review revealed that changes were needed.
Other
Asset Management Requirement
Division Split with new positions

Q19 - What were the goals of the reorganization? (select all that apply)



#	Field		Choice Count
1	Fill vacant positions	0.00%	0
2	Increase efficiency and effectiveness	50.00%	13
3	Increase focus on non-driving modes (e.g. biking, transit)	11.54%	3
4	Provide more public accountability and transparency	15.38%	4
5	Resolve conflict inside DOT	3.85%	1
6	Resolve conflict outside of DOT	3.85%	1
7	Other	15.38%	4
			26

Showing rows 1 - 8 of 8

Other

Align priorities and resources; increase productivity and morale
Other
Comply with Federal requirements
Alignment with Strategic DIrection
Increased focus on financial accountability

Q18 - Which parts of the DOT were reorganized?

Which parts of the DOT were reorganized?

Environmental clearance and NEPA were moved from Bureau of Planning to the Bureau of Development

The Multimodal Planning Division.

Within Planning, consolidating local grants, absorb performance management and asset management requirements. Within DOT elevate ownership of IT to executive level, and create a CFO

Primarily the planning branch

Divisions within the department were re-organized and re-aligned.

The Planning & Research Division was split into two separate Divisions. Planning was renamed to the Strategic Asset & Performance Management (SAPM) Division. Under SAPM a new branch was created, Planning & Performance Branch.

Moved some of the modal and programming/funding functions into a new section under the division - called Active Transportation Section. At the same time, Asset Management was moved from the division to another division of the agency.

As discussed, UDOT, because of changes in state code, now has two deputy directors; one over operations and engineering and one over planning and investment. The purpose was to refocus the organization on the planning function. The Planning, Environmental Services, and Programming divisions report directly to the new Deputy of P&I.

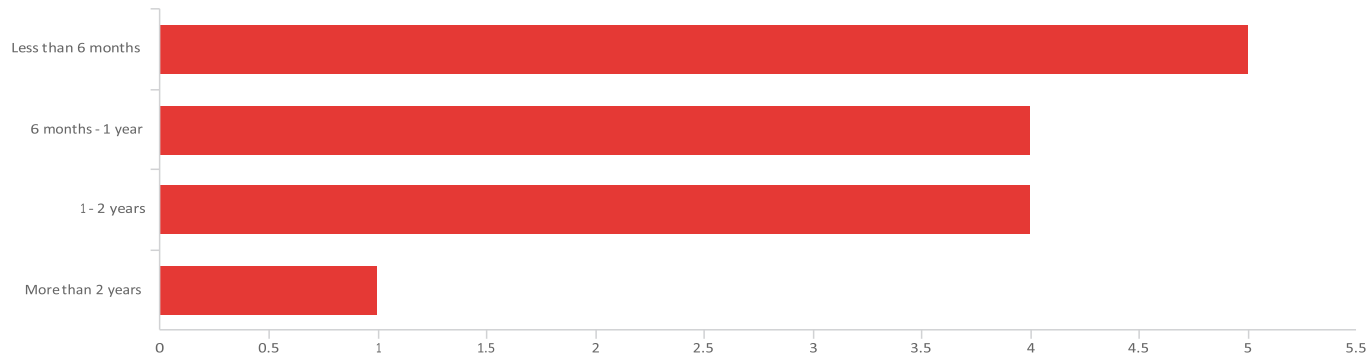
Planning and Program Management Split

Within the Planning Division. Earlier reorganizations were agency-wide and over 10 years ago.

Multimodal Planning & Program Management Division

All districts and divisions

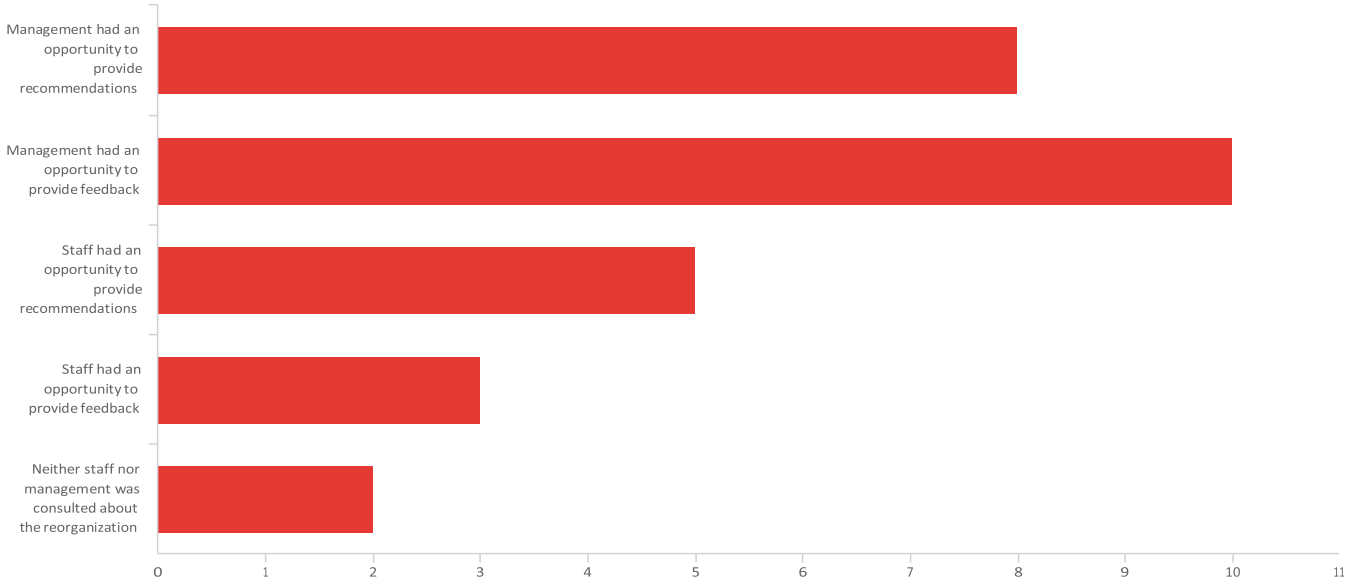
Q21 - How long did it take to transition to the new organizational structure?



#	Field		Choice Count
1	Less than 6 months	35.71%	5
2	6 months - 1 year	28.57%	4
3	1 - 2 years	28.57%	4
4	More than 2 years	7.14%	1
			14

Showing rows 1 - 5 of 5

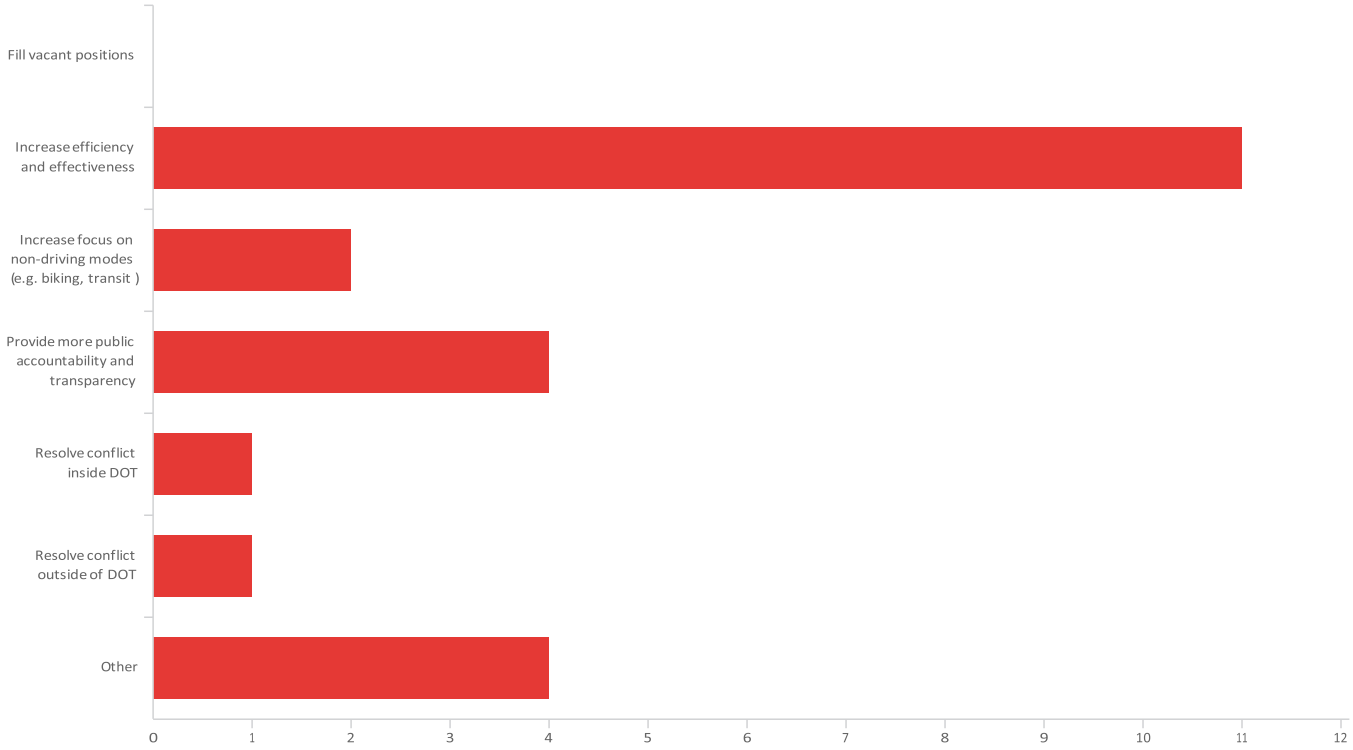
Q22 - In what ways was the staff and management involved with the reorganization? (select all that apply)



#	Field		Choice Count
1	Management had an opportunity to provide recommendations	28.57%	8
2	Management had an opportunity to provide feedback	35.71%	10
3	Staff had an opportunity to provide recommendations	17.86%	5
4	Staff had an opportunity to provide feedback	10.71%	3
5	Neither staff nor management was consulted about the reorganization	7.14%	2
			28

Showing rows 1 - 6 of 6

Q23 - Which needs were addressed by the reorganization? (select all that apply)



#	Field	Choice Count	
1	Fill vacant positions	0.00%	0
2	Increase efficiency and effectiveness	47.83%	11
3	Increase focus on non-driving modes (e.g. biking, transit)	8.70%	2
4	Provide more public accountability and transparency	17.39%	4
5	Resolve conflict inside DOT	4.35%	1
6	Resolve conflict outside of DOT	4.35%	1
7	Other	17.39%	4
			23

Showing rows 1 - 8 of 8

Other

Q24 - Which gaps still exist within the planning department despite the reorganization?

Which gaps still exist within the planning department despite the reorganiz...

Not enough funding for all priorities, so we haven't been able to resource all our needs. Looking at alternative ways - IE consulting out work or transferring to other areas within DOT.

Future of automated vehicles and alternative fuels.

highly qualified staff

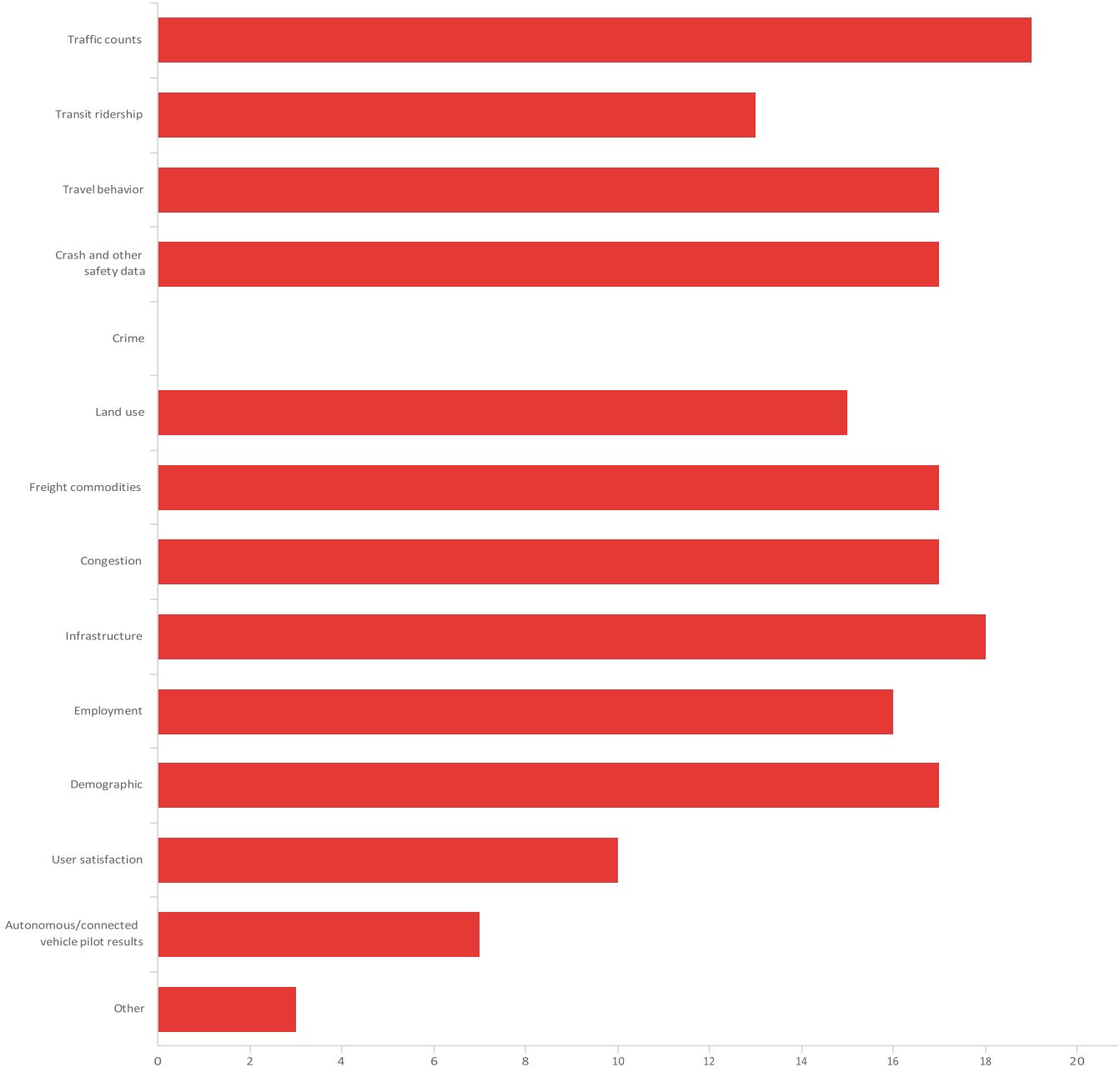
Manpower for proper analysis or risk, performance measures, business continuity.

We have made great strides in becoming fully an intermodal planning and programming division, but we are still trying to break down aspects of modal silos.

Vacancies

We are currently in the process of reorganizing again. This time it is due to realignment of responsibilities and retirements.

Q26 - Data and Performance What types of data are used in planning? (select all that apply)



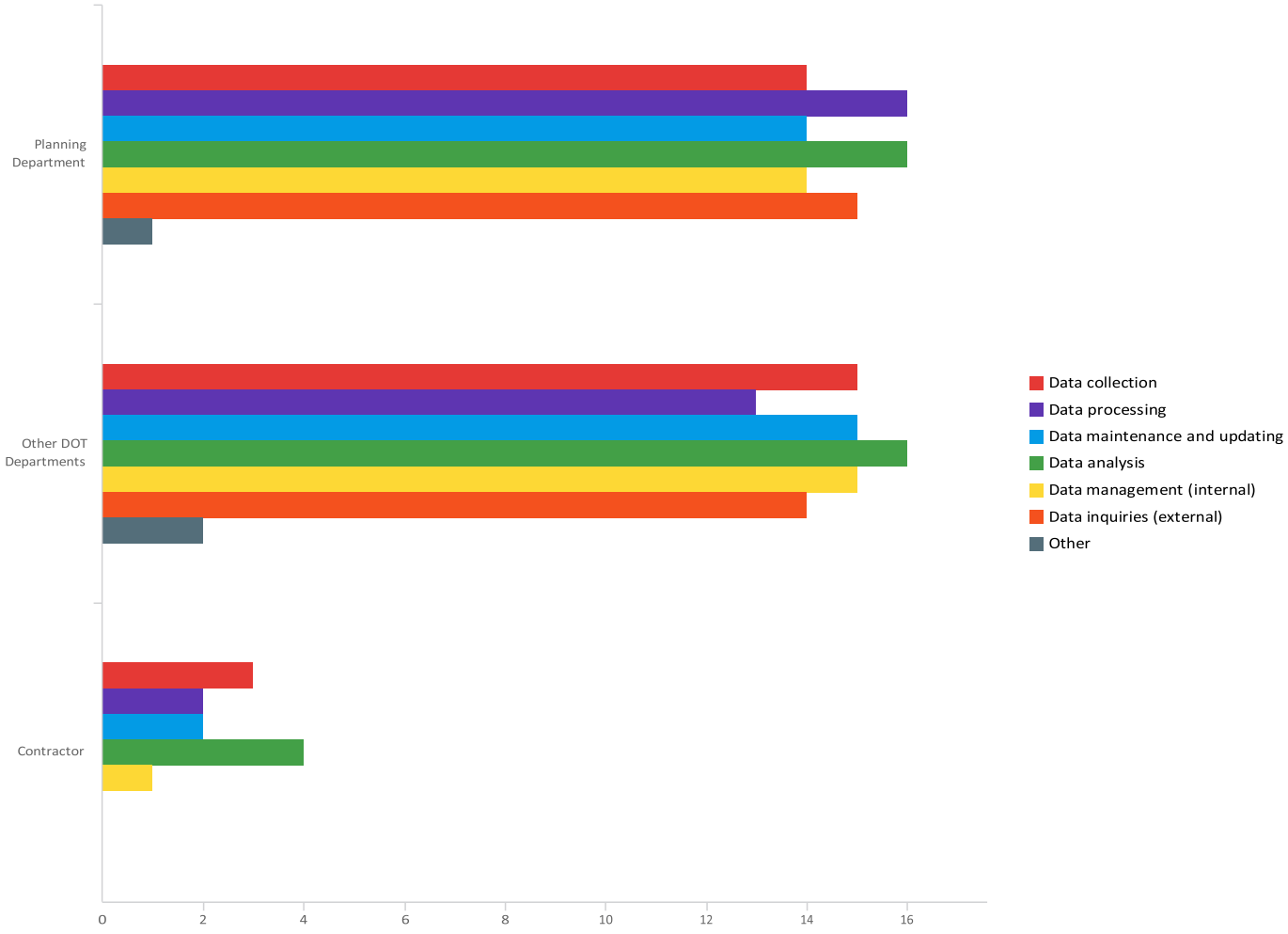
#	Field	Choice	Count
1	Traffic counts	10.22%	19
2	Transit ridership	6.99%	13
3	Travel behavior	9.14%	17

#	Field	Choice	Count
4	Crash and other safety data	9.14%	17
5	Crime	0.00%	0
6	Land use	8.06%	15
7	Freight commodities	9.14%	17
8	Congestion	9.14%	17
9	Infrastructure	9.68%	18
10	Employment	8.60%	16
11	Demographic	9.14%	17
12	User satisfaction	5.38%	10
13	Autonomous/connected vehicle pilot results	3.76%	7
14	Other	1.61%	3
	Showing rows 1 - 15 of 15		186

Other

Other
Census or other geographies, OD, Freight Commodity
operational improvements

Q25 - Who is in charge of data tasks? (select all that apply)



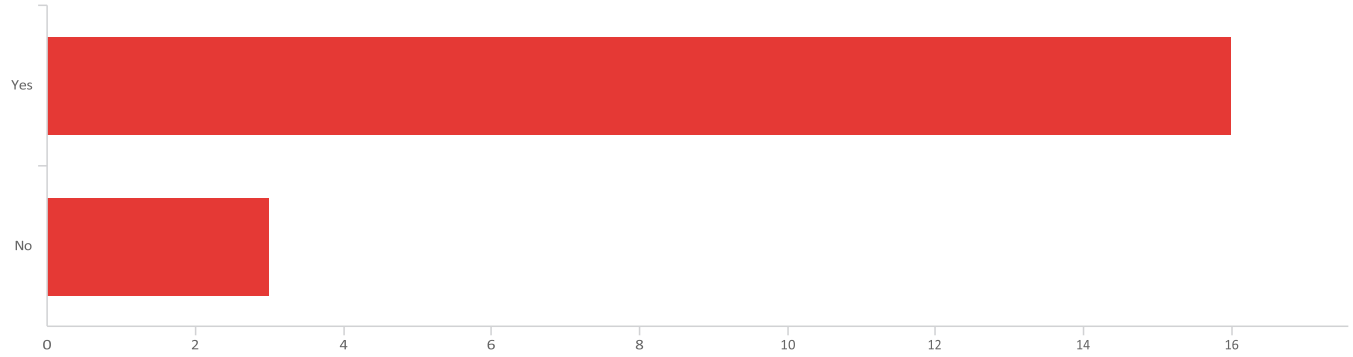
#	Field	Planning Department		Other DOT Departments		Contractor		Total
1	Data collection	43.75%	14	46.88%	15	9.38%	3	32
2	Data processing	51.61%	16	41.94%	13	6.45%	2	31
3	Data maintenance and updating	45.16%	14	48.39%	15	6.45%	2	31
4	Data analysis	44.44%	16	44.44%	16	11.11%	4	36
5	Data management (internal)	46.67%	14	50.00%	15	3.33%	1	30
6	Data inquiries (external)	51.72%	15	48.28%	14	0.00%	0	29
7.	Other	33.33%.	1	66.67%.	2	0.00%.	0	3

Showing rows 1 - 7 of 7

Other

data improvement

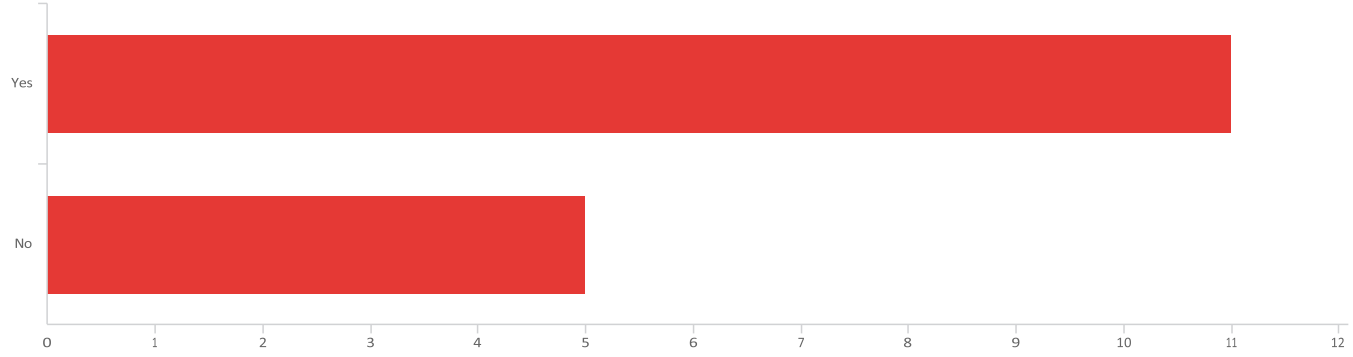
Q28 - Is there a person or team in charge of data in the planning department?



#	Field		Choice Count
1	Yes	84.21%	16
2	No	15.79%	3
			19

Showing rows 1 - 3 of 3

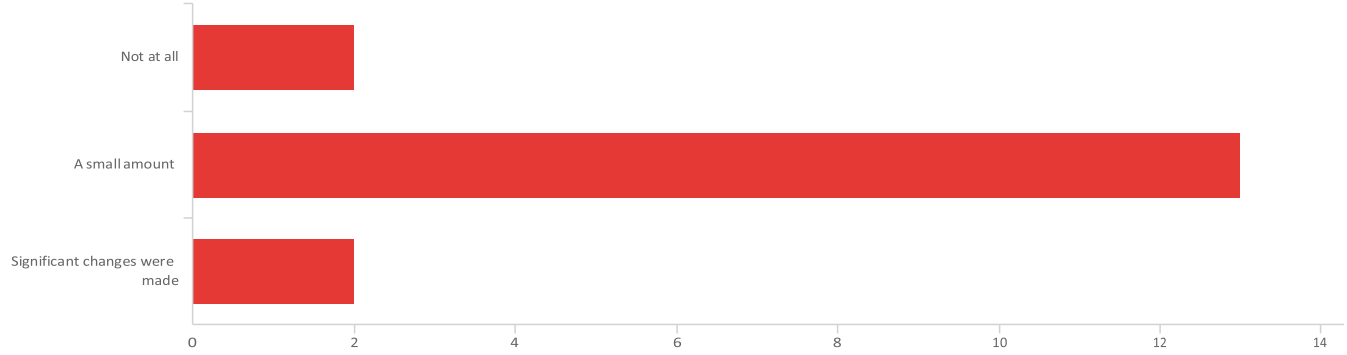
Q39 - Has the MAP-21 Federal Performance Management mandate affected the amount or type of data the planning department uses?



#	Field		Choice Count
1	Yes	68.75%	11
2	No	31.25%	5
			16

Showing rows 1 - 3 of 3

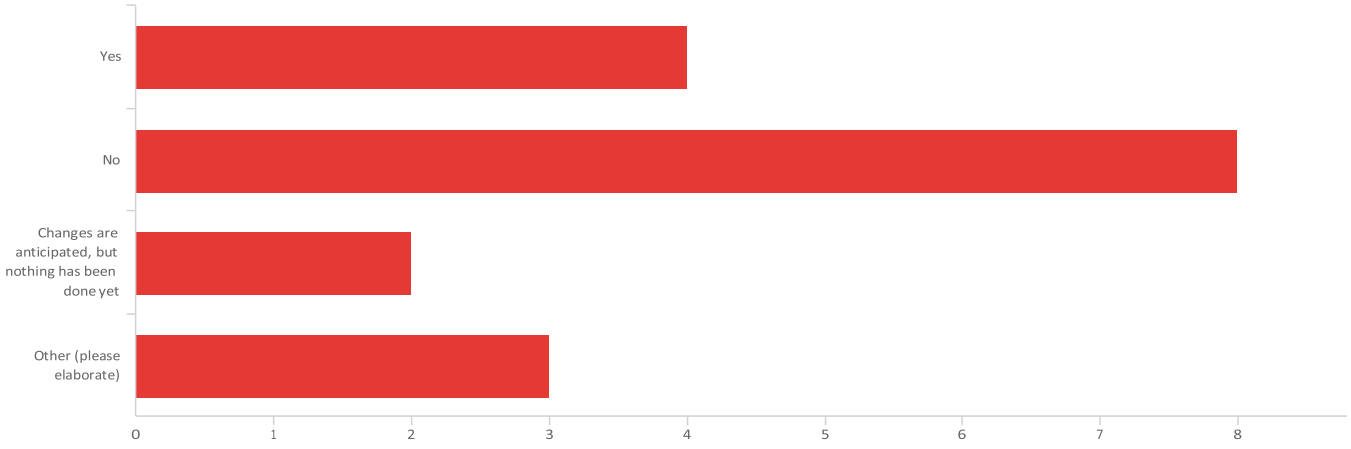
Q38 - How much has the MAP-21 Federal Performance Management mandate affected how the planning department uses data?



#	Field	Choice Count	
1	Not at all	11.76%	2
2	A small amount	76.47%	13
3	Significant changes were made	11.76%	2
			17

Showing rows 1 - 4 of 4

Q41 - Has the MAP-21 Federal Performance Management mandate resulted in the developing and filling of new positions within the planning department?

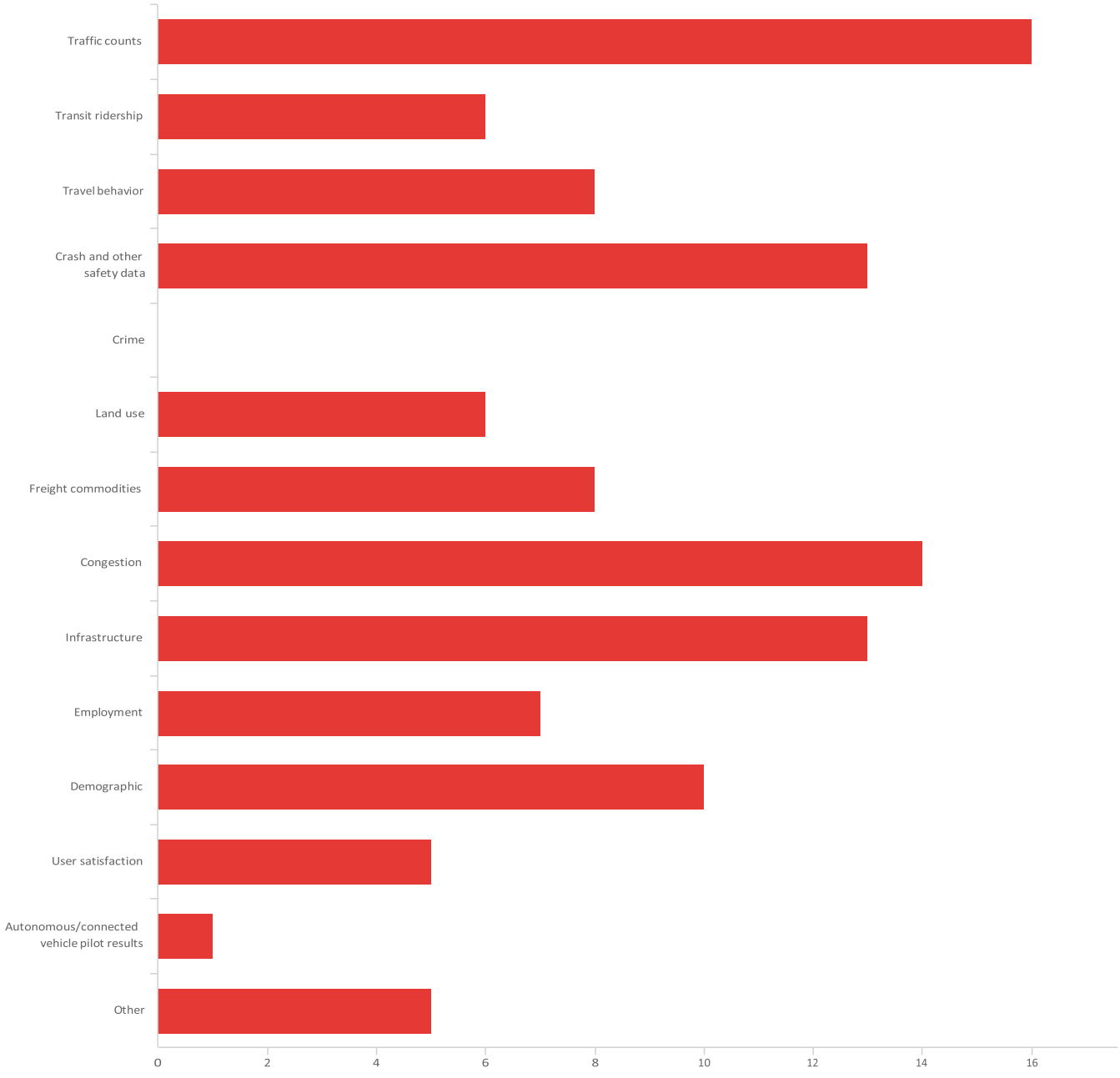


#	Field		Choice Count
1	Yes	23.53%	4
2	No	47.06%	8
3	Changes are anticipated, but nothing has been done yet	11.76%	2
4	Other (please elaborate)	17.65%	3
	Showing rows 1 - 5 of 5		17

Other (please elaborate)

Other (please elaborate)
Consideration of restructuring existing positions.
in the near future it will, haven't figured this out just yet.

Q36 - What types of data are accessible to the public? (select all that apply)



#	Field	Choice Count	
1	Traffic counts	14.29%	16
2	Transit ridership	5.36%	6
3	Travel behavior	7.14%	8
4	Crash and other safety data	11.61%	13
5.	Crime	0.00%	0

#	Field		Choice Count
6	Land use	5.36%	6
7	Freight commodities	7.14%	8
8	Congestion	12.50%	14
9	Infrastructure	11.61%	13
10	Employment	6.25%	7
11	Demographic	8.93%	10
12	User satisfaction	4.46%	5
13	Autonomous/connected vehicle pilot results	0.89%	1
14	Other	4.46%	5
Other		Showing rows 1 - 15 of 15	112

Other

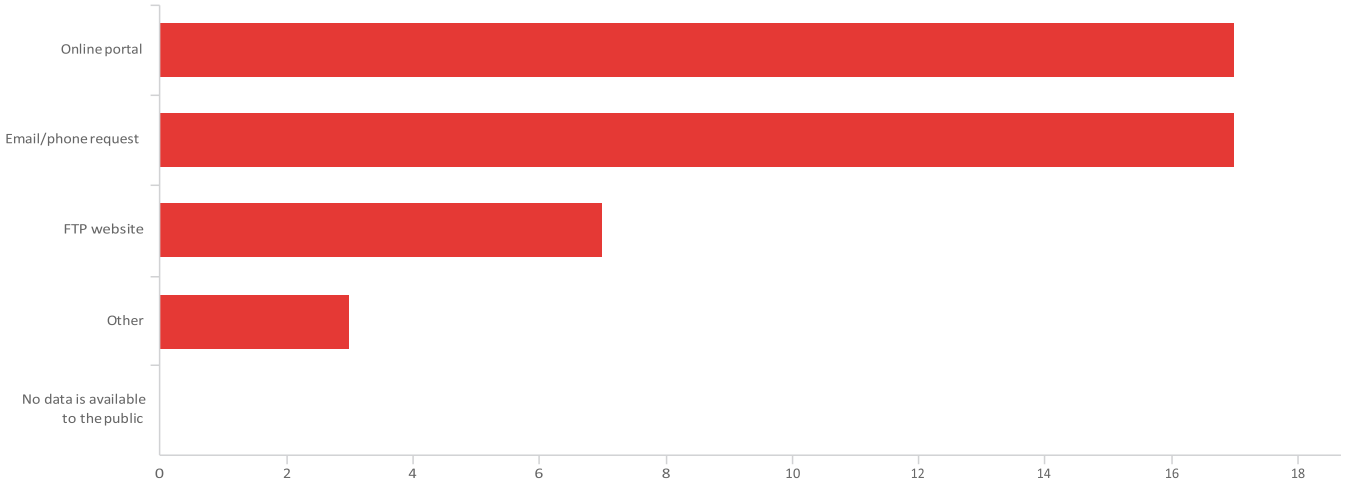
These are my best guesses, may be more. Also some data is available but from other agencies.

All datasets managed by DOT are accessible with limited restrictions

All data we collect and maintain is available upon request

http://www.oregon.gov/ODOT/Data/Pages/TransData-Portal.aspx

Q27 - How can the public access data?



#	Field	Choice Count	
1	Online portal	38.64%	17
2	Email/phone request	38.64%	17
3	FTP website	15.91%	7
4	Other	6.82%	3
5	No data is available to the public	0.00%	0
			44

Showing rows 1 - 6 of 6

Other

Other
A subset of data is available online to the public
GIS Online

Data Practices Request

Q32 - Additional Feedback Please provide any additional thoughts you may have regarding DOT organization, staffing, reorganization, data measures, or other areas.

Additional Feedback Please provide any additional thoughts you may have re...

Our Multimodal Planning Division has recently reorganized (partly) under core functions. In addition to our Transportation Data, GIS and Modeling Office (TDGMO), we also have Statewide Planning, Regional Planning, Local Systems Planning, and Planning Program Administration and Communications.

testing

The use of performance measures links long range planning to the work plan (STIP) and is a good fit in the planning department.

https://www.txdot.gov/inside-txdot/division/planning.html I am available to provide more information if interested.

While we currently have no gaps, employee recruitment and retention is a challenge. We have vacancies that are difficult to fill which limits succession planning.

Our state is working on a statewide portal - probably be a few years before it is up and running that would get to some of the issues and crime and demographics etc. Those things that are not the responsibility of the DOT. We do have on our website a think called AskODOT - which often is used by folks to get data that we just don't have on our site but that we share. We have info on freight commodities, our performance measures and their data. All which we share if asked

I would say that there are lots of overlap within the DOT between the planning offices at the transportation business units, and a lot of coordination that occurs.

Beyond resourcing, State DOTs will soon need to wrestle with potential conflict between performance measures that have been identified as critical at the federal level, and those that have been identified as critical by the state. Such measure may apply to similar aspects of system condition/performance, but may present a much different picture. This will create significant messaging challenges while also stretching resources.

Virginia is organized so that the different modes are planned for by different state agencies. All transportation is not under the DOT. The DOT only has roads and park-and-ride-lots, bike facilities and pedestrian facilities.

Nothing.

Appendix D – Phone Interview Script

Hello,
Recently the Functional supervisor for Planning Program Administration and Communications responded to a survey administered by researchers at the University of Illinois at Chicago. We are now asking that you answer additional questions over the phone. Some questions may seem above your pay grade. We encourage you to answer to the best of your ability but you are free to abstain.

First, is it OK for me to record this call so we can have a better record of your answers?

When you completed the survey online, you agreed to participate after reading our informed consent notice. Do you need a reminder of those terms? [Will have these available for the interviewer to read]

Any questions before we begin the interview portion?
(Refer to "Phone Interview Resources" for IDOT email and IRB consent form)

SECTION 1 – ORGANIZATIONAL CONDITIONS (CONTENT)
The first set of questions are designed to tell us a bit more about the departmental structure in which you work.

Q1. What is the name of the planning function of the DOT? *(N/A if respondent indicated there is no distinct planning department)*
Q2. What are the primary functions of the planning department at IDOT?
Q3. With which other departments does the planning department work closely?

SECTION 2 – ENVIRONMENTAL <u>CONTEXT</u>
The next set of questions how the department changes in response to both internal and external factors.

Q4. Has the DOT or planning department undergone a structural reorganization that affected the planning department in the last 10 years?
<u>If yes (these questions will address the **Process**):</u>
Who initiated the most recent reorganization in IDOT's planning department?

Can you describe the key changes made under the reorganization? *(prompt: changes in reporting structure, creation/elimination of positions, changes in titles/duties)*
What was the most time-intensive part of reorganization?
Were there organizational models from other sectors that informed the new structure? *(prompt: best practices from the business sector, consulting with non-transportation-related public agencies, experiences brought by leadership from other jobs/organizations)*

<u>If no</u>:
In what ways is the current organizational structure meeting the needs of the planning department/DOT?
What tools are used to assess the efficiency of the current organization?
Where are areas for improvement within the current structure?
(Skip to page 4)

Q5. What external factors have influenced changes in organizational structure and/or staffing, either currently or in the past? *(Prompt: change in administration/political upheaval, new policies or legislation, shifting agency priorities, public demand for a new or different service)*

Q6. Have the Transportation Performance Management Requirements from the Federal Highway Administration played a direct role in changes to the departmental structure? Have these changes beneficial? *(Prompt: MAP-21 Performance Management mandate)*

Q7. Have the Transportation Performance Management requirement from the Federal Highway Administration resulted in the developing and filling of new positions with the planning department? If so, what new positions have been created since the start of FY17? *(Prompt: FY17 began June 1, 2016, refer to organizational chart for data/analyst positions)*

SECTION 3 – MEASURING SUCCESS (<u>CRITERIA</u>)
The last set of questions addresses how the department/agency have evaluated the goals and outcomes of the reorganization.

Q8. Are there currently any functionality gaps due to vacant positions? *(Prompt: core tasks not being fulfilled, goals not being met)*

In what ways have the existing functionality gaps affected the organization?
What is the greatest barrier to filling these gaps and how is the department working to fix it? *(budget, ability to attract/retain talent, human resources function)*

Q9. Was/is there a mechanism for gauging staff reaction to the changes?
<u>If yes</u>:
What was the mechanism?
Can this information be shared with the research team?
<u>If no</u>:
Would it be or would it have been valuable to get staff feedback?

Q10. Was/is there a set of measurable goals or outcomes stated at any point in the reorganization process?
<u>If yes</u>:
Who was responsible for creating these goals?
How are individuals and/or the department kept accountable?
How do you know if the reorganization was successful?

<u>If no</u>: skip to Q11.

Q11. Based upon the experience you've told us about today, do you have any advice or recommendations for others interested in implementing a reorganization of their department or agency?

Q12. *(Ask only if respondent is at management level or above)* If you need to evaluate your organizational structure, what are the tools, resources, and/or additional information you may need? *(Prompt: budget)*

Q13. Are there ways this research might be of use to your department or agency? *(Prompt: even if they haven't had a reorganization as indicated by Q7, maybe they will be in the future)*

Thank you for your time! We'll let you know when the results of this research are available. If you have any further questions, please don't hesitate to contact P.S. Sriraj at sriraj@uic.eduor 312-413-7568.

(Page 4)

Q5. Are there currently any functionality gaps due to vacant positions? *(Prompt: core tasks not being fulfilled, goals not being met)*
In what ways have the existing functionality gaps affected the organization?
What is the greatest barrier to filling these gaps and how is the department working to fix it? *(budget, ability to attract/retain talent, human resources function)*

Q6. What changes in the organizational structure would you like to see based on those functionality gaps? *(Prompt: staffing needs)*

Q7. Are there ways this research might be of use to your department or agency? *(Prompt: even if they haven't had a reorganization as indicated by Q7, maybe they will be in the future)*

Thank you for your time! We'll let you know when the results of this research are available. If you have any further questions, please don't hesitate to contact P.S. Sriraj at sriraj@uic.eduor 312-413-7568.

Appendix D - State Profiles

State Profiles

Arkansas

Population (2016)
3,013,825

40% **Urban**
60% **Rural**

8	**MPOs**
10	**DOT Districts**
3,693	**DOT Employees**
##	**Planning Employees**
$$	**FY17 Budget**

53,179	**square miles of land**
101,656	**miles of public road**
304.9t	**ton-miles of freight flow**
5.9m	**transit riders**

Arkansas Department of Transportation (ArDOT)

The division that oversees long-range planning at ArDOT is called the Transportation Planning and Policy Division - Multimodal and Project Planning Section.

- Division functions: Capital Investment and Grants, Community Relations/Public Affairs, Data, Economic Development, Engineering, Freight and logistics, Operations, Policy Analysis, Programming, Research, Safety, Technology and Innovation
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations
- The ArDOT Transportation Planning is not organized by transportation mode.
- There are currently functionality gaps due to vacant positions in ArDOT.
    - Primary causes: Lack of qualified applicants

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Strategic Planning Division.

- Reorganization initiation by: Head of DOT
- Goals of Reorganization: Increase efficiency and effectiveness,
- Part of DOT reorganized: Primarily the planning branch
- Transition time needed: Less than 6 months

IDAHO

Population (2016)
1,754,208

51% **Urban**
49% **Rural**

5	**MPOs**
6	**DOT Districts**
##	**DOT Employees**
##	**Planning Employees**
$$	**FY17 Budget**

83,642	**square miles of land**
48,082	**miles of public road**
198.2t	**ton-miles of freight flow**
2.7m	**transit riders**

Idaho Department of Transportation

The division that oversees long-range planning at Idaho DOT is called the planning services.

- Division functions: Policy Analysis, Research
- Interaction and Communication:
  - *Regularly*: Interdepartmental committees, , Data sharing, Emails, Casual Conversations
  - *As needed*: Scheduled meetings, Task Force, Provide Funding
- The Idaho DOT Transportation Planning is not organized by transportation mode.
- There are currently functionality gaps due to vacant positions in Idaho DOT.
  - Primary causes: High turnover, Lack of qualified applicants, Recent organizational restructuring

Structural Reorganization

There has been a structural organization within the last 10 years that has affected the Strategic Planning Division.

- Reorganization initiation by: Other (Division Split with new positions)
- Goals of Reorganization: Increase efficiency and effectiveness
- Part of DOT reorganized: Planning and Program Management Split
- Transition time needed: Less than 6 months

Iowa

Population (2016)
3,156,145

42% **Urban**
58% **Rural**

9	**MPOs**
6	**DOT Districts**
##	**DOT Employees**
##	**Planning Employees**
$$	**FY17 Budget**

58,273	**square miles of land**
114,429	**miles of public road**
517.2t	**ton-miles of freight flow**
22.7m	**transit riders**

Iowa Department of Transportation

The division that oversees long-range planning at Iowa DOT is called the Planning, Programming & Modal Division, Office of Systems planning; Planning Team.

- Division functions: Capital Investment and Grants, Data, Economic Development, Freight and logistics, Policy Analysis, Programming, Safety
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations, Other (Initiate collaboration within the department)
- The Iowa DOT Transportation Planning is organized by transportation mode.
    - Different modal teams work together with scheduled meetings, data sharing, and committees
- There are currently no functionality gaps due to vacant positions in Iowa DOT.

Structural Reorganization

There has been no structural organization within the last 10 years that has affected the Planning Division.

Maryland

Population (2016)
5,773,798

84% **Urban**
16% **Rural**

7	**MPOs**
7	**DOT Districts**
11,000	**DOT Employees**
##	**Planning Employees**
$$	**FY17 Budget**

12,407	**square miles of land**
32,422	**miles of public road**
332t	**ton-miles of freight flow**
143.6m	**transit riders**

Maryland Department of Transportation (MDOT)

The division that oversees long-range planning at MDOT is called the Office of Planning and Capital Programming.

- Division functions: Capital Investment and Grants, Data, Economic Development, Policy Analysis, Programming, Research and Other (Performance Measurement)
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations, Other (Initiate collaboration within the department)
- The MDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in MDOT.

Structural Reorganization

There has been no structural organization within the last 10 years that has affected the Office of Planning and Capital Programming.

Mississippi

Population (2016)
2,986,530

28% **Urban**
72% **Rural**

4	**MPOs**
7	**DOT Districts**
##	**DOT Employees**
##	**Planning Employees**
##	**FY19 Budget**

48,430	**square miles of land**
75,116	**miles of public road**
320.6b	**ton-miles of freight flow**
2m	**transit riders**

Mississippi Department of Transportation (MDOT)

The division that oversees long-range planning at MDOT is called Planning Division.

- Division functions: Capital Investment and Grants, Community Relations/Public Affairs, Data, Economic Development, Engineering, Freight and Logistics, Policy Analysis, Technology and Innovation
- Interaction and Communication:
    - *Regularly:* Scheduled meetings, Data sharing, Task Force , Emails, Casual Conversations
    - *As Needed:* Interdepartmental committees, Provide Funding
- The MDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in MDOT.

Structural Reorganization

There has been no structural organization within the last 10 years that has affected Planning Division.

Oklahoma

Population (2016)
3,751,583

46% **Urban**
54% **Rural**

4	**MPOs**
8	**DOT Districts**
2400	**DOT Employees**
##	**Planning Employees**
##	**FY19 Budget**

69,960	**square miles of land**
112,940	**miles of public road**
425.5b	**ton-miles of freight flow**
7.8m	**transit riders**

Oklahoma Department of Transportation (ODOT)

The division that oversees long-range planning at ODOT is called Planning and Performance

- Division functions: Capital Investment and Grants, Data, Economic Development, Engineering, Freight and Logistics, Policy Analysis, Programming
- Interaction and Communication:
    - *Regularly:*, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations
    - *As Needed:* Interdepartmental committees
- The CDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in ODOT.

Structural Reorganization

There has been a structural organization within the last 10 years that has affected Transportation Planning.

- Reorganization initiation by: Head of DOT, New leadership
- Goals of reorganization: Increase efficiency and effectiveness
- Parts of DOT reorganized: The Planning & Research Division was split into two separate Divisions. Planning was renamed to the Strategic Asset & Performance Management (SAPM) Division. Under SAPM a new branch was created, Planning & Performance Branch.
- Transition time needed: 1 - 2 years

Oregon

Population (2016)
3,831,075

62% **Urban**
38% **Rural**

9	MPOs	98,466	square miles of land
14	DOT Districts	71,228	miles of public road
##	DOT Employees	369.5b	ton-miles of freight flow
##	Planning Employees	124.6m	transit riders
##	FY19 Budget		

Oregon Department of Transportation (ODOT)

The division that oversees long-range planning at ODOT is called Transportation Development Division

- Division functions: Data, Economic Development, Freight and logistics, Policy Analysis, Programming, Research
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Task Force, Provide Funding, Emails, Casual Conversations
- The ODOT Transportation Planning is organized by transportation mode.
    - Different modal teams work together with Scheduled meetings, Data sharing, Committee, Task force
- There are currently no functionality gaps due to vacant positions in ODOT.

Structural Reorganization

There has been a structural organization within the last 10 years that has affected Transportation Planning.

- Reorganization initiation by: Head of DOT,DOT planning department, Public influence
- Goals of reorganization: Increase efficiency and effectiveness, Increase focus on non-driving modes (e.g. biking, transit), Provide more public accountability
- Parts of DOT reorganized: Moved some of the modal and programming/funding functions into a new section under the division - called Active Transportation. Also, at the same time, Asset Management was moved from the division to another division of the agency.
- Transition time needed: Less than 6 months

Utah

Population (2016)
2,763,891

81% **Urban**
19% **Rural**

4	**MPOs**
4	**DOT Districts**
1,800	**DOT Employees**
##	**Planning Employees**
$$	**FY19 Budget**

84,899	**square miles of land**
46,254	**miles of public road**
216.1b	**ton-miles of freight flow**
46.8m	**transit riders**

Utah Department of Transportation (UDOT)

The division that oversees long-range planning at UDOT is called Planning and Investment

- Division functions: Capital Investment and Grants, Freight and logistics
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Emails, Casual Conversations
    - *As Needed:* Task Force, Provide Funding
- The UDOT Transportation Planning is not organized by transportation mode.
- There are currently no functionality gaps due to vacant positions in UDOT.

Structural Reorganization

There has been a structural organization within the last 10 years that has affected Transportation Planning.

- Reorganization initiation by: DOT planning department, New leadership
- Goals of reorganization: Increase efficiency and effectiveness, Increase focus on non-driving modes (e.g. biking, transit),Other (Alignment with Strategic Direction)
- Parts of DOT reorganized: Because of changes in state code, now has two deputy directors; one over operations and engineering and one over planning and investment. The purpose was to refocus the organization on the planning function. The Planning, Environmental Services, and Programming divisions report directly to the new Deputy of P&I.
- Transition time needed: 6 months - 1 year

Virginia

Population (2016)
8,001,055

70% **Urban**
30% **Rural**

15	**MPOs**
9	**DOT Districts**
7500	**DOT Employees**
##	**Planning Employees**
$$	**FY19 Budget**

42,775	**square miles of land**
74,748	**miles of public road**
533.8b	**ton-miles of freight flow**
73.6m	**transit riders**

Missouri Department of Transportation (VDOT)

The division that oversees long-range planning at VDOT is called The OIPI, Office of Intermodal Planning and Investment, is an office within the Secretary of Transportation's.

- Division functions: Capital Investment and Grants, Data, Engineering, Environmental sustainability, Freight and Logistics, Safety,
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Emails, Casual Conversations
    - *As Needed:* Task Force, Provide Funding
- The VDOT Transportation Planning is organized by transportation mode.
    - Different modal teams work together with Scheduled meetings, Data sharing, Committee, Task force and Research
- There are currently functionality gaps due to vacant positions in VDOT.
    - Primary causes: Due to reorganization process

Structural Reorganization

There has been a structural organization within the last 10 years that has affected Transportation Planning.

- Reorganization initiation by: New leadership
- Goals of reorganization: Increase efficiency and effectiveness, Provide more public accountability and transparency
- Parts of DOT reorganized: Planning Division
- Transition time needed: Less than 6 months

Wisconsin

Population (2016)
5,813,568

56% **Urban**
44% **Rural**

14 **MPOs**
5 **DOT Districts**
DOT Employees
Planning Employees
FY17 Budget

65,498 **square miles of land**
115,145 **miles of public road**
490b **ton-miles of freight flow**
70.6m **transit riders**

Wisconsin State Department of Transportation (WisDOT)

The division that oversees long-range planning at WisDOT is called the Bureau of Planning and Economic Development.

- Division functions: Capital Investment and Grants, Data, Economic Development, Freight and Logistics, Policy Analysis and Other (Traffic forcasting)
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Providing funding, Emails, Casual Conversations and other (Transportation Projects)
- The WisDOT Transportation Planning is not organized by transportation mode.
- There are currently functionality gaps due to vacant positions in WisDOT.
    - *Primary Causes:* Budgetary issues, High turnover and Retirement

Structural Reorganization

There has been no structural organization within the last 10 years that has affected the Bureau of Planning and Economic Development.

Wyoming

Population (2016)
563,773

25% **Urban**
75% **Rural**

2 **MPOs**
7 **DOT Districts**
2000 **DOT Employees**
Planning Employees
FY17 Budget

97,914 **square miles of land**
29,024 **miles of public road**
576.7 **ton-miles of freight flow**
0.5m **transit riders**

Wyoming State Department of Transportation (WYDOT)

The division that oversees long-range planning at WSDOT is called the Planning division.

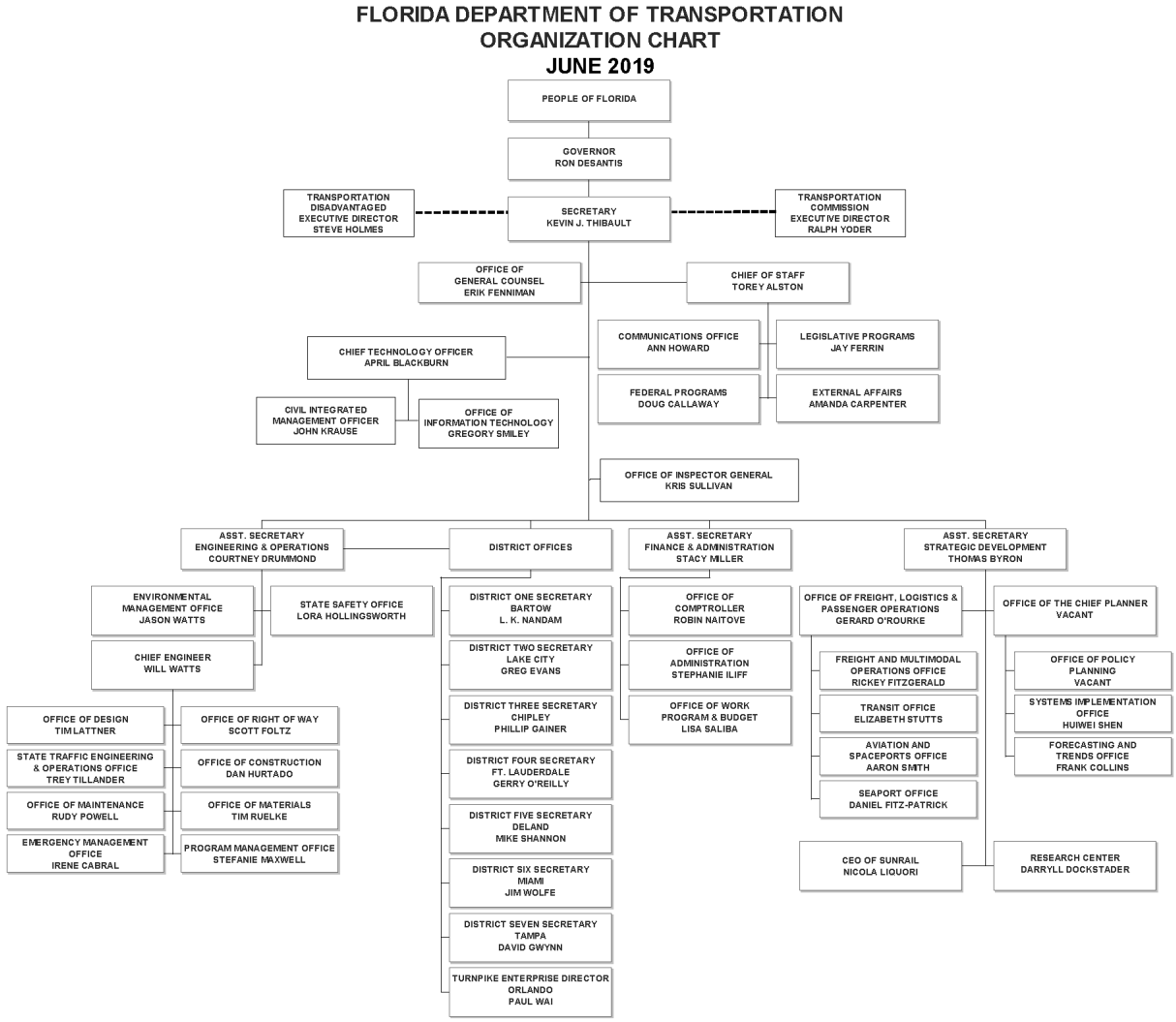
- Division functions: Capital Investment and Grants, Environmental sustainability, Freight and Logistics, Programming, Research
- Interaction and Communication:
    - *Regularly:* Interdepartmental committees, Scheduled meetings, Data sharing, Emails, Casual Conversations.
    - *As Needed:* Providing funding
- The WYDOT Transportation Planning is not organized by transportation mode.
- There are currently functionality gaps due to vacant positions in WYDOT.
    - *Primary Causes:* Budgetary issues

Structural Reorganization

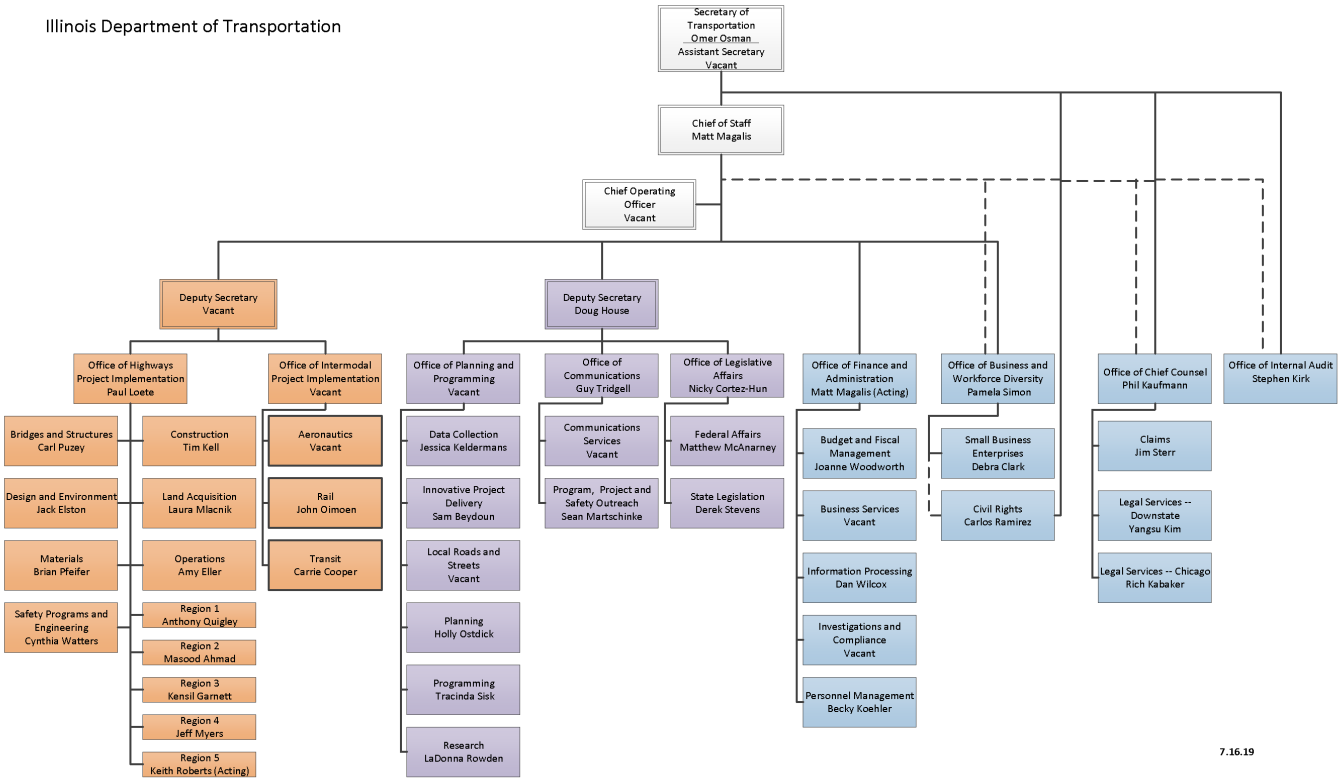
There has been a structural organization within the last 10 years that has affected the Multimodal Planning division.

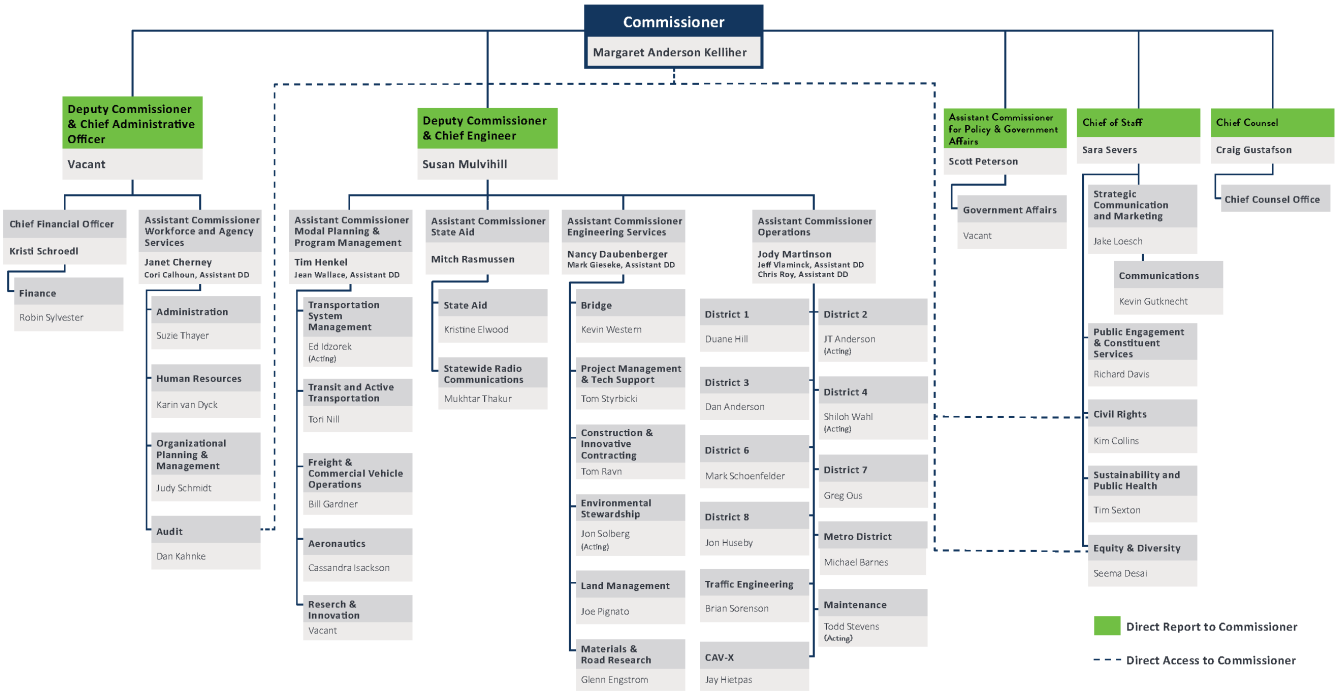
- Reorganization initiation by: Head of DOT,DOT planning department, Performance measures, Other (Asset Management Requirement)
- Goals of Reorganization: Increase efficiency and effectiveness, other (Comply with Federal requirements)
- Part of DOT reorganized: Within Planning, consolidating local grants, absorb performance management and asset management requirements. Within DOT elevate ownership of IT to executive level, and create a CFO
- Transition time needed: 6 months - 1 year

Appendix E – Organizational Charts

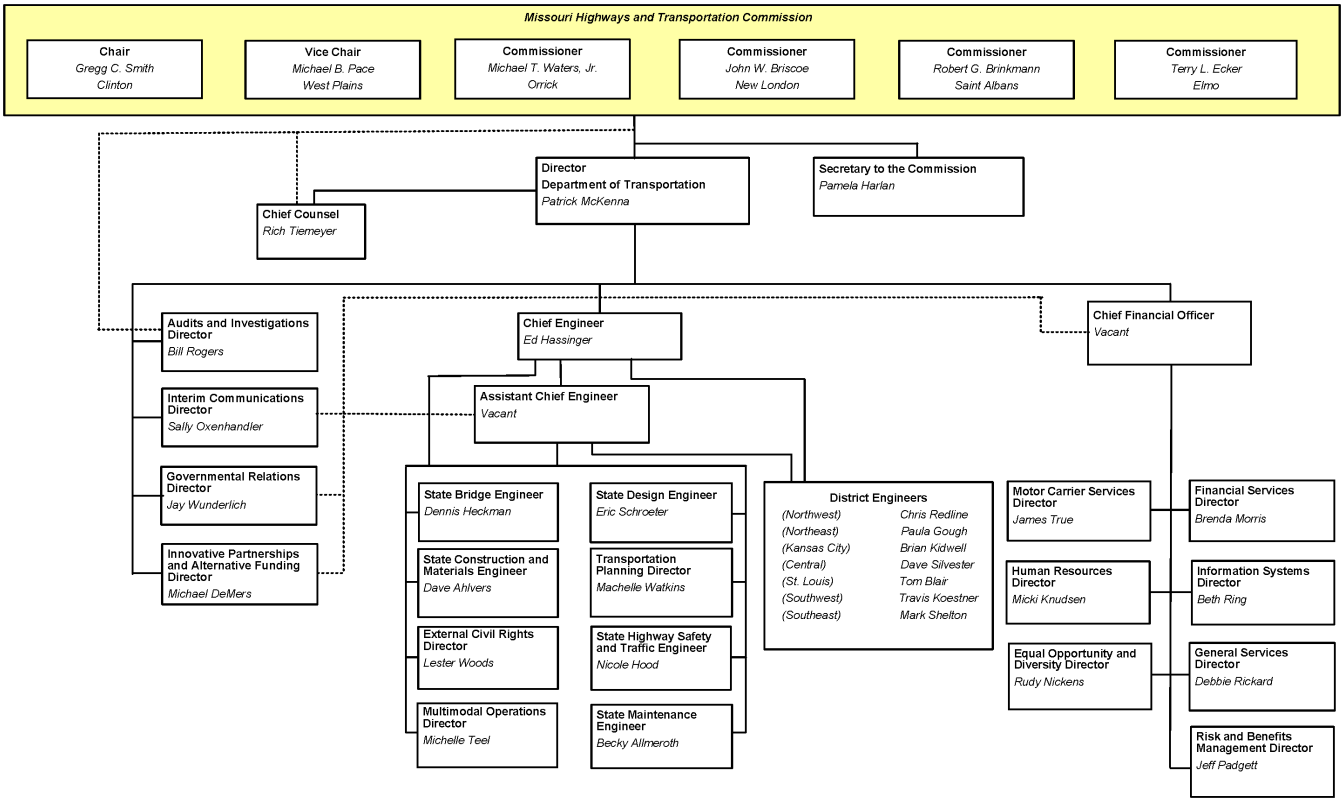


Illinois Department of Transportation





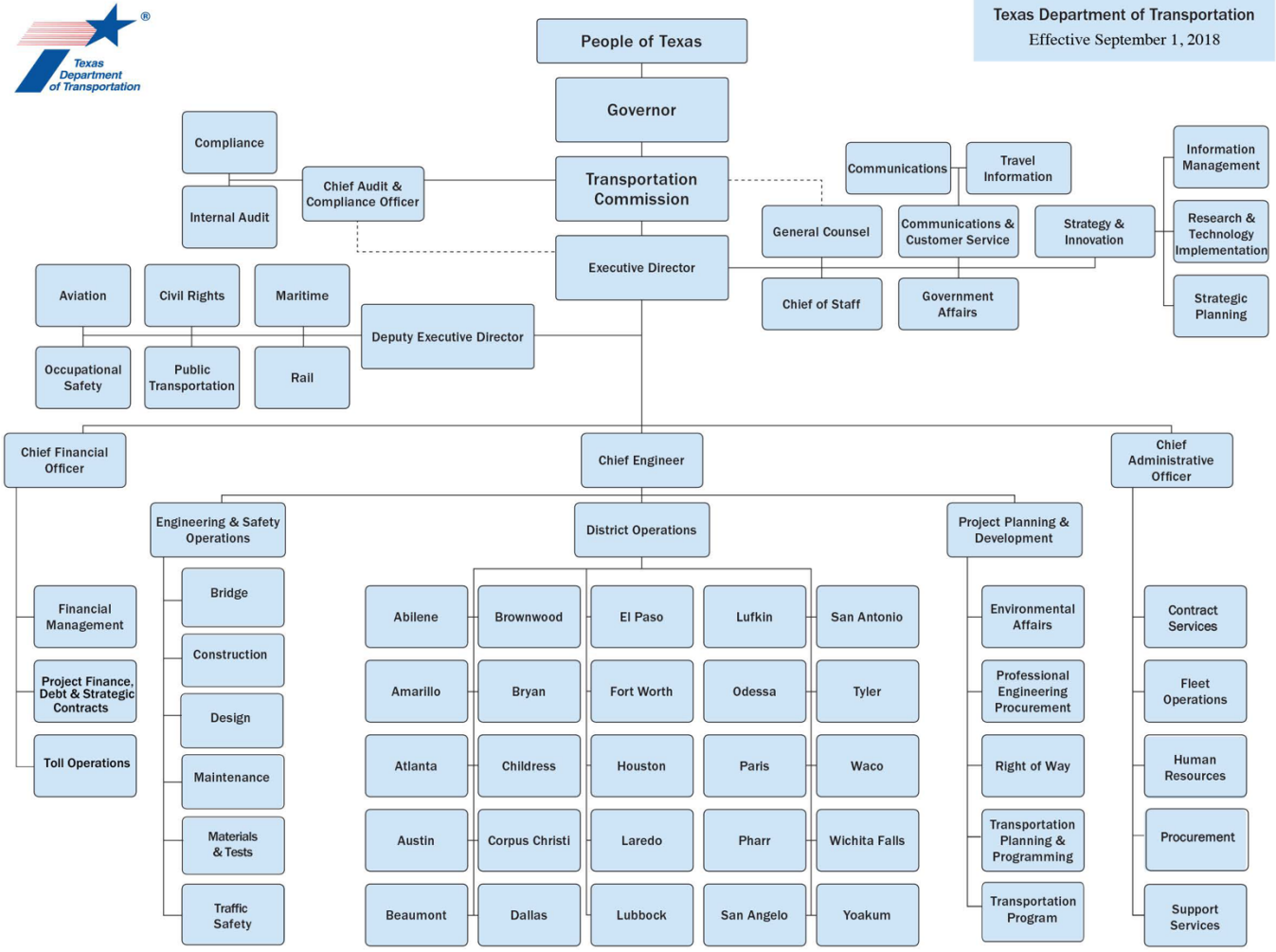
Missouri Department of Transportation



Human Resources Division
September 1, 2018

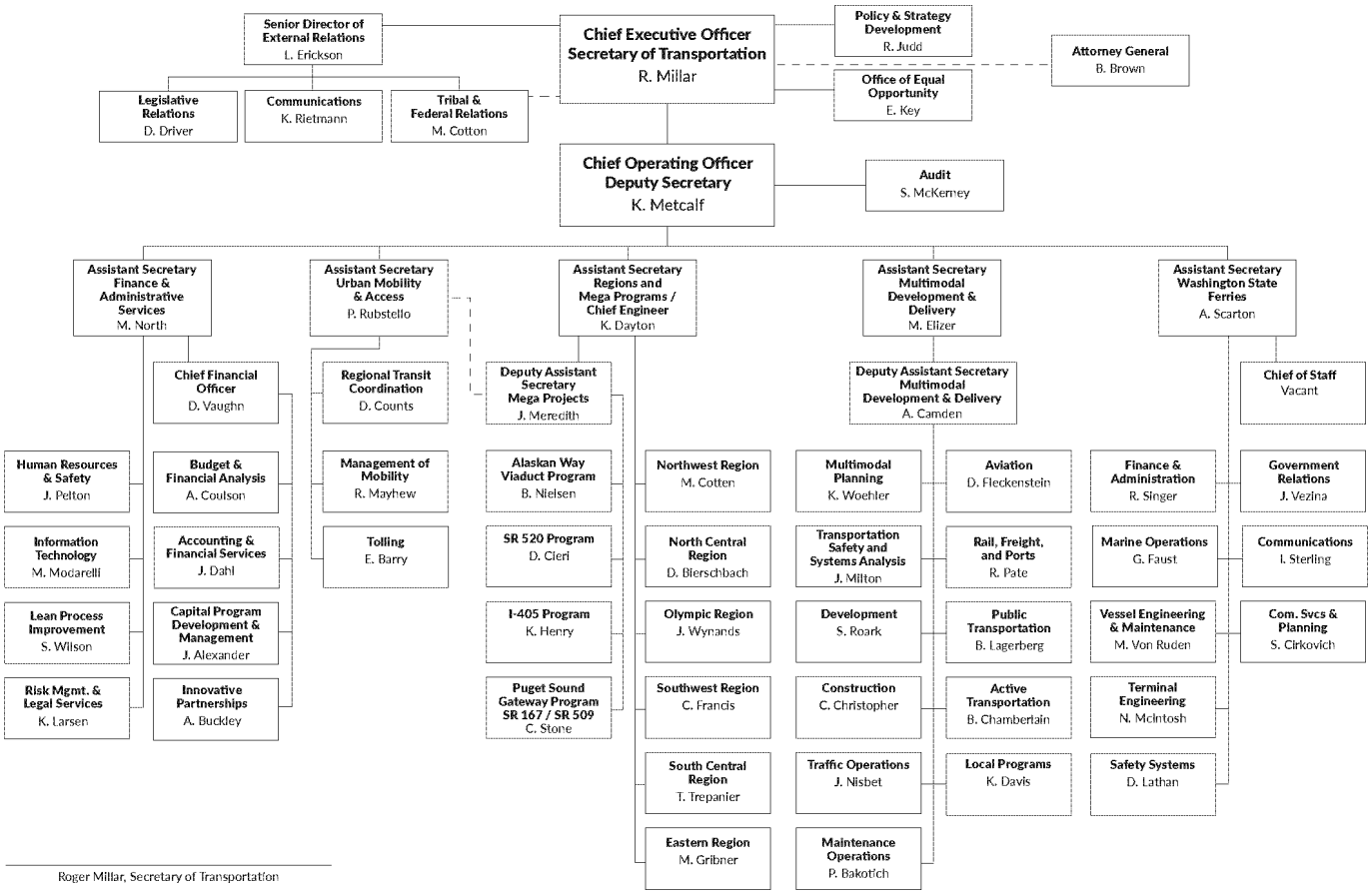
Texas Department of Transportation

Effective September 1, 2018



Washington State Department of Transportation

Citizens of the State of Washington
Governor Jay Inslee



Roger Millar, Secretary of Transportation

March 5, 2019

Date

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