



TABLE OF CONTENTS

About this Document	4
Acknowledgements	5
Executive Summary	6
Why Focus on Organizational Structure	9
>> Conditions for Success	1
>> Transportation Needs a Champion	
>> Bringing Structure, Process, and Champions Together	1
Where to Start: Structure vs. Process	
>> Diagnosing Your Challenge	
>> Structures and Processes that Support Public Transit	2
Understanding Structure	
>> Understanding Structure	2
Transportation-Focused	
Transportation-Inclusive	
Transportation-Diffuse	3
>> What Does a Transportation Agencies Do?	
>> First Steps in Internal Organization	4.
Understanding Process	
>> Understanding Process	4
>> How to Update a Process	4
 Document and Evaluate Process 	
Mapping Your Delivery Chain	5´
Implement Process Changes	52
Revisit the Process Regularly	54
First Steps in Managing & Sustaining Change	5
APPENDIX: Resources	
>> Appendix A - Further Reading	6
>> Appendix B - Organization Charts	

2 NACTO Structured For Success 3 ____

ABOUT THIS DOCUMENT

How do transportation agencies align their internal conditions to produce their desired outputs and ultimately achieve their stated goals and objectives? This report, Structured for Success, looks to answer this question by exploring how organizational conditions—agency structure, internal processes, and transportation's positioning within a city government—can support or hinder an agency's ability to consistently deliver high quality transportation projects.

Structured for Success is a starting place for transportation-minded decision-makers and advisors who want to understand how to improve project delivery in their cities. This report provides a framework to get started, by exploring where transportation typically sits in city governments and the strengths and limitations of different common configurations, and by mapping out the steps necessary to make meaningful process changes. Many agencies will also choose to do this essential, but challenging, work with the support of a consultant with specialized expertise in organizational structure and design. While this report does not specifically address transit agencies, many of its lessons may be applicable.

Structured for Success synthesizes approaches and thinking of more than three dozen active transportation professionals who manage and shape city streets across North America. With funding from Ford Greenfield Labs, it connects research on organizational design in public and private sector organizations with detailed interviews with 16 leading transportation practitioners, and survey responses from staff in 33 NACTO member cities. In addition, Structured for Success builds on previous work, including NACTO's Green Light For Great Streets initiative (2017-2018), a collaborative project with the transportation departments of San Jose and Pittsburgh to better understand and address structural challenges to project delivery.





ACKNOWLEDGEMENTS

NACTO Board

Janette Sadik-Khan

Principal, Bloomberg Associates NACTO Chair

Michael Carroll

Deputy Managing Director, Philadelphia Office of Transportation and Infrastructure Systems **NACTO President**

Veronica O. Davis

Director of Transportation & Drainage Operations, Houston **NACTO Vice President**

Gia Biagi

Commissioner, Chicago Department of Transportation **NACTO Treasurer**

Kim Lucas

Director, Department of Mobility and Infrastructure, Pittsburgh

NACTO Secretary

Brad Rawson

Director of Mobility, Mayor's Office of Strategic Planning & Community Development, Somerville NACTO Affiliate Member Representative

NACTO Project Team

> Staff

Kate Fillin-Yeh, Strategy Director Jenny O'Connell, Senior Program Manager Alex Engel, Senior Manager, Communications Corinne Kisner, Executive Director

> Consultants

Mike Flynn, Sam Schwartz Engineering Alex Hanson, Sam Schwartz Engineering Ana Bercovich, Graphic Design Consultant

> External Advisors

Alek Suni, Delivery Leader, Delivery Associates Andy Wiley-Schwartz, Bloomberg Associates **Jacob Tzegaegbe**, Sr. Transportation Policy Advisor to Mayor of Atlanta (former)

Paul Supanawich, Director of Programs, Global Designing Cities Initiative

Rvan Westrom. Ford Greenfield Labs (former) Sam Zimbabwe, Director, Seattle Department of Transportation (former)

Working Group

Ariel Espiritu Santo, Oakland DOT

Amanda Stout, District Department of Transportation

Blythe Bailey, City of Chattanooga

Barbara Gray, Toronto Transportation Services

Bianca Thorpe, City of San Antonio (former)

Brette Hjelle, Minneapolis Public Works Department

Chris Newman, Philadelphia Streets Department

Christopher Puchalsky, Philadelphia OTIS

Cate Irvin, City of Chattanooga (former)

Cheryn Robles, City of New Orleans

Dan Jatres, City of New Orleans

Eric Asboe, City of Chattanooga

Eulois Cleckley, Denver DOTI (former)

Ellen Jones, District Department of Transportation (former)

Gregory Reininger, City of San Antonio

Greg Rooney, Boston Transportation Department (former)

Jennifer Ruley, City of New Orleans

Jim Curtin, Seattle Department of Transportation

Jon Larsen, City of Salt Lake City

Julianne Sabula, City of Salt Lake City

Kelley Yemen, City of Philadelphia

Karen Warfel, City of Fort Lauderdale

Laura Bryan, City of New Orleans

Liz Lankenau, Philadelphia OTIS

Pat Kennedy, Denver DOTI (former)

Rhett Crowninshield, City of Tucson, AZ

Rich Montanez, Philadelphia Streets Department

Ryan Russo, Oakland DOT (former)

Randall Rutsch, City of Boulder

Tim Hayes, City of San Antonio

Tracy Krawczyk, Seattle DOT

Vadim Fleysh, Philadelphia Streets Department

Viktoriya Wise, SFMTA

Virginie Nadimi, King County Metro

Cover picture: City of Oakland // Credit: OakDOT (Pablo Miras) NACTO Structured For Success NACTO Structured For Success 5

EXECUTIVE SUMMARY

Historically, city leaders established transportation agencies to maintain existing street conditions, pave roads, and fill potholes. But as cities' needs have evolved, many transportation leaders report that their agency's structure—both how the organization is set up internally, and where transportation functions are situated within their city's overall hierarchy—hinders their ability to address critical needs. Intentional, thoughtful changes to city hierarchies, organizational structures, and internal processes are essential to ensure that cities can deliver projects effectively and efficiently. Improving project delivery is crucial for transportation agencies in order to develop the credibility, expertise, and momentum they need to truly address today's climate, economic, safety, equity, and health challenges.

While every city has unique challenges and strengths, examples from across North America indicate that agencies are most capable of effectively delivering transportation projects and policies when:

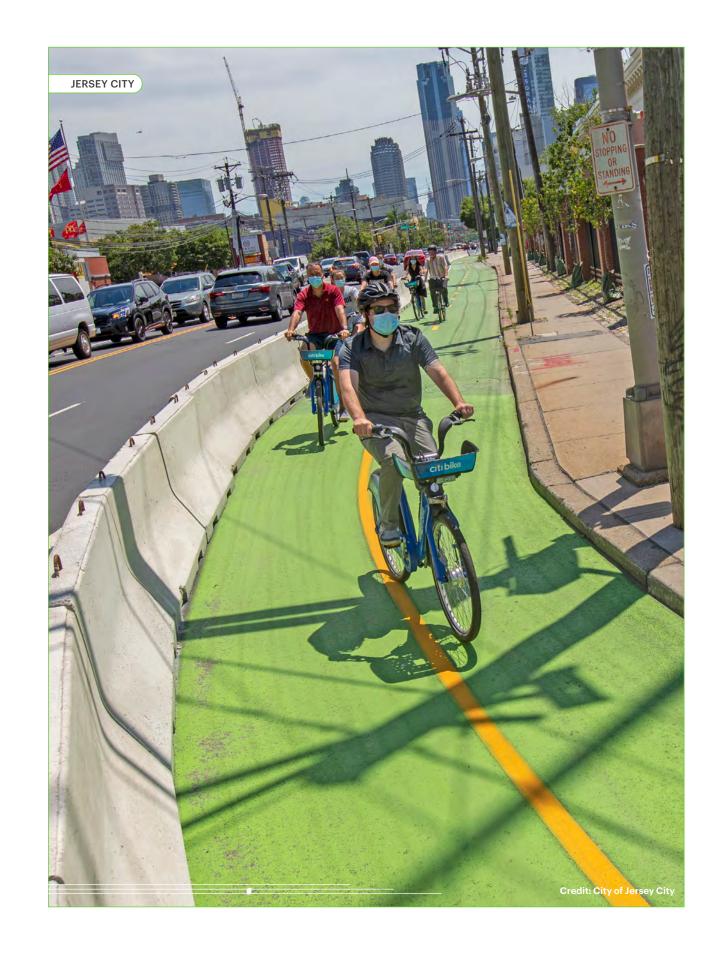
- Transportation is housed in a "Transportation-Focused" agency that is responsible for most or all transportation functions in a city;
- There is a transportation-focused leader, who champions transportation priorities and has a direct line to the mayor or decision-making authority; and
- The transportation agency has proactively established transparent internal processes for project delivery and can coordinate and communicate effectively, both internally and with the public.

This trifecta of structure, people, and process sets cities up to be successful in delivering on transportation projects and goals. Well-established processes and agreements for project hand-offs between agencies may mitigate the impact of a more diffuse transportation structure. A strong transportation "champion" may be able to resolve disputes between agencies when processes are lacking.

At the same time, evidence from cities across North America shows that there are a number of important conditions that can make transportation project delivery smoother. Cities can influence these conditions through structure, process, and championship. They are:

- Clear goals
- Reliable & recurring funding
- Strong coordination & hand-offs
- Commitment to evaluation
- Investment in staff
- Strategic communications & community engagement
- Access to specialized expertise
- Rapid response capacity

Cities aspiring to be more effective are in good company. In recent years, cities like Oakland, Denver, and Atlanta have established new Transportation-Focused agencies and other cities like Toronto, Jersey City, Seattle, and Honolulu have implemented internal process and structure adjustments to better deliver on their goals. The experiences of these cities, as well as countless others who are currently updating their structures and processes, provide a guide for any leader looking to make change.





WHY **FOCUS ON ORGANIZATIONAL** STRUCTURE



WHY FOCUS ON ORGANIZATIONAL STRUCTURE

Today's transportation leaders recognize the key role that transportation can play in solving, or exacerbating, today's climate, economic, safety, equity, and health challenges. Whereas historically, transportation agencies were charged with a narrow portfolio to maintain existing street conditions, pave roads, and fill potholes, today's transportation leaders understand that they are in the business of accessibility. They must work to reshape their city's transportation systems to reflect values-based conversations about how people move around in cities and how different modes and needs should be prioritized.

More than 1/4 of NACTO member cities feel that their organization's structure is unhelpful for achieving their city's desired mobility outcomes

As cities' needs have evolved, many transportation leaders report that their agency's structure—both how the organization is set up internally, and where transportation functions are situated within their city's overall hierarchy hinders their ability to address critical

needs. In a 2019 survey of 33 NACTO member cities conducted for Structured for Success, more than a quarter of respondents felt their organization's structure was unhelpful for achieving their city's desired mobility outcomes. In recent years, a number of cities have explored new structures and new ways of grouping transportation functions within their city's hierarchy, in order to focus on transportation and deliver on essential transportation projects for the public.

When transportation functions are not well situated within city government, or when agencies are not structured to effectively deliver important projects, the repercussions are costly: key projects and priorities languish, or the projects themselves change dramatically when they move from planning to design to implementation; agencies miss important opportunities, such as when the pedestrian safety division completes a long-desired pedestrian safety project only to have the public works department tear up the street for a necessary sewer upgrade. These inefficiencies not only cost agencies time and money that they do not have to waste, but they also erode the public's confidence in their government.

Conversely, when city agencies align internal conditions and desired outcomes, they are more likely to deliver projects on time and on budget, they can scale outputs to meet the need, and solve issues early and quickly. For example, a city that has aligned its internal conditions and desired outcomes might have a strategic paving schedule that is matched to its high-injury crash network so that dangerous corridors or streets with heavy bus use can be prioritized and redesigned quickly and efficiently.

The Power of Reorganizing in Oakland

"A better Oakland starts with better streets today, in every part of our city. We need a worldclass transportation department to take a fresh look at our streets, and provide Oakland residents with safer, healthier and more accessible ways to get around, to and from work and school."
- Mayor Libby Schaaf

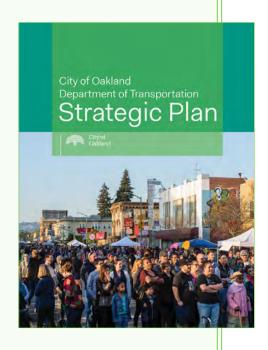
In 2016, Oakland Mayor Libby Schaaf announced the formation of a new Department of Transportation (OakDOT) to help meet key city goals.

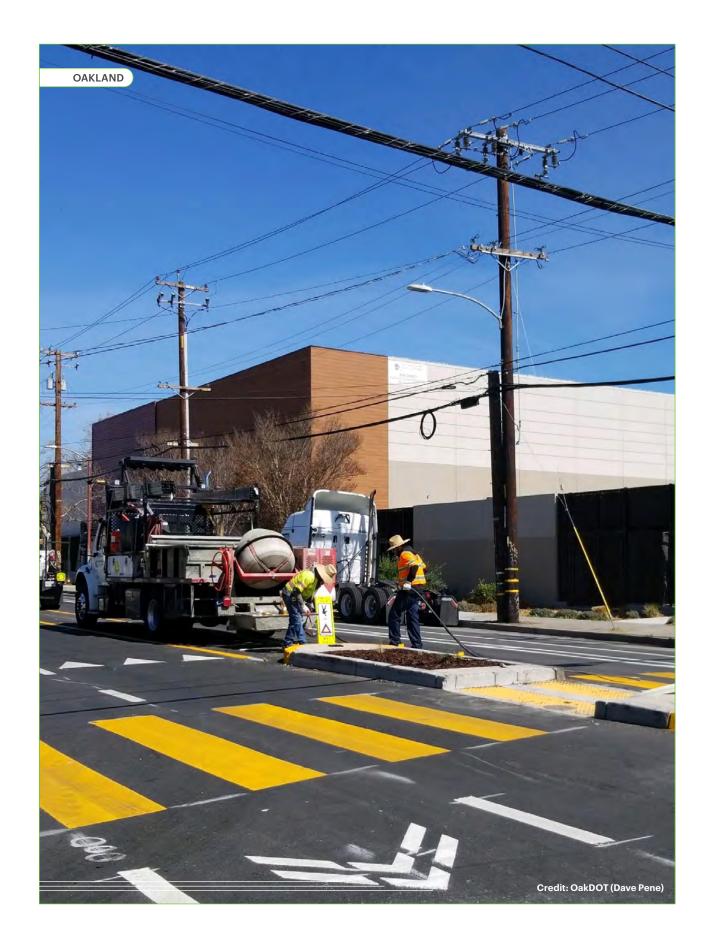
Clarity on goals and values was a core strategy for the success of the new department. To prioritize their work, OakDOT leadership developed a Strategic Plan that mirrored the four main citywide goals: equitable jobs and housing, holistic community safety, vibrant sustainable infrastructure, and responsive trustworthy government. OakDOT staff worked closely with the agency's executive team to develop and operationalize the strategic plan, translating it into clear, multi-year work plans for each division.

Having much clearer goals and stated outcomes for the new department helped the city make the case for a \$450 million infrastructure bond measure that passed by referendum that same year. That money was then allocated through new equitable engagement and data-driven processes.

For example, OakDOT successfully utilized the Strategic Plan's pillars to guide its resource allocation in the new 3-year paving plan. Unlike previous resurfacing plans, which focused on arterials and largely allocated funds to local street resurfacing based on volume of complaints and road conditions, the 2019 paving plan flipped the formula, allocating 80% to local streets and 20% to arterials. Most importantly, the selection of local streets for paving equally weighted equity (via demographic data) and road condition.

Agency leadership were also intentional about creating an internal structure with interdisciplinary teams within each division to foster cross-functional collaboration and mix diverse perspectives together. In addition to bringing core transportation functions together from Public Works and the Police Department, OakDOT also includes dedicated administrative staff for communications, community engagement, human resources, fiscal services, and funding, as well as a Racial Equity Team dedicated to ending systemic causes of racial disparity through improving and developing policies, programs, and practices in the agency.





10 NACTO Structured For Success

Why Focus on Organizational Structure 11 _

CONDITIONS FOR SUCCESS

City practitioners routinely identify specific conditions for success; when these conditions are present, agencies tend to be able to deliver projects better and more efficiently. Often, leaders can influence or create these conditions through a combination of structure and process choices.

Clear Goals for What, How, & Who

1

Clear priorities and shared goals are the glue that hold together successful organizations. The most effective agencies translate citywide goals into agency priorities and establish specific, time-bound processes and work plans with measurable outcomes that map out how individual contributions support broader organizational goals and prioritize staff time and effort.

Reliable & Recurring Funding

2

When funding is certain, predictable, and insulated from politics, agencies are better positioned to make funding decisions aligned with transportation priorities. Recurring funding allows professionals to focus on project design, implementation, and coordination. Transportation champions often play a key role in ensuring this funding.

3

Strong Coordination & Hand-offs

Well-designed project hand-off processes across teams, divisions, or agencies are essential to success. Project goals and priorities must be aligned regardless of who is overseeing a project to ensure that leadership's vision is carried out and to avoid costly or unnecessary duplication and delays.



Commitment to Evaluation

4

The most effective agencies ensure that their goals are connected to time-bound, specific metrics and establish processes to routinely track and report on their effort, progress, and impacts, course-correcting as necessary, to stay true to their vision and goals and to ensure equitable outcomes for constituents. Performance data is key to making improvements and provides quantitative proof of success.

Invested in Staff

5

Staff who bring a diversity of perspectives and experiences at all levels and managers who champion and defend their work are the backbone of effective agencies. Effective agencies focus resources on equitable hiring, retention, professional development and leadership opportunities, and work to build inclusive workplaces supported by clear, transparent, and accessible processes.

Strategic Communications and Community Engagement



Thoughtful engagement and communication about plans, projects, programs, and policies—both with the public and internally with agency staff—is essential for building trust and achieving desired transportation outcomes. Agencies that are purely reactive or ones that rely on "design, announce, defend" models of public engagement are rarely effective.

Access to Specialized Expertise (internal & consultant)



Effective transportation agencies have dedicated in-house support staff (e.g., communications, procurement, HR) who are invested in the agency's work plan and priorities, knowledgeable about federal transportation grant-making and processes, and versed in transportation messaging, ensuring planning and engineering staff can focus on project development and implementation. When projects arise that require specialized transportation expertise, these agencies can act fast because they have established processes for getting outside help.

Rapid Response Capacity



Agencies can build public trust and internal expertise by developing capacity to implement and iterate on quick-build projects. Situations can change quickly and when they do, it is essential that governments know how to respond quickly and effectively, using a wide variety of tools and materials from temporary (paint and posts) to permanent (concrete and street reconstruction).

12 NACTO Structured For Success
Why Focus on Organizational Structure 13



TRANSPORTATION NEEDS A CHAMPION

For an agency to deliver on its priorities, it needs someone to champion them at the highest levels of decision-making. In fact, many believe that having a transportation "champion" is the single most important factor in whether cities can successfully build transportation projects. City agencies exist in a complex political environment with many competing priorities; having a transportation champion with a direct line to the mayor is a valuable asset for advancing priorities. Without a champion for transportation projects who can advocate upwards while mediating transportation-related disputes across agencies or divisions, projects can get stuck, be tabled, or never get prioritized to start with.

A transportation "champion" is key factor in whether cities can successfully build transportation projects

When all or nearly all transportation functions are organized into a single Transportation-Focused agency, the director or commissioner is often well placed to be the champion. This is the

case in Denver or Toronto. In a city like Detroit, however, where transportation functions are housed within multiple departments, the city's Chief Operating Officer, who sits above the transportation agency in the city's hierarchy, serves as the transportation champion, overseeing a large group of agencies and coordinating regular meetings between agency heads. Similarly, in Boston, the Chief of Streets in the mayor's cabinet fills the champion role and oversees a narrow set of streets-focused agencies. In Austin, where the mayor sits as the head of the City Council, the mayor also serves as transportation champion, elevating transportation issues to their legislative colleagues.

Regardless of exactly where they sit, these transportation champions must be well positioned to connect projects to citywide policies, compete for and prioritize transportation funding, and ensure that efforts taken on by one agency do not undermine transportation efforts in another. By that same token, these champions need political support and backing from above. They must be able to stick to plans that might be controversial without fear of being fired or undermined. Lack of political support can take out even the strongest leader, rendering transportation strategy rudderless and unable to articulate or execute a vision of any kind.

Consolidating Transportation in Tampa

In 2019, as part of her transition into office, Tampa Mayor Jane Castor convened a Transportation Advisory Team that recommended consolidating all transportation functions in the city under one City Administrator. Crucial to this recommendation was the idea that a single, empowered transportation team with a straight line of communication to the mayor would help attract and retain both professional talent and sufficient resources to deliver on the mayor's Vision Zero agenda. The Administrator of Mobility and Infrastructure Services was charged with overseeing the newly-created Mobility Department as well as solid waste, wastewater, water services and other functions.

The Mobility Department oversees all major transportation functions in the city of Tampa, including roads, trails, sidewalks, traffic signals, streetlights, bridges and seawalls, stormwater and parking facilities. This streamlined structure fostered the citywide Mobility Opportunity Vision Equity and Safety Plan (Tampa M.O.V.E.S) and a Vision Zero Action Plan that establishes priorities for the agency and allows it to act confidently with the support of the Administrator and the Mayor.

Danni Jorgenson, manager of the Transportation Engineering team in the Mobility Department adds, "The structure of the mobility team was developed as a reflection of the mayor's 'Transforming Tampa Tomorrow' vision...we very clearly understand our transportation goals, which helps to provide a feedback loop for everything we do. As much as the personnel structure is impacting our success, having the structure align with the vision is critical."



14 NACTO Structured For Success
Why Focus on Organizational Structure 15

BRINGING STRUCTURE, PROCESS, AND CHAMPIONS TOGETHER

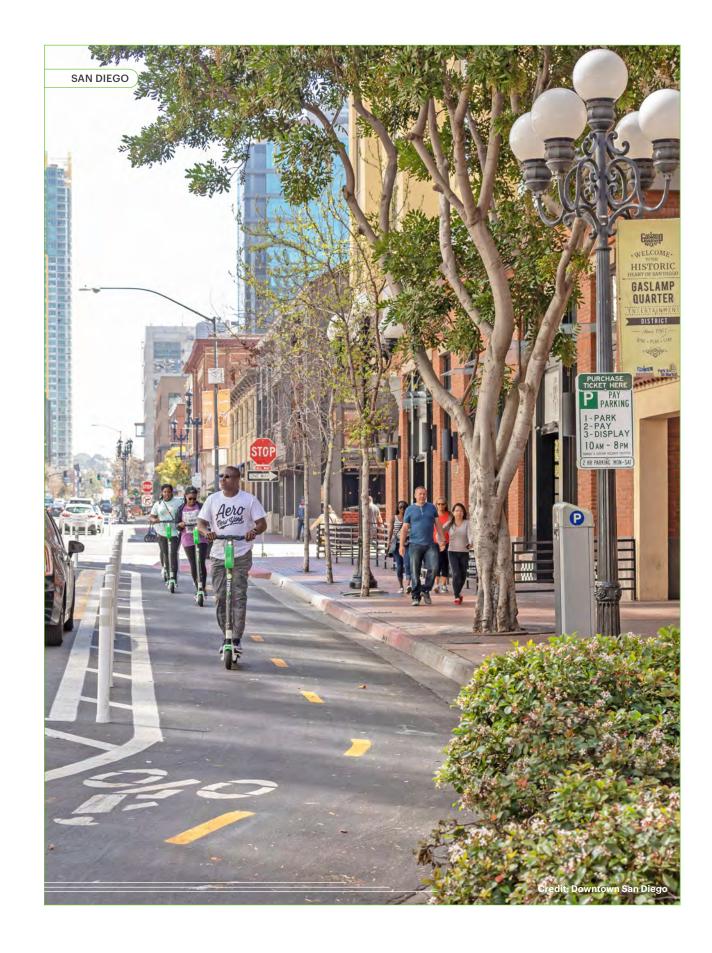
When effective agency structure is supported by a strong champion and is bolstered by effective processes, cities can take advantage of, or even create, conditions for success and deliver on their transportation projects and goals. Examples from across North America indicate that agencies are most capable of effectively delivering transportation projects and policies when:

- Transportation is housed in a "Transportation-Focused" agency that is responsible for most or all transportation functions in a city;
- There is a transportation-focused leader,
 —a "champion"—with a direct line to the mayor or decision-making authority; and
- The transportation agency has proactively established transparent internal processes for project delivery and can coordinate and communicate effectively, both internally and with the public.

This trifecta of structure, people, and process sets cities up to be successful in delivering on transportation projects and goals. There are, of course, cities without a transportation-focused agency who successfully deliver high quality transportation projects in line with their goals thanks to strong transportation

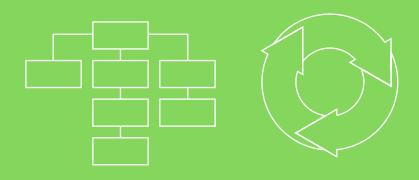
As cities look to improve how they provide transportation services and options to the public, strengthening all three factors—structure, process, and championship— is essential

championship, robust project hand-off processes, and a commitment to re-evaluating internal structures that are not serving their purpose. Well-established processes and agreements for project hand-offs between agencies can mitigate the impact of a more diffuse transportation structure. Similarly, a strong transportation "champion" may be able to resolve disputes between agencies when processes are lacking. As cities look to improve how they provide transportation services and options to the public and meet their goals, strengthening all three factors—structure, process, and championship—is essential.



16 NACTO Structured For Success

Why Focus on Organizational Structure 17 _____



WHERE TO START: STRUCTURE & **PROCESS**



WHERE TO START: STRUCTURE & PROCESS

Broadly speaking, leaders looking to improve transportation delivery have two main levers: structure and process. They can choose to start addressing challenges by redefining where the organization fits within their city's hierarchy, what functions transportation agencies fulfill, or what responsibilities different people or groups within the organization take on. Or, they can address issues by examining processes that exist within the current structure of the organization, clarifying and streamlining procedures, handoffs, decision-making, and communication methods.

In the 2019 NACTO city survey conducted for Structured for Success, half of the responding cities reported that they had made major changes to their organizational structure or processes in the last five years. In practice, most of these changes were a combination of structure and process changes made by leaders to reach agency goals. Depending on context, desired results, and internal appetite, those changes varied from small process tweaks to creating completely new departments and hierarchies. In some cases, process changes can help set the stage for larger structural changes as leaders and agencies alike experience the value of increased coordination.

To address challenges and make change, leaders must decide which lever—structure or process—is the right starting place. For example, a leader who finds their transportation department frequently in "turf wars" with other divisions or agencies, or one who realizes that major programmatic areas are not being addressed by anyone, will probably want to think first about structural changes. Processes will also need to change, but getting clarity and alignment on roles and overall structure first can avoid the need for overly complicated processes later down the line. Conversely, a leader who identifies challenges with project hand-offs or asset management may want to start with process changes to ensure that roles and tools are clear and consistent across departments and stakeholders, and then look at structural changes if process fixes are insufficient.

Using structure to address challenges means redefining where a transportation agency fits within a city's hierarchy, what functions transportation agencies fulfill, or what responsibilities different people or groups within the organization take on.



STRUCTURE

Using process changes to address challenges means examining processes that exist within the current structure of the organization, clarifying and streamlining procedures, hand-offs, decision-making, and communication methods.



PROCESS

DIAGNOSING YOUR CHALLENGE: STRUCTURE OR PROCESS?

While all agencies are unique, challenges tend to manifest in similar ways. The following common scenarios can help identify whether structure or process might be the best starting point.

High-priority items span multiple agencies, divisions, or departments. Key projects fall through the cracks.

Start thinking about structure. Structural improvements do not necessarily mean a full reorganization but, most likely, new teams, roles, or reporting structures are necessary. Cities can create cross-functional teams (e.g., a Vision Zero or Transit Priority team that includes planning, engineering, and engagement staff) or establish new roles (e.g., a project champion who oversees a project across all phases) to address specific challenges.

There are frequent disputes about funding between divisions or agencies. Projects or teams are understaffed, given their priorities.

Start with structure. Funding and staff are essential, finite resources. When they are split between multiple departments or agencies, especially when those groups report up different chains, it becomes harder to agree on priorities, implement projects at scale or deliver on big visions. Decision-making and accountability need to be aligned for good long-term outcomes.

People who are doing similar work are located across multiple teams, divisions, or even agencies. Roles are unclear.

Start with structure. Clearly define roles and responsibilities; change structures to avoid duplication. If there is frequent confusion over decision-making, reorganize or redefine roles, internally to the agency or externally across agencies. Once roles are clear, map out the processes for coordination (even within departments or teams) between stakeholders. In most cases, collaboration and alignment is easier when people who do similar things work together. Grouping people doing similar work, or ensuring that they ultimately report to the same person, also makes it easier for the public to understand how things work and who to ask for help.

Project hand-offs can result in major changes to the project direction.

Projects change hands multiple times in their journey from idea to implementation.

Start with process changes to ensure that hand-offs are clear, that project goals and priorities remain consistent regardless of who is working on it, and that decisions or lessons learned by one group are not ignored or overridden by the next. If processes are in place and problems are still occurring, then think about structure. In general, the more hand-offs, the more places where the project can diverge from the original purpose and the greater the need for strong processes to ensure consistent outcomes.

There are recurring issues within a specific workflow or around a specific type of project/program.

Start with process. If certain types of projects are always behind schedule or over budget, start by looking at the processes that connect project elements and players. Often there is a missing or nascent process. In its absence, a person or team is driving outcomes but lacks a framework to ensure consistency or connect to larger goals.

Staff cannot articulate standard processes for how work is supposed to occur.

Start with process. Consistent, transparent processes for how things are supposed to happen are essential for good outcomes and for staff morale. When people cannot explain how things are supposed to occur or when they default to personal networks (e.g., "my guy in engineering is Joe, he always bumps my projects up"), important work can get lost or delayed and staff get frustrated. Mapping and documenting processes can help establish new, more transparent norms and practices.



20 NACTO Structured For Success 21 ___

Addressing challenges through structure: Salt Lake City, Detroit, Jersey City

In 2018, **Jersey City** moved part of its transportation planning function, which was previously entirely within City Planning, into the Division of Engineering, Traffic, and Transportation. In 2022, Jersey City undertook a more significant reorganization that resulted in the creation of a new <u>Department of Infrastructure</u> that now includes the Divisions of Transportation Planning, Engineering, Traffic Engineering, Innovation, Sustainability, and Architecture. With the new structure, project planning, design, and delivery for public spaces are in one department, which has greatly improved collaboration across disciplines and

coordination across project phases. The structural change has also enabled the city to rapidly transform several major corridors using tactical urbanism. Planners and engineers work together to develop striping plans for quick-build projects and utilize on-call striping, asphalt, and concrete contractors for implementation.

Salt Lake City reorganized its Transportation Division in the <u>Department of Community and Neighborhoods</u> to improve capital project delivery. This was in response to a significant increase in transportation funding starting in 2019. As part of the reorganization, the Transportation Division created new work groups to allow for specialization.



Previously, project managers had been expected to lead every element of a project from securing funding through construction. The new structure separates out the general planning work group into three groups: a strategic planning and programming team, a project delivery team, and a safety and analytics team. The Division increased staffing and redefined certain staff's roles in order to better utilize several new sources of capital project funding as well as better organize project prioritization and grant writing efforts.

In **Detroit**, leadership consolidated transportation functions to better equip the city to deliver on the goals, strategies, and benchmarks laid out in the city's <u>Strategic Plan</u>. Transportation planning, which had previously been in the Department of Planning and Development, moved into the Department of Public Works (DPW), placing the full project delivery lifecycle under one agency. Next, the city updated the reporting structure of the city's bus operating agency, the Detroit Department of Transportation (DOT), so that both the DOT and the DPW could report to the city's Chief Operating Officer, alongside the Municipal Parking Department (MPD). Under this new reporting structure, the DPW, DOT, and MPD directors have weekly meetings and bi-weekly meetings with the mayor, and communication at all levels has improved.

Process that works: Boston and Seattle

In 2015, **Boston** moved to address coordination challenges between agencies by creating a new role—Chief of Streets, Transportation & Sanitation—that oversees the Departments of Transportation and Public Works and reports directly to the Mayor. With this role, Boston hoped to avoid duplication efforts between the agencies and also keep issues from getting lost between them. One of the Chief of Streets' main roles is to increase coordination between the two departments by implementing new processes and tools for managing and tracking projects and by clarifying how responsibilities are divided between Public Works and Transportation. This new structure involves an ongoing process of reorganization and adaptation, but has allowed Boston to significantly increase the amount of ongoing progress toward mode-shift, climate and equity goals.

Seattle DOT has a team responsible for coordinating public and private construction in the city right-of-way. The <u>Project and Construction Coordination Office (PCCO)</u>, located in the Downtown Mobility Division, coordinates utility, paving, and other projects on Seattle's streets. The team uses technological and non-technological tools to achieve their goals. They convene Project Coordination Groups to bring together project managers from all relevant projects up to five years before work begins to achieve alignment on project schedules and sequences. The team also relies on the <u>dotMaps project mapping platform</u> to gather, assemble, and visualize location and schedule data for all construction projects in the public right-of-way. The PCCO has played an essential role in aligning megaprojects that span multiple agencies with SDOT goals.



STRUCTURES & PROCESSES THAT SUPPORT PUBLIC TRANSIT

Organizational structure, individual champions, and robust, transparent, cross-agency processes for project coordination take on additional importance when it comes to public transit. Public transportation is a critical aspect of moving people in every city, but crosses the fabric of entire regions. As a result, collaboration, trust, and transparency are critical factors to getting it right.

While most transit agencies are structured at the regional or state level, impact and access is ultimately local

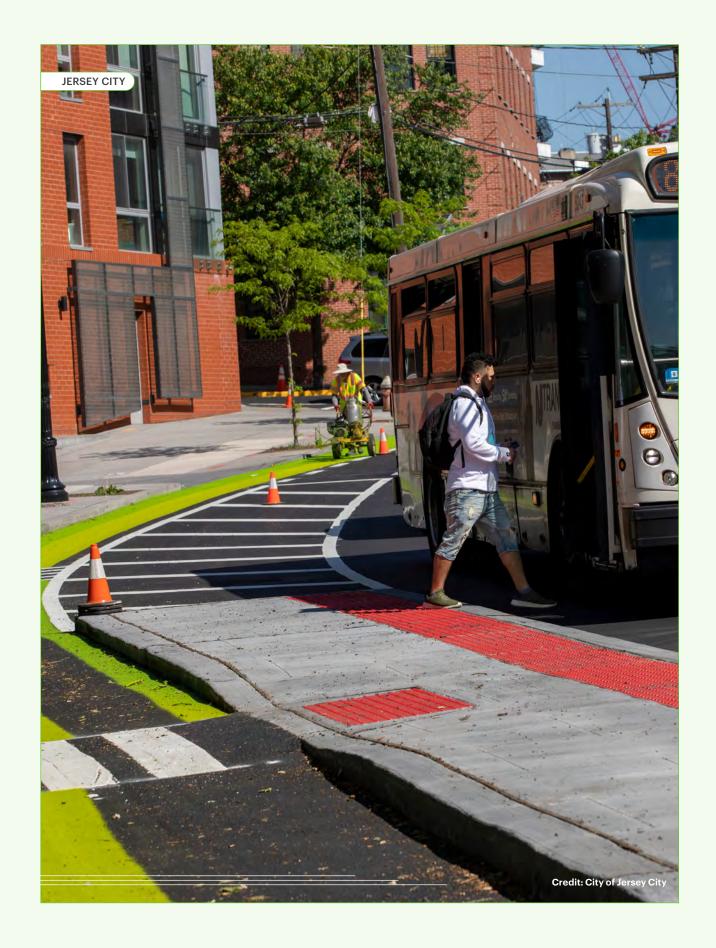
In most cities, the agency that manages the streets and traffic signals is separate from the agency that operates the bulk of the public transit network. When coordination is lacking, agencies can become misaligned and miss opportunities to share resources that would achieve common goals. In practice, this can look like city leaders adopting goals without consulting the tran-

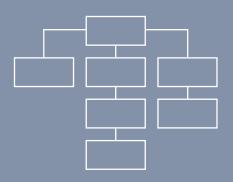
sit agency on how to deliver those outcomes, or transit agencies deciding on networks and frequency without considering city mode-shift or emissions goals.

Cities typically address this structural split through process, dedicating city transportation staff to interface with transit agency counterparts to ensure that key projects and goals are prioritized by both agencies. These teams are responsible for managing interagency efforts to improve transit speed and reliability, such as planning and installing bus lanes and implementing transit signal prioritization. For example, the Bus Speed and Reliability team within Translink Canada was created to liaise with the city of Vancouver, B.C. with the explicit responsibility of coordination and shared project management to achieve transit outcomes. The improved coordination and processes help to resolve the divide in responsibilities and result in improvements in long-range planning, bus lane implementation, and transit signal prioritization projects.

A few cities have also addressed coordination challenges with structural solutions. Most recently, in Austin, through Project Connect, the City and transit agency set up an independent entity, the Austin Transit Partnership, to oversee management of a broad suite of ballot-funded transit projects. More established is San Francisco, where all street transportation and the MUNI bus and light rail system is run by the San Francisco Municipal Transportation Agency (SFMTA).

While most transit agencies are structured at the regional, county, or even state levels (with corresponding funding realities), the impact is ultimately local. Agencies that have opted for interagency agreements, memoranda of understanding, and interagency working groups have established processes that can help transit succeed, despite the nuanced responsibilities. By coordinating on legal structures and working group approaches, regions can focus on ensuring robust project delivery for key transit projects.





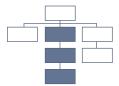
UNDERSTANDING STRUCTURE

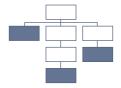


UNDERSTANDING STRUCTURE

Unclear responsibilities, duplication of efforts, diffuse funding: addressing structure might be the place to start. But, what should the new structure be? And, what do decision-makers need to know about the differences between structures, and how those differences might be applied in their city, in order to reach the best outcomes?

In most cities in North America, management of the street and transportation functions are arranged in one of three typologies:





TRANSPORTATION-FOCUSED

All or most transportation functions are in one department that is primarily focused on transportation.

Sometimes these departments also have a partner agency (e.g., Engineering, Public Works, etc) that handles certain responsibilities like construction or maintenance.

TRANSPORTATION-INCLUSIVE

All or most transportation functions are in a larger department that is not solely focused on transportation, such as an Engineering Department or a Department of Public Works.

TRANSPORTATION-DIFFUSE

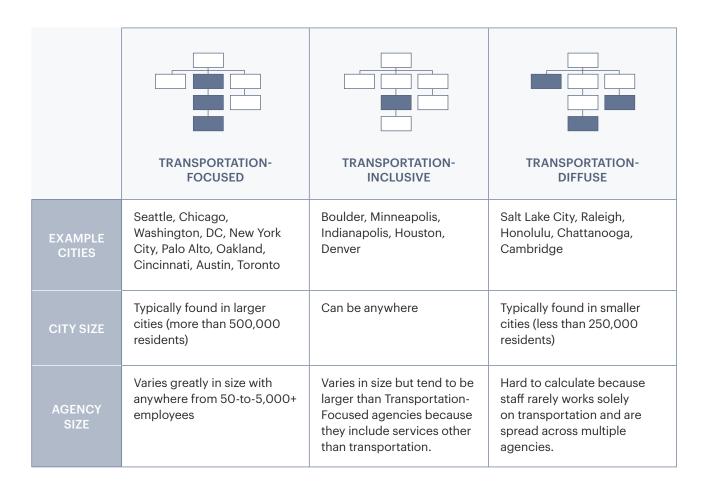
Transportation functions are spread across multiple departments, none of which is solely focused on transportation.

While each organizational typology has benefits and drawbacks, most transportation practitioners indicate that Transportation-Focused structures generally provide the best scaffolding for delivering projects. By concentrating transportation functions largely in one place, these structures create logical homes for transportation champions, and make it easier to coordinate and prioritize funding and resources and align around goals and priorities. Many of the best practices for effective project delivery discussed on pages 12-13, can be more easily achieved in Transportation-Focused or Transportation-Inclusive structures.

There are, of course, examples of cities without a Transportation-Focused agency who successfully deliver high quality transportation projects in line with their goals. This is largely due to a combination of strong transportation championship, robust project hand-off processes, and a commitment to re-evaluating internal processes that are not serving their purpose.

The varied positioning of transportation champions often make it so the structure on paper is not always what is actually happening on the ground. Staff in cities that have what looks like a Transportation-Diffuse structure sometimes report that the city is actually operating with a Transportation-Focused mindset. In Detroit, for example, transportation functions are housed in many agencies—a Department of Public Works, a DOT, a Municipal Parking Department, and a Planning and Development Department. However, the city's Chief Operating Officer oversees all transportation-related agencies (in addition to others), and organizes regular meetings between the department heads to coordinate much like the divisions of a typical municipal DOT. In essence, the Chief Operating Officer role approximates the coordination that tends to be more inherent to other structures.

Conversely, staff in a city that looks like it has a Transportation-Focused agency sometimes report that it feels more like they are a Transportation-Diffuse city. In New York City, for example, there is a large DOT responsible for streets, bridges, and even a ferry. When they plan and design projects within their operations budget, they benefit from smooth project hand-offs, clear funding, and goals that are aligned across the agency. However, when they plan capital projects, the Department of Design and Construction becomes a critical partner. When the two agencies are not aligned, challenges for project delivery can arise.





28 NACTO Structured For Success

Understanding Structure 29

TRANSPORTATION-FOCUSED STRUCTURES

In cities with a Transportation-Focused structure, most or all transportation functions are housed in one department that is primarily focused on transportation.

The Transportation-Focused structure tends to offer cities many benefits, particularly when it comes to clarity around **funding**, **accountability**, **decision-making**, and **alignment around goals**, and in many aspects of **project coordination**. In addition, Transportation-Focused agencies tend to have:

- Flexibility and quick-build capacity. Interviews with cities suggest that Transportation-Focused agencies can often be quicker to adapt to external changes, since responses (and funding decisions) do not have to be coordinated across multiple departments.
- Internal support and professional growth. In addition, because Transportation-Focused agencies tend to be large organizations, they often have support staff (e.g., finance, procurement, HR, communications) embedded within the department. These staff are invaluable because they ensure that practices or information unique to transportation functions are included in larger actions. For example, finance staff with transportation expertise can make sure the unique intricacies of federal transportation grant-making processes are complied with, or transportation-focused communications teams can ensure transportation policy concepts are well communicated to the public. The prevalence of specialized roles creates more opportunities for in-depth, transportation-specific skill development for staff.
- Coordination with other organizations. Because Transportation-Focused agencies are the established transportation actor, there is little confusion about who needs to be at the table. Especially when working with transit agencies, community partners, and other stakeholders, having one organization with which to coordinate can simplify and speed up projects.



But the Transportation-Focused structure is not without challenges. Common challenges include:

- Siloed functions. Most Transportation-Focused agencies are large organizations with many distinct functions organized into divisions and stand-alone teams. A larger number of teams increases the likelihood of work being isolated and less coordinated, and leaders must establish processes that facilitate communication and collaboration across teams. Differing needs between divisions can cause further tension. For example, maintenance teams might be frustrated that the capital group keeps choosing low-cost, high-maintenance materials like delineators or basic paint, instead of more robust bollards and thermoplastic.
- Excessive hierarchy. Because they are often found in larger cities, Transportation-Focused agencies tend to have a large staff organized across multiple divisions (horizontal complexity). As a result, they can tend toward excessive layers of management (vertical complexity). Centralization ensures consistency, but over-centralization can stymie good ideas and make it harder for organizations to adapt to changing situations or pilot ideas in response to community needs. Agency leadership must proactively foster clear, transparent decision-making processes and delegation authority to avoid ideas or projects getting bogged down.
- Transportation-only focus. Transportation-Focused agencies may view transportation projects and issues in isolation and lose sight of how transportation relates with land use, housing, public health, stormwater management, and the work of other city departments. Champions and strong interagency processes are essential to ensure connections between transportation and other agencies.

Goals for what, how, and who	Having a single department that handles all or most transportation functions makes it easier to articulate a transportation vision, set goals and priorities, and assign tasks and responsibilities.
Ability to Coordinate Funding	Transportation-Focused agencies are well set-up to connect the dots between the projects they have planned and the funding they apply for. In addition, it is easier to identify funding gaps and opportunities when fewer agencies are involved.
Strong Coordination & Hand-offs	Coordination can be easier since all functions are in the same department and, ultimately, report to the same person. Challenges may arise when coordinating with elements in the ROW (e.g., utilities) that are managed outside of the DOT.
Commitment to Evaluation	Having a single department increases the likelihood that evaluations will be done consistently across all projects.
Strategic Communications	With one agency, it is easier to coordinate messages and comms effectively.
Access to Specialized Expertise	Most Transportation-Focused agencies are large organizations with internal support staff who can bring their specialized expertise to transportation topics.
Rapid Response Capacity	Transportation-Focused agencies can be quicker to adapt to external changes, since responses do not have to be coordinated across multiple departments.

30 NACTO Structured For Success
Understanding Structure 31

Creating a DOT in Atlanta

In 2019, Atlanta created the city's first, stand-alone Department of Transportation. Prior to the creation of the new department, Atlanta operated with diffuse transportation responsibilities spread across several departments: the Office of Mobility Planning within the Department of City Planning handled transportation planning; the Office of Transportation within the Department of Public Works was responsible for design, construction, maintenance, and operations; and Renew Atlanta led the planning, design, and construction of a specific set of projects funded by two voter-approved bond referenda.

This diffuse structure created a number of challenges. First, the city lacked a single, centralized home for transportation within local government, which made internal and external collaboration challenging. Second, there was duplication of roles and responsibilities across departments. And third, managing the project life-cycle across multiple departments was inefficient. Without a high-level leader solely focused on transportation who could champion priorities at the executive level, some mobility issues also languished. By bringing together the previously disparate groups working on transportation in the City, Atlanta will be better positioned to meet its growing and changing transportation demands, as well as ensure alignment and singular vision for transportation priorities and policies.





TRANSPORTATION INCLUSIVE STRUCTURES

Cities with a Transportation-Inclusive structure locate almost all transportation functions in one department that is not solely focused on transportation.

Transportation-Inclusive agencies are typically a Public Works or Engineering Department, which might manage city fleet services, solid waste, water, vertical construction, or other functions in addition to transportation. Because of their wide focus, these agencies tend to have **clarity around funding, opportunities for smoother internal coordination**, and **consolidated project processes** just like Transportation-Focused agencies.

Transportation-Inclusive agencies typically have a large staff, which allows the agency to deliver across its wide portfolio. However, when Transportation-Inclusive agencies are insufficiently staffed, transportation (especially transportation planning functions) can get shunted to the sidelines as staff struggle to manage urgent priorities such as burst water mains, fires, flooding, or pandemic relief services.

For transportation services to be delivered most effectively, Transportation-Inclusive agencies typically benefit from a transportation division lead who has the authority to advocate for transportation needs within the agency, and can make sure that transportation issues do not get subsumed by other organizational priorities like water or sewer.

Transportation-Inclusive agencies provide the following additional benefits as well:

- Construction coordination. Staff in Transportation-Inclusive agencies are often better able to coordinate construction happening in the city's right-of-way, since many, or all, of the services that work in the right of way are located in the same department (e.g., transportation, water, streetlights, forestry).
- Internal support functions. Transportation-Inclusive agencies are often large departments (sometimes the largest in a city), making it more feasible to have some or all support staff (e.g., finance, procurement, HR) within the department. Having business and administrative staff within the department can mean that these staff are more knowledgeable about and invested in transportation outcomes.

Large, broadly focused agencies can also pose challenges, however. In particular:

• Competing priorities. Because Transportation-Inclusive agencies do more than transportation, they can lack a strong voice that champions transportation issues within city government. With this structure, whether or not transportation is prioritized citywide can be highly dependent on who the department's leaders are and how teams are structured beneath them.

- Maintenance-oriented legacy. Many Transportation-Inclusive agencies have historically focused on maintaining existing assets and processes. Leaders may need to establish new processes to ensure that agency resources support a strong transition to a more multimodal transportation perspective that will require new projects and programs.
- Leadership requirements. The broad focus of Transportation-Inclusive agencies often attracts an executive who has deep expertise in one area, but not all, or who has broad but shallow experience across many focus areas. Leadership is in the difficult position of having to stay up to date on emerging issues and adapt to changes across multiple service areas (transportation, solid waste, stormwater, fleet management, etc.), which can prevent them from being able to develop deep expertise in any. Leaders in Transportation-Inclusive agencies must develop processes that allow them to learn from and lean on staff experts. Champions may be particularly essential to ensure transportation issues do not get lost or ignored.

Goals for what, how, and who	Having a single department that handles all transportation functions makes it easier to set goals and priorities, and assign tasks and responsibilities. However, since Transportation-Inclusive agencies are not solely focused on transportation, transportation issues can get lost or subsumed.
Ability to Coordinate Funding	Transportation-Inclusive agencies are well set-up to connect the dots between the projects they have planned and the funding they apply for. However, internal champions within the agency are particularly important to ensure transportation needs are not overlooked.
Strong Coordination & Hand-offs	Coordination can be easier since all functions are in the same department and, ultimately, report to the same person. In particular, project coordination and handoffs can be easier when many, or all, of the services that work in the right of way are located in the same department (e.g., transportation, water, sanitation, streetlights, forestry etc.).
Commitment to Evaluation	Metrics must be calibrated to transportation needs, and that transportation goals (e.g., safety) do not get subsumed by other operational concerns.
Strategic Communications	A singular department can coordinate messages across a wide platform. Attention is required to ensure that transportation messages do not get subsumed by other operational concerns.
Access to Specialized Expertise	Most Transportation-Inclusive agencies are large organizations with internal support staff who can bring their specialized expertise to transportation topics.
Rapid Response Capacity	Transportation-Inclusive agencies can be quicker to adapt to external changes, since responses do not have to be coordinated across multiple departments.

____ 34 NACTO Structured For Success

Moving to a Transportation-Inclusive Agency in Denver

In 2017, Denver conducted an assessment to determine the best organizational structure to deliver the mayor's new mobility vision. At the time, all of Denver's transportation functions were within Public Works, but transportation planning, project management and delivery, and maintenance were each in a different division. Denver's assessment process involved an intensive series of interviews and workshops with representatives from the Mayor's Office, Public Works leadership and staff, partner agencies, and external stakeholders.

Following the assessment, Denver took an iterative approach to implementing organizational changes. First, the city realigned Public Works to better organize transportation functions to improve coordination. Then in 2019, the city began preparing to create a new department of transportation, which required voters to approve changes to the City Charter. Voters overwhelmingly approved the creation of the Department of Transportation and Infrastructure (DOTI) in November 2019, and the changes took effect in January 2020. The new department has two mobility administrations: a Project Delivery Administration that includes planning, design, and project and program management; and an Operations Administration that includes operations, maintenance, right-of-way services, and right-of-way enforcement. DOTI also has a utilities administration that includes wastewater and solid waste management. Denver elected to keep these utilities functions within the new department to focus on improving construction coordination across all projects in the right-of-way.





36 NACTO Structured For Success

Understanding Structure 37 _

TRANSPORTATION-DIFFUSE STRUCTURES

In cities with a Transportation-Diffuse structure, transportation functions are spread across multiple departments, none of which is solely focused on transportation.

One common example of the Transportation-Diffuse typology is a city where transportation planning is managed by the Planning Department; the Engineering Department handles design, construction, and operations; and Public Works is responsible for street and sidewalk maintenance. To coordinate between these different agencies, some cities also have a small team within the Mayor's Office that focuses on transportation policy and special projects. This can be an effective strategy as long as responsibilities are clearly defined.

The primary benefit of a Transportation-Diffuse structure is that it can provide the **opportunity for more holistic decision-making** than the other structures. Transportation needs may be more integrated into other departments or service areas, like land use or stormwater management, if some transportation functions are co-located with these staff. This can enable a city to make more holistic, strategic decisions that cut across departmental boundaries.

Transportation-Diffuse systems generally do not work well for advancing core transportation goals without deeply invested, well-positioned champions. These transportation champions (e.g. a mayor, city manager, or council member) hold the system together and keep the disparate parties on task, aiming for the same goals. The risk is that if these champions depart, transportation priorities can fall to the wayside.

Most cities with Transportation-Diffuse structures are relatively small. In general, the larger a city is, the more complex it is to manage the transportation system, so it becomes necessary to carve out more formal roles and responsibilities housed within a single big agency.

Most practitioners find that Transportation-Diffuse structures pose more challenges than they do opportunities. In particular:

• Unclear ownership. In a Transportation-Diffuse structure, it can be difficult to parse out which department "owns" transportation, creating a cascade of challenges. These cities sometimes struggle to put forth a compelling transportation vision. They also often wind up with overlapping roles in various agencies, which is both inefficient and inconsistent. And for the public, this lack of clarity can make it challenging to know which department handles which issues. Strong champions can mitigate many of these challenges.

- Coordination. With different stages of the project lifecycle spread across multiple departments,
 planning, design, construction, and maintenance can become disconnected. Likewise, implementing changes, whether a new process, procedure, or change in strategic direction, becomes increasingly complicated when it has to be done across multiple departments. Ensuring strong, clear
 processes for coordination is essential for success in diffuse environments.
- **Inconsistent messaging.** Cities with Transportation-Diffuse structures may find it hard to coordinate messaging and communications around transportation issues, projects, and programs across multiple departments.

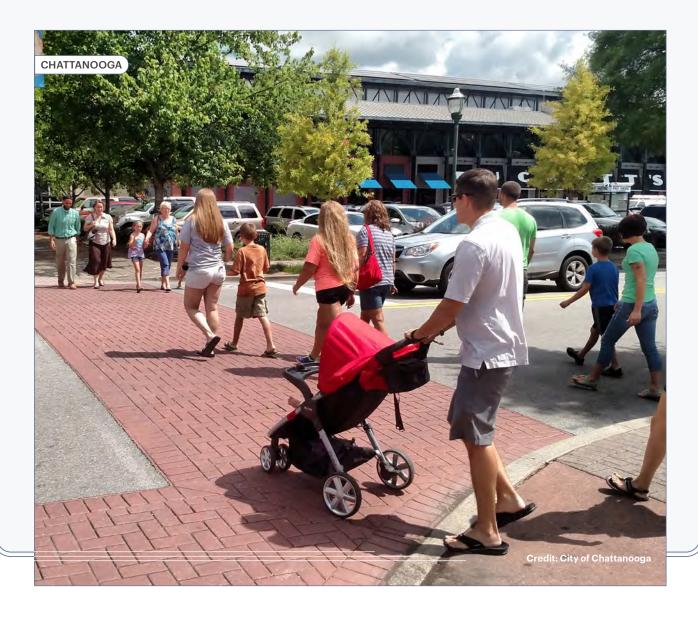
Goals for what, how, and who	Since many agencies are involved, it is difficult to put forth a compelling transportation vision and gain traction around major or emerging issues without exceptionally strong leadership. Assigning work or even knowing who is ultimately responsible for improving transportation outcomes is often a challenge.
Ability to Coordinate Funding	With multiple agencies in the mix, it can be difficult to decide which projects should be prioritized, how much money is needed, and who should receive it. Agencies may find themselves responsible for projects they are not ready to deliver or that do not meet their agency goals or priorities (e.g., funding for LOS improvements when the priority is pedestrian safety treatments). In addition, because capital funding is typically easier to find than maintenance or operations funding, cities with Transportation-Diffuse structures may find that they have funding to build great projects that they can't maintain or support over time.
Strong Coordination & Hand-offs	Coordinating across multiple departments can be challenging and time consuming. Disconnects can develop between planning, design, construction, and maintenance. Implementing changes, whether a new process, procedure, or change in strategic direction, becomes increasingly complicated when it has to be done across multiple departments.
Commitment to Evaluation	Hard to track things & make changes to things across multiple departments.
Strategic Communications	Hard to communicate/coordinate one message across multiple agencies.
Access to Specialized Expertise	Specialized support staff is usually spread between different agencies throughout the city. It can be hard to build transportation-focused expertise (e.g. for federal transportation grant management) when support staff is not focused on transportation.
Rapid Response Capacity	Coordination between departments with potentially competing priorities can slow response.

38 NACTO Structured For Success

Understanding Structure 39 ____

Returning to a Diffuse Model in Chattanooga

In 2013, Chattanooga created a DOT, moving transportation policy, design, and operations functions from the Department of Public Works into a stand-alone Transportation-Focused DOT (though some maintenance functions remained in Public Works). In 2021, however, the city reassessed and re-split transportation functions into multiple different departments across the city. A new City Planning agency oversees and collaborates in multimodal transportation and transit planning. Parks, greenways and neighborhood connectivity are housed in the Department of Parks and Outdoors. Operational transportation elements are situated in the Division of Transportation in Public Works. The city hopes that the new distributed leadership model will allow it to inculcate a public space and people-first emphasis into a wider array of projects and programs.



WHAT DOES A TRANSPORTATION AGENCY DO?

City transportation agencies in North America are increasingly responsible for a broad range of functions—from planning, policy, and construction to asset management, permitting, and enforcement, along with dozens of other services that touch the streets. This wide-ranging and evolving set of functions require diverse skill sets, resources, and management approaches. Agencies are responsible both for technical functions that relate to the planning, design, construction, operations, and maintenance of a city's transportation assets, as well as business or administrative functions that enable transportation agencies to successfully execute their technical functions.

Technical Functions:

Planning | Policy | Capital Programming | Program Management | Community Engagement | Development Review | Design: Preliminary/concept; Civil/final | Construction: Capital Improvements; Interim Improvements; Enforcement; Automated; Commercial Vehicle Parking; Parking | Operations & Maintenance: Street Paving; Bridges/Structures; Sidewalk Repair; Signs/Signals/Markings; Parking & Curbside; Street Sweeping/Snow Removal; Incident Response | Asset Management | Forestry/Street Trees | Transportation Engineering | Transportation Safety | Traffic Management / ITS | Right of Way Management: Permitting; Public Realm; Events; Freight & Loading

Business/Admin. Functions:

Fiscal/Budgeting | Grants/Contract Management | Procurement | HR | IT | Data Analytics & Management | Communications | Government Affairs | Press & Public Relations | Legal | Performance Management | Health & Safety



40 NACTO Structured For Success

Understanding Structure 41 ____

FIRST STEPS IN INTERNAL ORGANIZATION

Leaders must think carefully about how teams or divisions within their agency are organized. For example, to deliver on a Vision Zero mandate, how should staff be grouped in order to maximize their efforts and ensure success? Across North America, transportation agencies typically use one (or a combination) of the following models to organize people across the organization:

- **Functional:** Employees who perform similar functions and bring similar knowledge/skills to bear are grouped together (e.g., traffic engineers are in the traffic engineering division).
- **Geographic:** People are organized to serve constituents in unique geographic areas (e.g., community engagement staff who serve specific neighborhoods or maintenance crews that are assigned to districts or wards).

• Divisional:

- » Outcome / Product: All the people and resources needed to plan, deliver, and operate a 'product' or who are driving toward an 'outcome' are grouped together. For example, a 'product' team might take shape as an off-street parking division with planning, facilities, finance, and customer service staff. And an 'outcome' team might take shape as a Vision Zero group with policy, planning, and engineering staff.
- » **Process:** People are organized around key processes for delivering outputs (e.g., capital projects division that includes planners, engineers, and project managers).
- Matrix: The organization uses more than one of these models in tandem (e.g., maintenance staff might be in a functional maintenance division and a geographic overlay).
- **Hybrid:** The organization applies different models to different units based on the nature of their work (e.g., a transportation agency might use a geographic model for its maintenance staff but a functional model for planning and engineering).





Not all teams need to work the same way. Most successful organizations use different organizational models for different teams. For example, operations and maintenance functions may require clear, set hierarchies that support efficiency and consistency and may benefit from some geographical organization (particularly in large cities) to support intimate local knowledge of assets. Policy, planning, programming, and design functions may benefit from matrix-style management structures that allocate staff to different projects and initiatives based on changing priorities or emerging issues. Applying different organizational models to different teams based on the nature of their work can balance the need for innovation and adaptation with the need for consistency and efficiency.

Organizations are made up of people. In order to be successful, restructuring plans must be matched with management capacity. Any individual manager has a limit to the number of people they can effectively directly manage. If people in mid- and mid/upper-level positions are spread too thin, they will not be able to build fully successful teams or help support changes, regardless of structure or organization.

Similarly, restructuring plans should consider how individuals are impacted. For example, breaking up a team or unit that has been together for 20 years could hurt morale and push people to leave. On the other hand, deciding to leave too many teams intact to avoid change can result in an ineffective organizational structure. Ignoring the impact on the people involved in either scenario can be destructive to the agency.

42 NACTO Structured For Success

Understanding Structure 43 _

Internal Reorganization Fits the Bill in Toronto

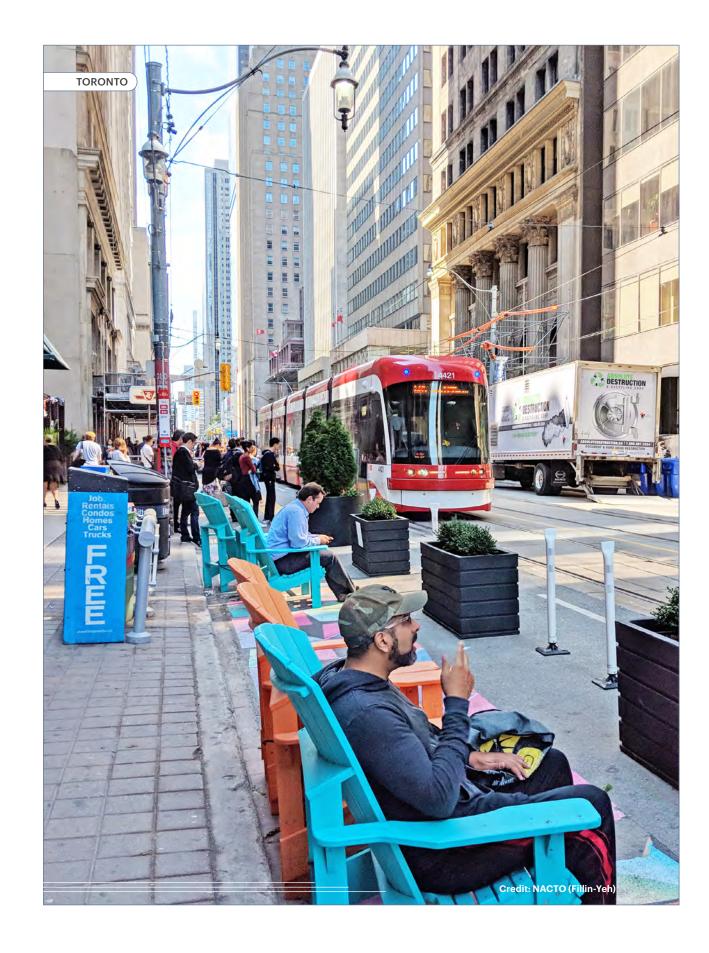
In 2017, Toronto Transportation Services (TTS)—the city's Transportation-Focused department—was facing some major challenges. The public was asking for more transportation projects while the budget remained stagnant, new technologies were generating evolving needs, there was limited appetite for organizational change to meet market demands, and the agency had weak alignment between existing roles and employee skills. As a result, TTS was struggling to meet project demands, and was providing inconsistent citywide services. With the help of a consulting team, TTS leadership asked staff from across the agency to identify specific problems that needed to be solved, and developed organizational design principles geared at solving those challenges. They established a new mission, vision, and principles that serve as the basis of their work moving forward, and actively prepared and supported agency staff for change.

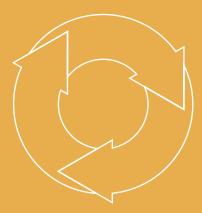
TTS's new org chart was carefully designed to address the agency's process and structure issues. One major change was how they addressed geographically specific needs. In their original internal structure, TTS utilized **geographic organization** for Road Operations,

Toronto's new organizational structure has improved their ability to spend their capital budget and to take on new pilot projects in response to public demand

Traffic Planning, Right-of-Way Management, and Traffic Operations, with 4 districts that each provided these services across the city. In the new structure, those services are organized **functionally** within an Operations & Maintenance Division, a Planning & Capital Program Division, and a Traffic Operations Division. And while organized functionally, the teams also retain some **geographic organization**, with two managers within each division dedicated to geographically specific (Area 1 and Area 2) roadway planning, operations, and maintenance.

As of this writing, the new organizational structure in Toronto has been largely in place for over three years and has accomplished many of the outcomes initially identified. A few key accomplishments include improving capacity to spend their allocated capital budget by nearly 30% (from approximately 65% spent in 2017 to 92% spent in 2020). They have also been able to take on new pilot projects in response to public demand even with the impacts of the global pandemic. The team continues to work through challenges, while also finding that alignment with their organizational design principles and their new vision, mission, and principles has enabled leadership to paint a clear and consistent picture for staff and the public about how they plan to evolve along with the world around them.





UNDERSTANDING PROCESS



UNDERSTANDING PROCESS

In conversations with transportation professionals, no topic came up more often than the importance of clear processes that ensure work is performed consistently and efficiently. Leaders and staff emphasize that explicit, formal processes lead to durable success that can sustain change and outlast a supportive mayor, a visionary leader, or a boom in funding.

City agencies, like all organizations, are built on systems and processes that dictate everything from how an agency supports and communicates with its own staff to how an agency prioritizes and delivers projects for the public. Many project delivery issues can be addressed through process solutions like revamping how a key project hand-off occurs, re-setting the order in which project approvals occur, or establishing new communications procedures. Upstream, retooling project prioritization processes can also significantly improve a city's ability to build projects that support local equity, climate, and safety priorities. At any level, the goal of good processes is to ensure quality and consistency without sacrificing efficiency or adding unnecessary steps.

The goal of good processes is to ensure quality and consistency without sacrificing efficiency or adding unnecessary steps Process changes do not typically affect where specific tasks or roles are located in an organization, but they can impact how those project components relate to or communicate with each other. As a result, process solutions typically do not require approval from mayors or city councils and often take less time, resources, and effort

than restructuring the organization. Process improvements can also serve as smaller tests that provide the organization with more information about the underlying issues and help decision-makers formulate future iterations for how their organization can improve.

Organizational processes can usually be categorized as either a "process-process" or "a people-process." "Process processes" are established, clear, and jointly understood by everyone who touches the work. Establishing "process processes" is essential to organization health and growth because they allow work to be performed consistently over time, even as individual staff, or even administrations, turn-over. "People processes," on the other hand, change depending on who is involved. They create inconsistent results, can frustrate and disenfranchise both staff and public, and exacerbate challenges when trying to make or sustain significant change. Identifying "people processes" and transforming them into "process processes" is an essential first step in structuring public agencies for success.

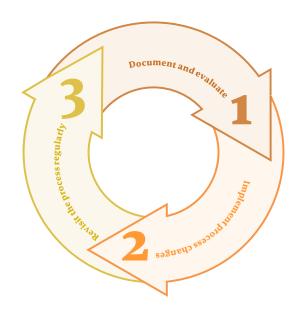


HOW TO UPDATE A PROCESS

Organizations need to regularly assess their processes and update corresponding documentation, keeping in mind that when one process changes it may have ramifications for others as well.

Process updates typically have three main steps:

- Document and evaluate to understand the process;
- 2 Implement process changes to address critical challenges; and
- Revisit the process regularly to make sure it is working as intended.



These steps should be thought of as an ongoing cycle, as processes evolve and conditions change. Designing good processes requires regular evaluation and tweaking, which one leader interviewed for this guidance called 'process hygiene'.

1

Document and evaluate process

The first step to updating a process is to identify what the current process actually is. Taking the time to document and understand how things currently work is key for change-makers to determine why there are recurring issues in a project workflow or major delays during hand-offs, and what to do about them. Leaders who jump to solutions without first understanding what is happening risk making changes that do not actually improve the current situation or make things worse.

Especially for project delivery processes, working with the project team to map out the specific events or tasks that need to happen for a project to get done and who needs to do what when, can help leaders understand and evaluate what is going on and what parts of the process might need to change. Often, seemingly simple questions such as, "What happens first?" "What are the steps in this process?" "Who are the decision-makers?" "How is information recorded or passed on?" produce illustrative answers. It is important to provide space for staff to be candid, as roadblocks could be specific to a person or to a process that staff would hesitate to point out to leadership in an open forum.



48 NACTO Structured For Success

Understanding Process 49 ____

Establishing a Quick-Build Process through Delivery Chain Mapping in Honolulu

In 2020, as an American Cities Climate Challenge participant, the City of Honolulu undertook a series of changes to improve bus speed and reliability across the city in an effort to reduce greenhouse gas emissions from single occupancy vehicle driving. On King Street, the busiest bus corridor in Hawai'i, nearly half the road users during rush hour were people on the bus. However, the street design failed to prioritize bus service, and as a result, the buses were slow and unreliable. With this context, the City of Honolulu embarked on a new quick-build process to implement better bus lanes within a short time frame.

To establish the quick-build process, city staff across four departments convened for an in-depth planning process that mapped out cross-departmental relationships and the city's overall implementation pathways. The resulting delivery chain established a shared understanding of where key decision points lived and who the important decision-makers were. This enabled city staff to develop a workplan that aligned various roles and activities that were key to the new quick-build process.

With early alignment and project clarity around the quick-build process, city staff were able to build a 1.3 mile bus lane within 10 months from initial planning to implementation. Recent data shows that the lanes have reduced travel time by as much as 30% during peak hours, while service reliability has increased by 11-17% and average speed has doubled through Chinatown and Downtown. In addition, the City expects the new lanes will produce savings of up to \$560,00/year in bus operating and maintenance costs. Building on this success, city staff developed a quick-build pilot that can pave the way for a broader transit-priority network in the future.



MAPPING YOUR DELIVERY CHAIN

The organizational management consulting firm <u>Delivery Associates</u> utilizes a technique called <u>Delivery Chain Mapping to diagnose what is happening in a process, identify sticking points, and hone in on places where the process needs to be improved in order to deliver the desired outcomes for the <u>public</u>. To start mapping out a delivery chain, they suggest:</u>

- Convening a team of all department contacts involved in the implementation process. If design, planning, or other phases of work are of greater concern, include key representatives of these perspectives. Try to ensure the group includes:
 - » A diverse set of employees
- » A range of seniority levels, including all the core functions likely to be represented along the delivery chain
- » The most collaborative members of other departments who understand processes beyond the team's control
- » An overall mix that enables open sharing and acknowledgement of challenges (i.e., potentially excluding very senior leaders that might, in practice, chill open dialogue)
- Hosting an active dialogue with this group to establish a shared understanding while surfacing and beginning to address challenges:
- Focus on end users. Starting with transit riders or other end users, map backward from project implementation and capture all the actors, departments, and outside groups that might influence the process. Who are the end users in this process (i.e., is it just transit riders, or is there a broader set of affected residents), and through whom does project delivery flow before reaching them?
- » Assess relationships. What are the relationships like between actors along the delivery chain? Are some stronger than others? Are there risks? Are any absences in the room indicative of those risks (i.e., a key department is out of the loop)?
- » **Map funding flows**. How does funding flow through to project delivery, and how does this affect decision-making along the delivery chain?
- » Align on decision-makers. Who are the decision-makers for each step? What types of decisions are they supposed to make? Who has the power to block or slow action, either formally or informally?
- » Establish hand-off points. Where does the project change hands? What is required at the hand-off point?
- be derailed? What type of risks and barriers exist, do you have a shared understanding of them, and can you pinpoint them along your delivery chain?

50 NACTO Structured For Success

Understanding Process 51 ___

Implement Process Changes

Mapping out how a process happens can highlight a range of process improvement opportunities that will vary based on agency structure. In general there are several common improvements that city leaders say often emerge as the result of this work:

- Formation and empowerment of cross-functional teams or establishment of other formal mechanisms that foster coordination and communication across teams, divisions, or agencies. While trust and cooperation can not be built overnight, many organizations have found that establishing regular venues for communication (e.g., monthly or quarterly meetings of a regular task force, or a coordination committee or working group) can improve coordination between previously disparate, and distrustful, entities.
- Improved delegation. Clarity about who can make what kind of decisions and thoughtful delegation of decision-making power to the lowest appropriate level can improve morale and allow organizations to move faster.
- Creation and dissemination of consistent workflows that project teams can follow every time. For many agencies, this might mean:
- » Establishing a project charter defining the project's goals at the onset
- » Ensuring that the right staff are always included at key decision points (especially relevant when projects span multiple divisions)
- » Having clear procedures for making decisions and escalating issues
- » Giving all staff across divisions and departments access to the same project management tools
- » Assigning a project champion to oversee the entire project from development and design through construction and evaluationprocess that staff would hesitate to point out to leadership in an open forum.



Strengthening Processes Across Agencies through the Austin Transit Enhancement Program

Since 2015, the Austin Transportation Department (ATD) and Capital Metropolitan Transportation Authority (CapMetro), the regional transit agency, have worked together to transform on-street transit across Austin. In 2018, CapMetro launched a system-wide transit network redesign called CapRemap, and between 2018 and today, the agencies have delivered a set of corridor and spot improvements that have improved the transit experience for CapMetro's over 83,000 weekday riders. In a sign of success, Austin voters passed Proposition A in 2020, which established a pot of funding for the implementation of Project Connect, the region's high-capacity bus and light-rail system plan.

The successful collaboration between ATD and CapMetro was initiated in 2015 through the development of the Transit Priority Working Group, a biweekly collaboration of agency staff to identify and implement projects that improve transit operations, safety and access in Austin. The Transit Priority Working Group, consisting of operations staff, planners, and designers across both agencies, continues to meet to develop and deliver important transit priority projects. In 2018, ATD and CapMetro formalized that partnership by signing an interlocal agreement that provides up to \$1 million per year for transit improvements that ATD performs on CapMetro's behalf. To support the management of those projects, both agencies hired dedicated staff, and ATD established the Transit Enhancement Program, which was further bolstered in 2020 when Austin voters also approved Proposition B, which dedicated \$19 million to Transit Enhancement projects.

Both the city and CapMetro also work closely with the <u>Austin Transit Partnership</u> (ATP), a new governing body created to manage the build-out of Project Connect. The city plays a key role in project development, design review, utility relocation, permitting, and the dispersal of anti-displacement funds. Shared goals, regular meetings, and support from executive leadership prove to be the most critical components to a successful partnership according to city and agency staff at both agencies.



52 NACTO Structured For Success
Understanding Process 53

3

Revisit the Process Regularly

Creating a more effective transportation agency is not a one-off event. Rolling out a new process does not end when employees receive a new process manual, either. Even simple process updates require clear user-focused communications, training, and ongoing support before they become organizational norms. Similar to rolling out a new project to the public, process managers should check in with the staff who must now use the new process and tailor communications and training to address their daily operational needs as well as loftier goals.

While organizations should commit to evaluating processes regularly, that does not mean it should be continuous. Constant flux and change is exhausting and can lead to feelings of futility. Process managers and change-makers should be up-front and transparent about how long they expect process changes to take and when they will revisit them, leaving time for new processes to settle, for staff to get acclimated to new ways of doing this, and to evaluate how the new process is working. Change-makers must remain clear and communicative about how and when decisions will be made, and let staff know they will be held accountable to the new standards.



Updating the Project Prioritization Process to Embed Equity in Minneapolis

In 2016, the City of Minneapolis passed the Neighborhood Park and Street Infrastructure ordinance, which increased the city's capital street paving budget by more than \$20 million annually for 20 years.

The ordinance also required the city to adopt a criteria-based system that incorporated racial and economic equity for selecting projects to include in the capital improvement program (CIP).

The Minneapolis Public Works Department's resulting 20 Year Streets Funding Plan laid out a new methodology for prioritizing and selecting street improvement projects according to the ordinance's requirements. The plan assigned weights to different categories like neighborhood demographics and asset condition, allowing certain considerations to take priority over others. For example, the racial composition of a neighborhood and the condition of a neighborhood's assets were weighted twice as much as the condition of underground utilities. In addition to laying out a weighting system, the plan also detailed a flexible qualitative screening phase to enable the department to identify opportunities for combining projects or coordinating them with ongoing maintenance activities.

In developing the 2016 plan, city staff created a list of process improvements for future versions of the plan, aiming to continually align the plan's scoring framework with city policies. The first update to the plan came in



2018, after city staff conducted additional public outreach efforts to better understand community priorities. In addition to updating scores with newer datasets, staff also weighted two categories more heavily to better reflect priorities expressed by the community: the condition of pedestrian facilities and the share of low-income residents in the area.

Transparency, community involvement, and adaptability were all paramount as Minneapolis established its new process for capital improvements. Both the Neighborhood Park and Street Infrastructure ordinance and the 20 Year Streets Funding Plan included regular reporting mechanisms to ensure accountability and set procedures to continually update relevant processes based on community feedback and any changes in policy direction.

54 NACTO Structured For Success

Understanding Process 55 ____



FIRST STEPS IN MANAGING & SUSTAINING **CHANGE**

FIRST STEPS IN MANAGING & SUSTAINING CHANGE

Regardless of whether a city decides to make process changes, small structural changes, or undergo a full hierarchy overhaul, leaders must be thoughtful about how they communicate and manage the change that they are promoting. Even under an entirely new organizational structure, old ways of doing business can still dominate unless everyone is on board with the need to do things differently.

Clear communication, both internal and external, and transparency about how decisions are being made, are the keys to managing and sustaining change. All too often, frustration about how change has happened can build resentment toward otherwise positive proposals. In contrast, by ensuring that stakeholders (e.g., staff, elected officials, the general public) understand and are comfortable with how decisions will be made and are clear about when their input will be included, change-makers create conditions for success.

Since public agencies exist at a unique nexus of public opinion, electoral politics, policy, and operational responsibility, managing change well is essential. Even well-liked changes that are agreed upon at a staff, or even leadership level can be undermined by poor communication with elected officials or the public, resulting in worse outcomes for the public.



There are, however, a few common strategies that can help guide organizations through change:

- Leaders must clearly define why changes are being made, articulate the benefits the changes will bring, and create a sense of urgency that compels near-term action. In many cases, these messages will not be 'one size fits all' and leadership should carefully consider how communications should be tailored for different audiences. For example:
- » When communicating with elected officials, leadership may want to emphasize how the proposed changes will maximize resources and increase efficiency;
- » When communicating with frontline staff, leadership may want to emphasize how the proposed changes will clarify their responsibilities and make their jobs easier;
- » When communicating with managers, emphasize how the proposed changes will empower them to quickly make decisions; or
- » When communicating with the public, emphasize how the proposed changes will improve service delivery and responsiveness.
- Organizational changes should be informed, guided, and executed by a diverse team that draws
 from across the organization, including staff from different levels in the hierarchy, from different
 functions, and with different backgrounds. Team diversity is essential to ensuring that the resulting solution meets everyone's needs in the best way possible. The team is not a rubber-stamp and
 should have a meaningful role in developing the proposed changes, crafting messaging, rolling out
 new initiatives, and stewarding change in the long-term.
- Organizations need to be clear and communicative about timelines for structural or process changes, including evaluation points, and be transparent about how and when decisions will be made. Clarity and transparency can assuage anxiety among staff about what changes are coming when and also helps keep efforts focused on the critical elements.
- Implementing organizational changes requires resources: staff time, budget, outside support. When done right, change can create long-term savings and efficiencies. Leadership needs to secure and devote the resources needed to achieve the proposed changes. Failing to follow through on promised actions can damage credibility and thwart organizational buy-in.
- Outside voices can provide perspective can provide outside perspective and be effective messengers. Partners outside the organization—other city departments, advocates, and stakeholders—can play a key role in identifying internal issues, developing innovative solutions, and helping to champion a proposed course of action. Leadership should involve outside partners at key points in the process, keep them informed, and emphasize how proposed changes will impact the issues they care about.
- Organizations should identify and pursue immediate-implementable improvements that demonstrate the tangible benefits changes can bring. Many people will not believe it until they see it, and quickly-implemented improvements can help tangibly demonstrate the benefits new approaches can bring.

"Do it with us, not to us." Managing Change in Toronto

In conversations with leaders and staff from transportation agencies across North America, one of the most consistent pieces of advice was the importance of meaningfully including staff in the process of identifying organizational issues, developing solutions, and making changes. Including staff from all levels not only builds support for change efforts, but it also leads to the best solutions.

Including staff from all levels not only builds support for change efforts, but it also leads to the best solutions

As part of its organizational review process, Toronto Transportation Services (TTS) assembled an Organizational Review Engagement Team to act as a bridge between the project team and staff throughout the organizational review process—providing feedback on substantive elements of the transition as well as helping to shape the com-

munications and messaging delivered to staff. The Organizational Review Engagement Team consisted of 23 staff from different units across Transportation Services—providing diverse perspectives and helping ensure that staff received the information they needed in the most impactful format. The Organizational Review Engagement Team was able to provide TTS leadership with insight into staff's questions and concerns so that leadership's communications could be tailored to provide staff with the right information in the right format. After the staff transition, the Organizational Engagement Review Team continues to work with leadership on change management initiatives that have expanded beyond their original mandate.

In addition to the Organizational Review Engagement Team, Transportation Services developed a custom, four day training program on change management that all staff were encouraged to attend. The training provides staff with the tools and knowledge they require to continue being effective in their roles and to provide support to their team members during the change process. Nearly 10% of the department's staff participated in the training.



58 NACTO Structured For Success

First Steps in Managing & Sustaining Change 59

APENDIX A FURTHER READING



AASHTO. (2016). "Transportation Governance and Finance: A 50 State Review of State Legislatures and Departments of Transportation".

Boston Consulting Group. (2003). Opportunities for Action in Organization: A Survivor's Guide to Organization Redesign.

Daft, R. (2016). Organization Theory and Design. Nelson Education.

Deloitte Consulting. (2009). Boosting Business Performance through Organization Design.

Deserti, A. & Rizzo, F. (2015). "Design and Organization Change in the Public Sector". Design Management Journal, 9(1).

Eggers, D. & Singh, S.K. (2009). The Public Innovator's Playbook: Nurturing Bold Ideas in Government. Deloitte Research and Ash Institute for Democratic Governance and Innovation, John F. Kennedy School of Government, Harvard University.

McConnell, T. & Sargent, A. (2007). Practical Approaches to Organization Design.

NACTO. (2018). Green Lights for Great Streets: The Agency Accelerator Project.

Salkin, S. (2016). "Rethinking Transportation in Pittsburgh".

WSP. (2018). Delivering Mobility: An Assessment of a Stand-Alone Atlanta Transportation Department.

Strategic Plans

Cities that are rethinking their transportation structures and processes often develop strategic plans to clarify the city and agency's transportation vision, and how they expect to achieve their goals. The transportation consulting team at <u>Bloomberg Associates</u> has worked closely with mayors and transportation leaders in a number of NACTO member cities, including Oakland, Detroit, Los Angeles, Chicago, Atlanta, Tampa, to re-envision how transportation functions are structured across the city's overall hierarchy. The strategic plans below reflect some of the outcomes of restructuring work in six NACTO member cities.

Los Angeles DOT. LADOT Strategic Plan Update 2021-2023.

City of Atlanta. (2019). One Atlanta: Strategic Transportation Plan.

City of Detroit. (2018). City of Detroit Strategic Plan for Transportation.

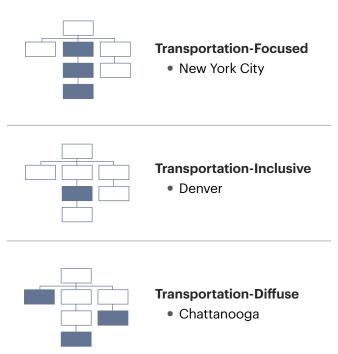
Chicago DOT. (2021). City of Chicago Strategic Plan for Transportation.

NYCDOT. (2008). Sustainable Streets: Strategic Plan for the New York City Department of Transportation.

Oakland DOT. (2016). City of Oakland Department of Transportation Strategic Plan.

APENDIX B ORGANIZATION CHARTS

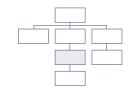
EXAMPLES OF CITYWIDE ORG CHARTS (Where transportation sits in the city)



EXAMPLES OF AGENCY ORG CHARTS (Examples of internal organization)

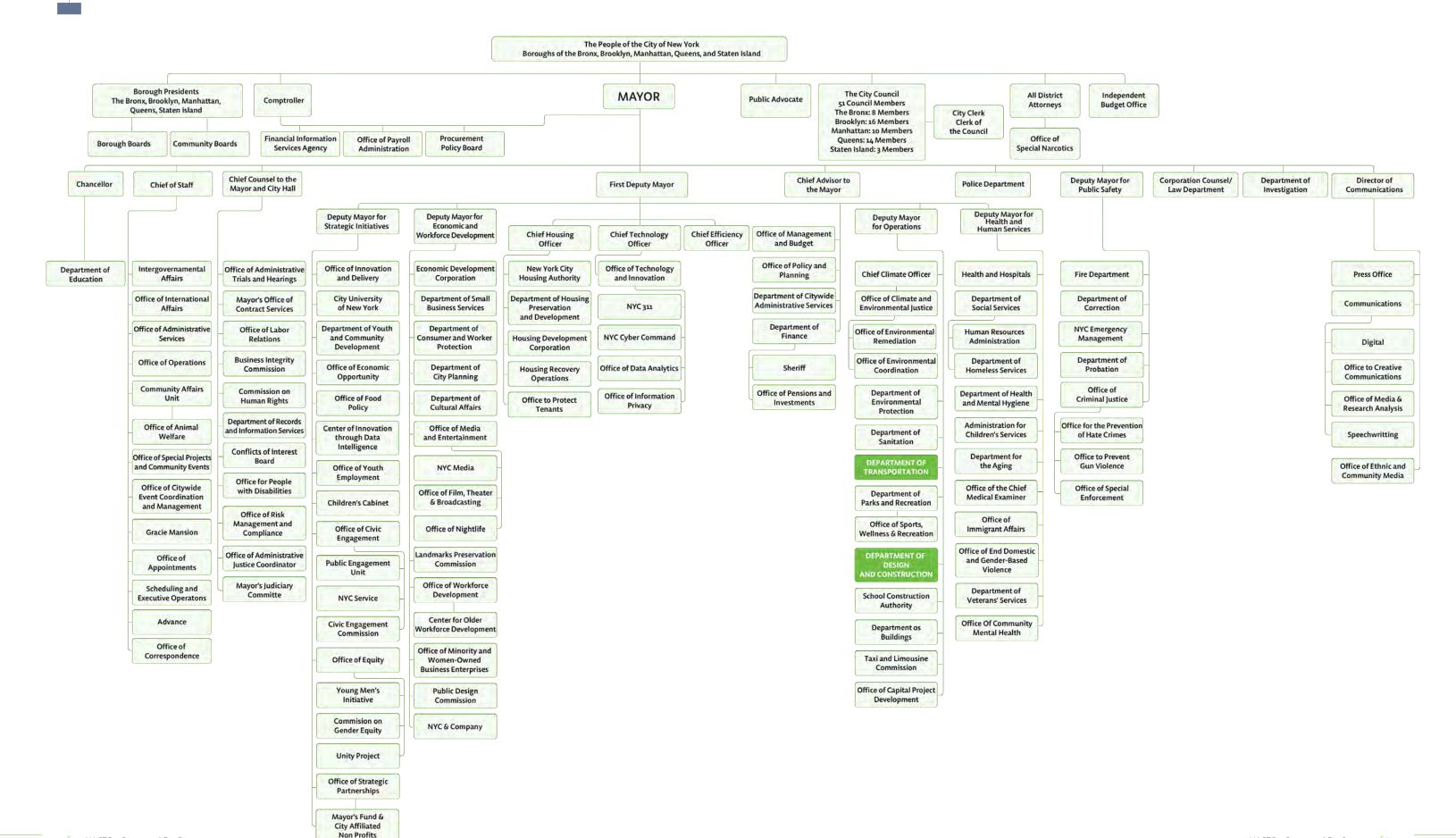
Transportation-Focused:

- Detroit Department of Public Works
- District DOT
- NYCDOT
- OakDOT
- Portland Bureau of Transportation
- San Francisco MTA
- Seattle DOT

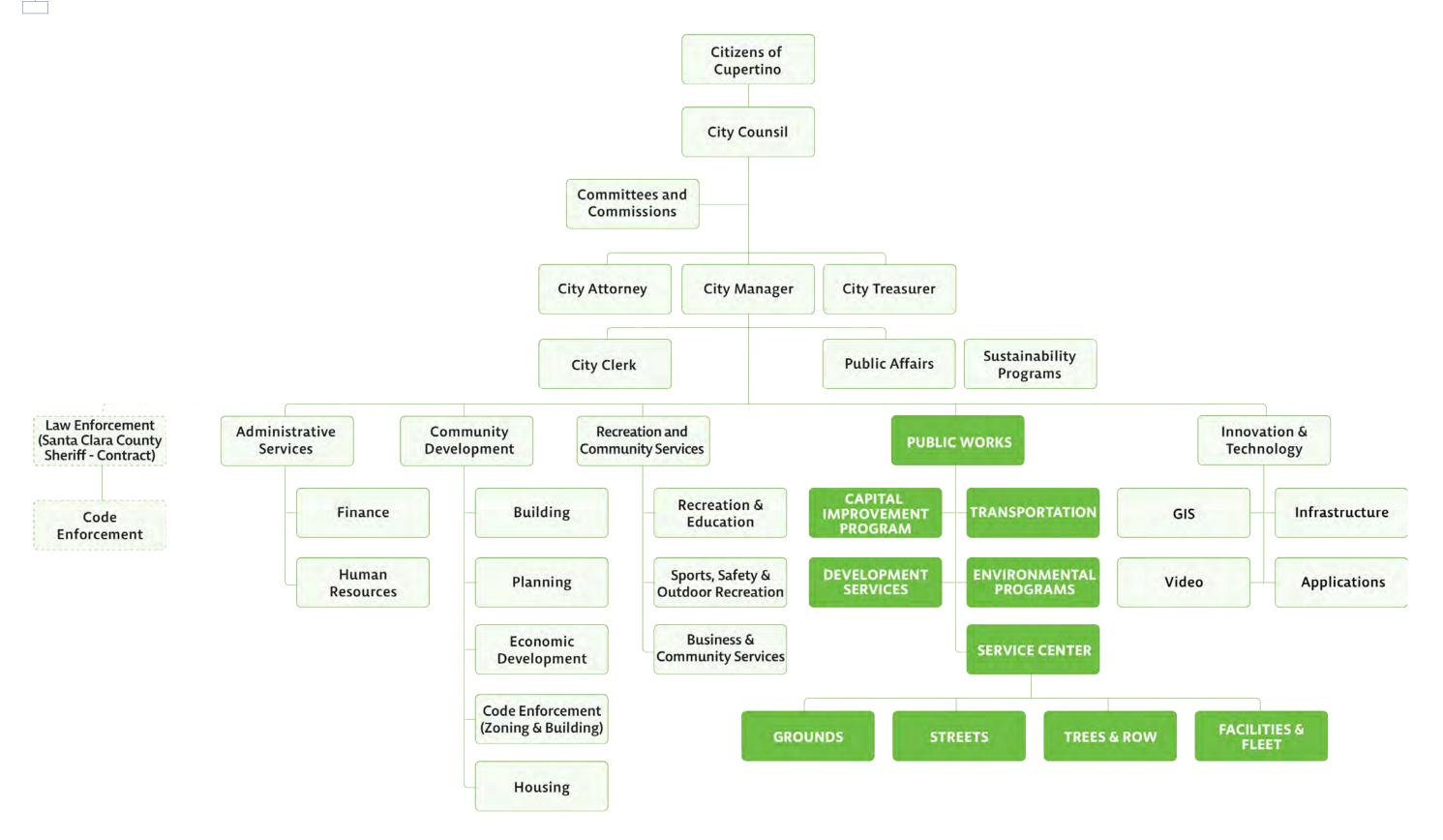


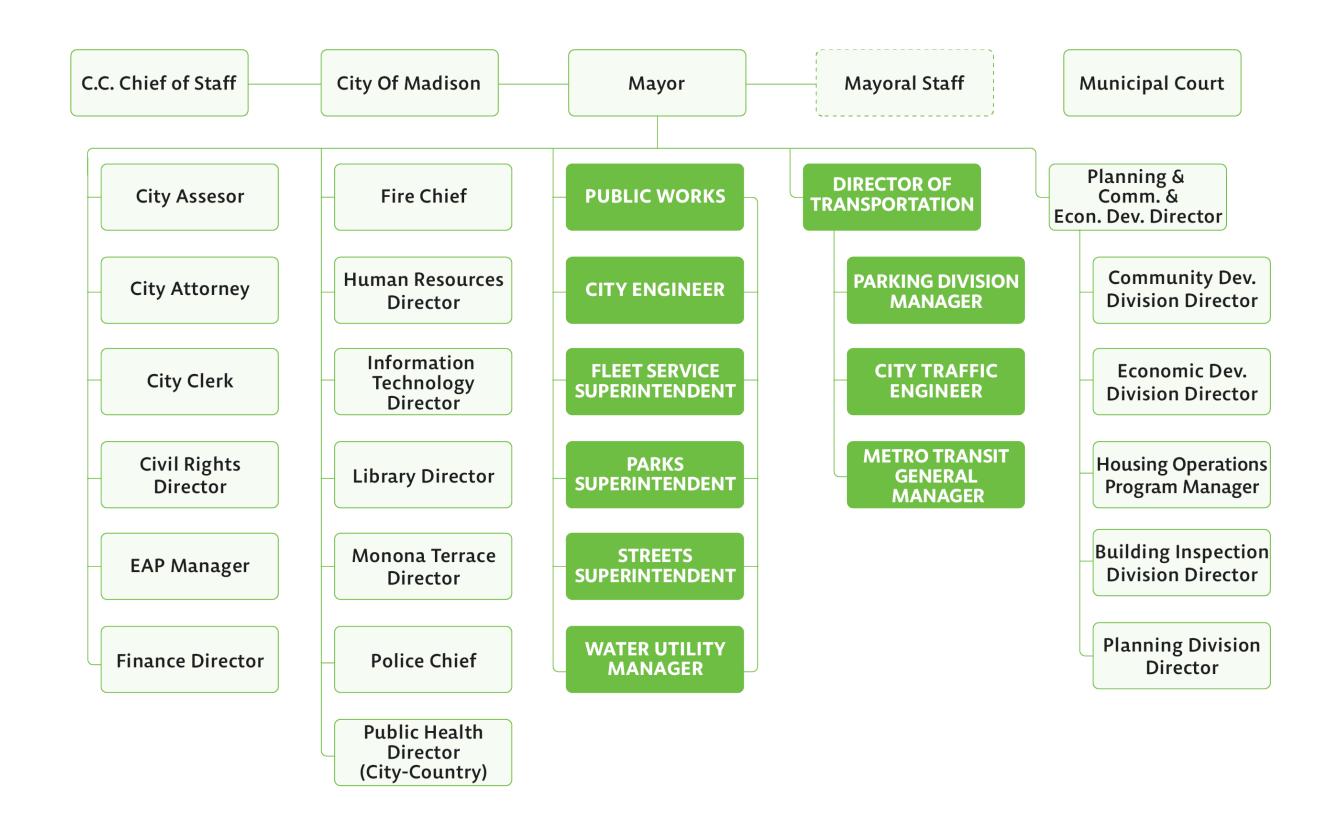
Transportation-Inclusive:

- Columbus Department of Public Service
- Denver Department of Transportation and Infrastructure

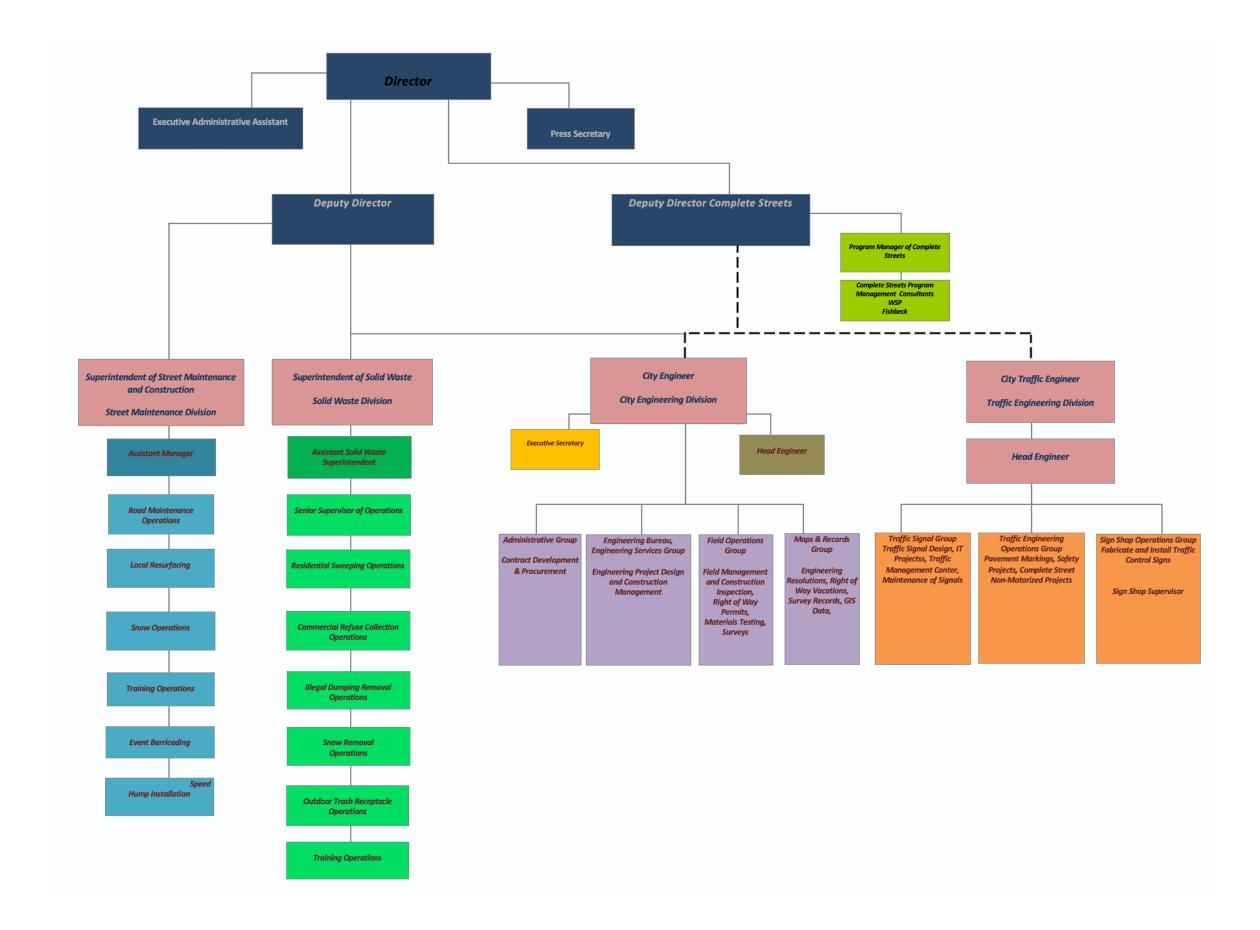


NACTO Structured For Success 65 _____

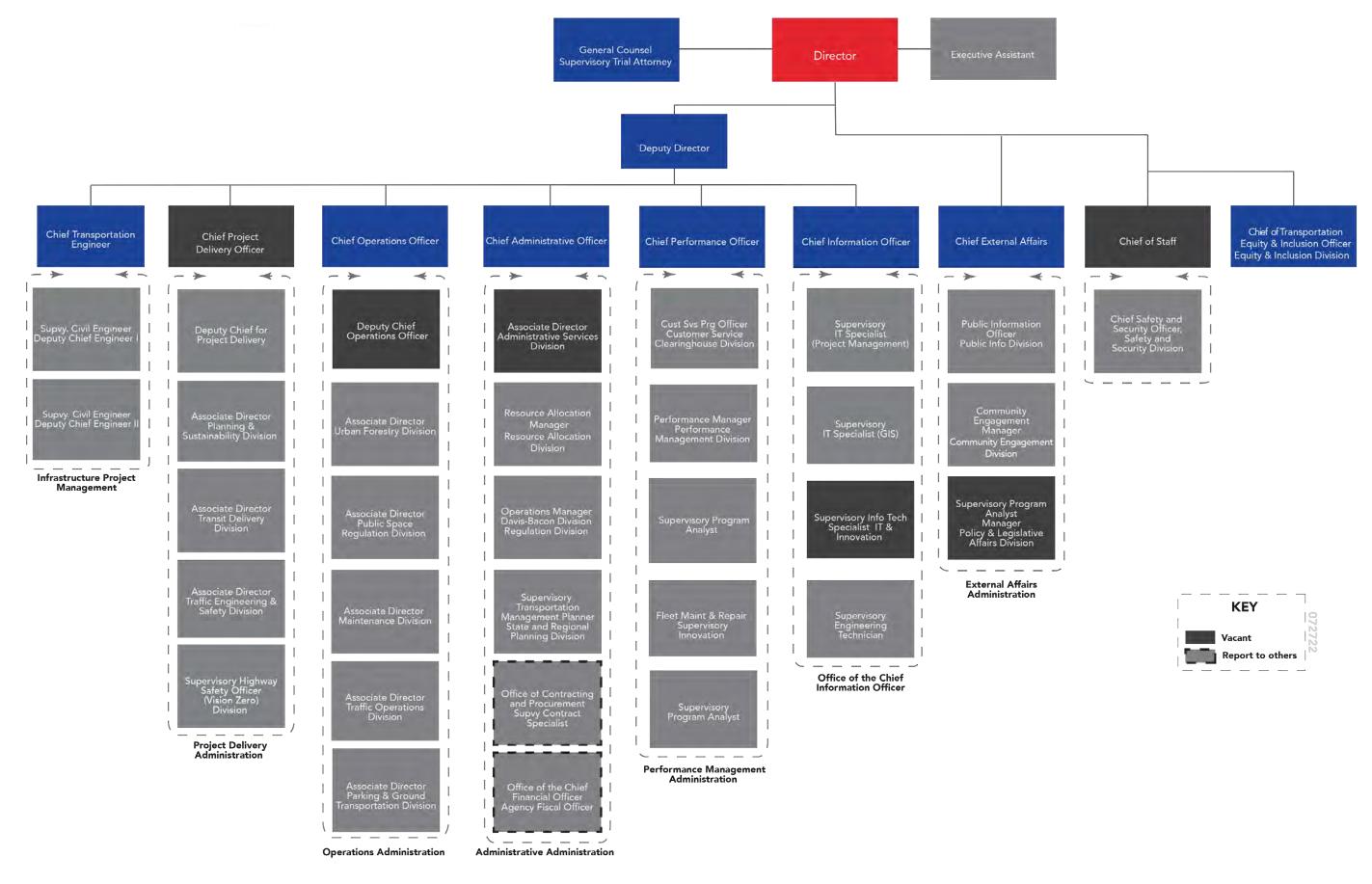


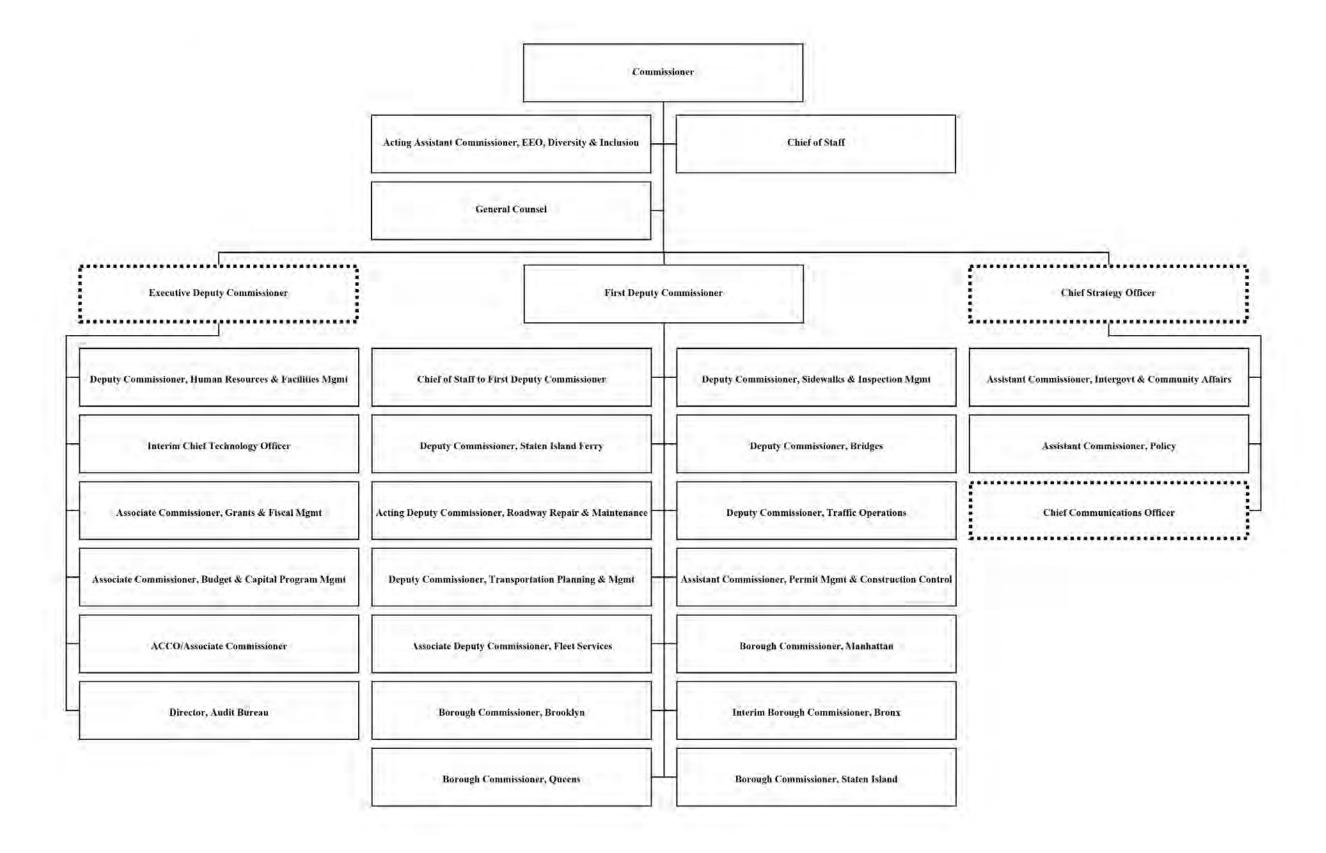


NACTO Structured For Success 69 _____

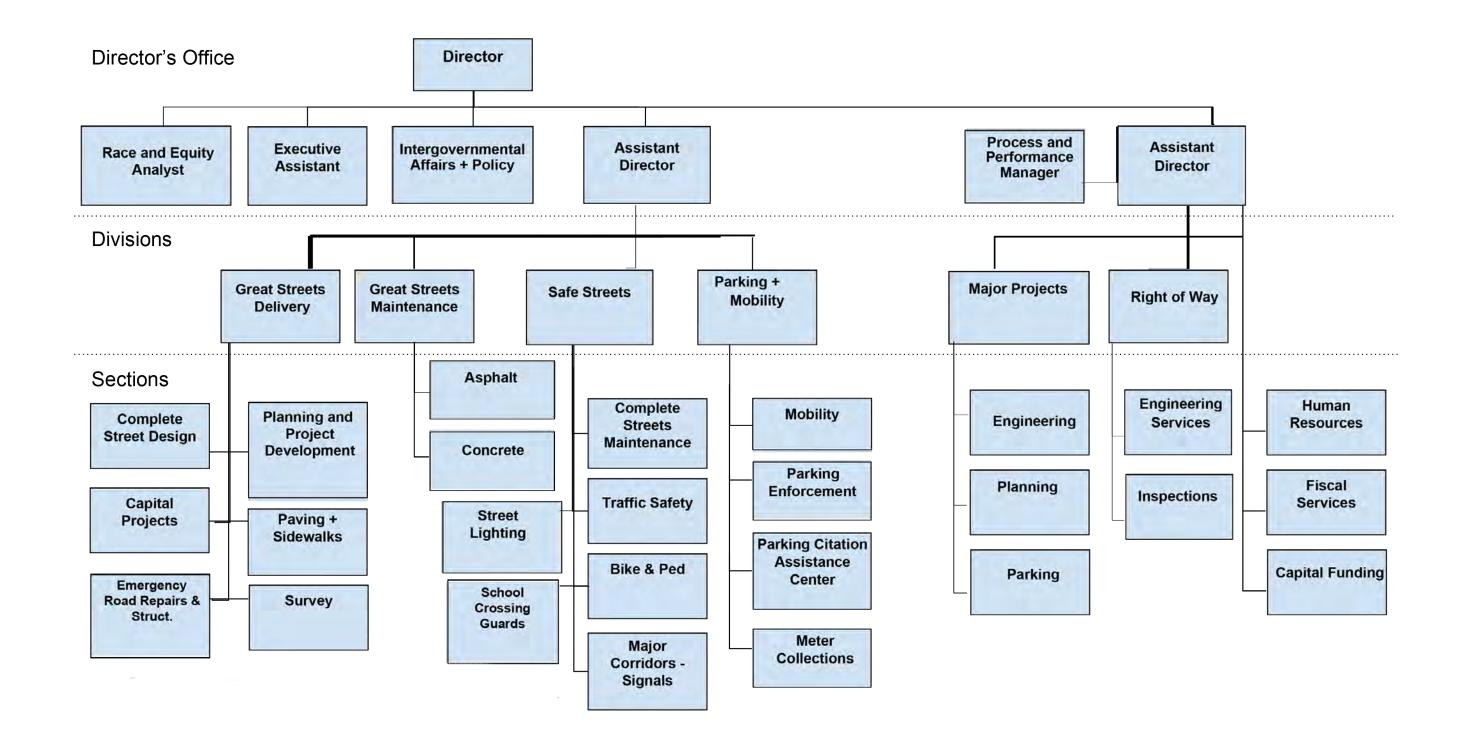


70 NACTO Structured For Success 71 ______

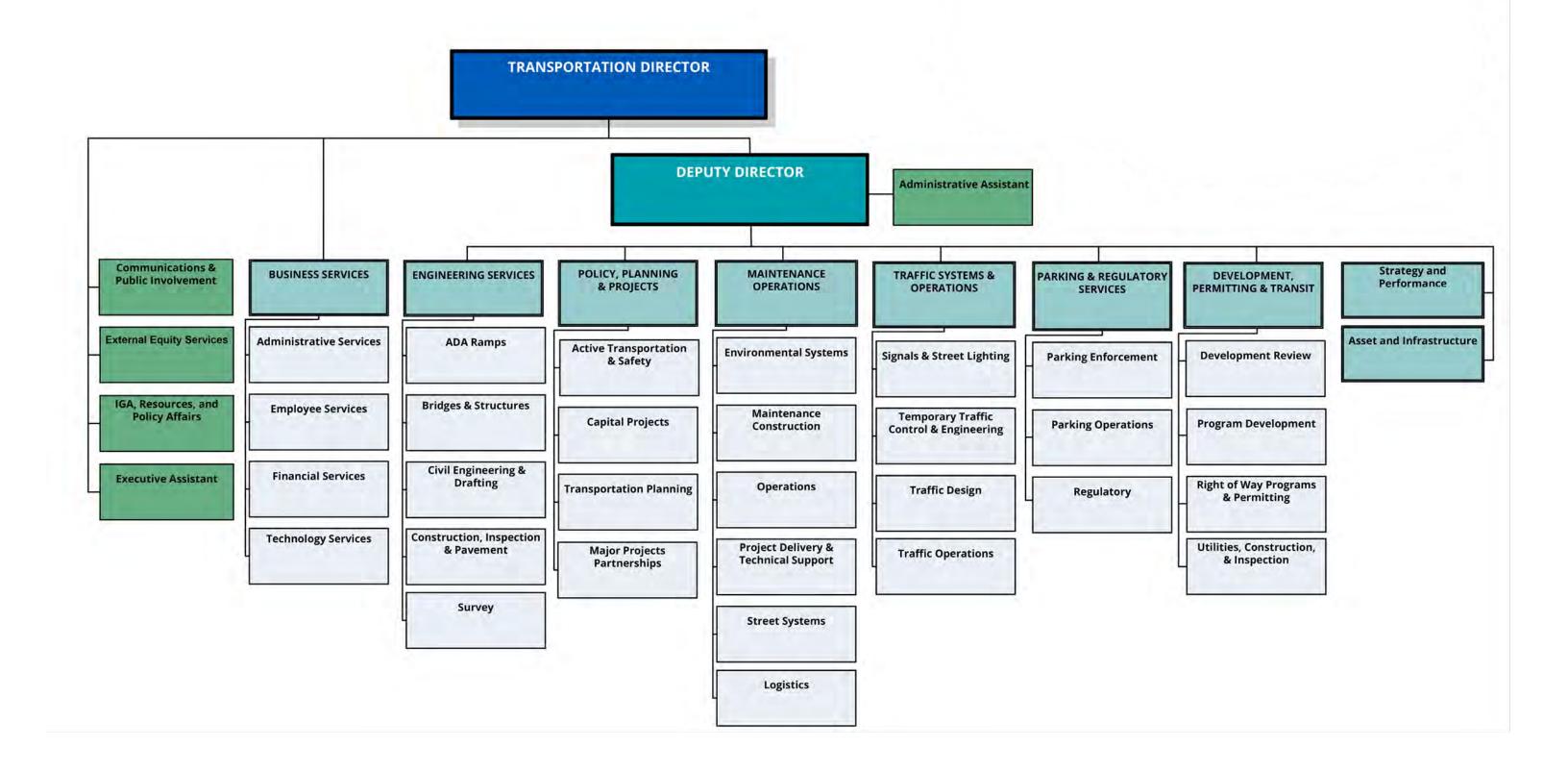




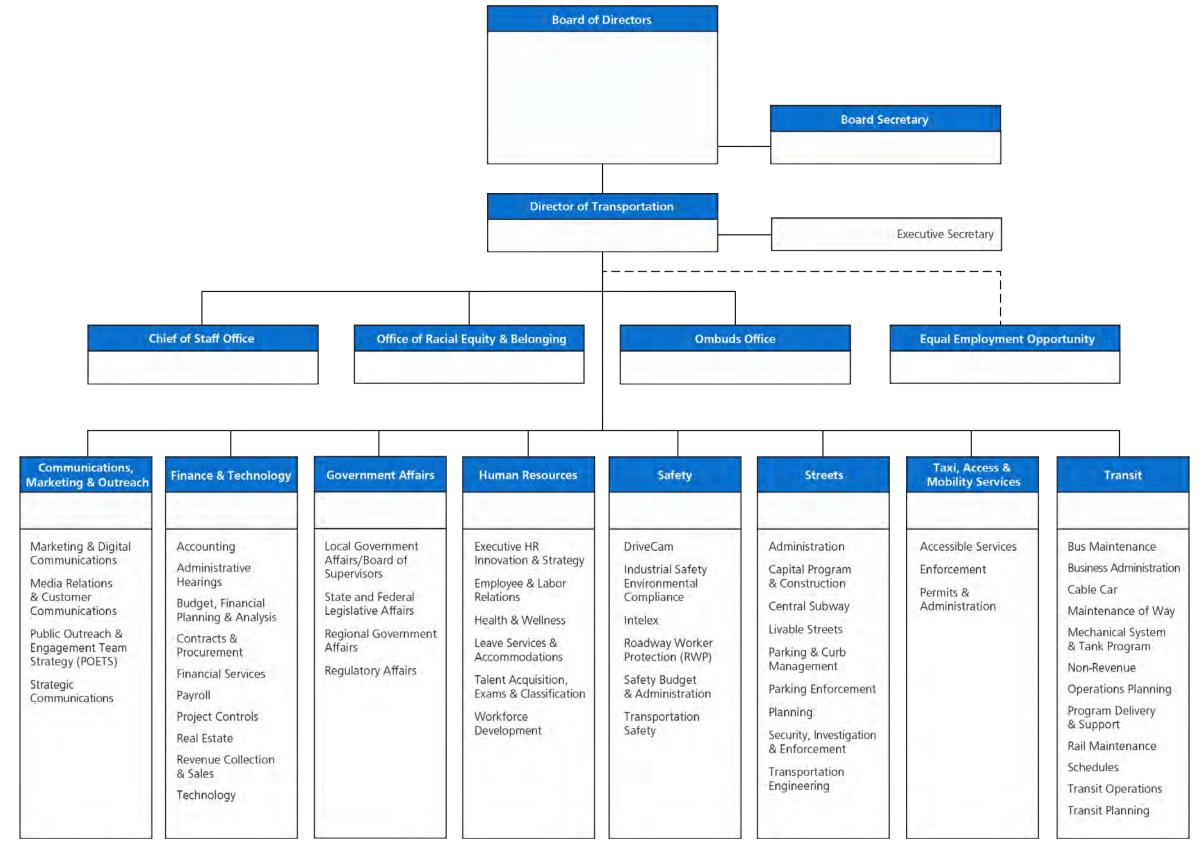
74 NACTO Structured For Success 75 ______



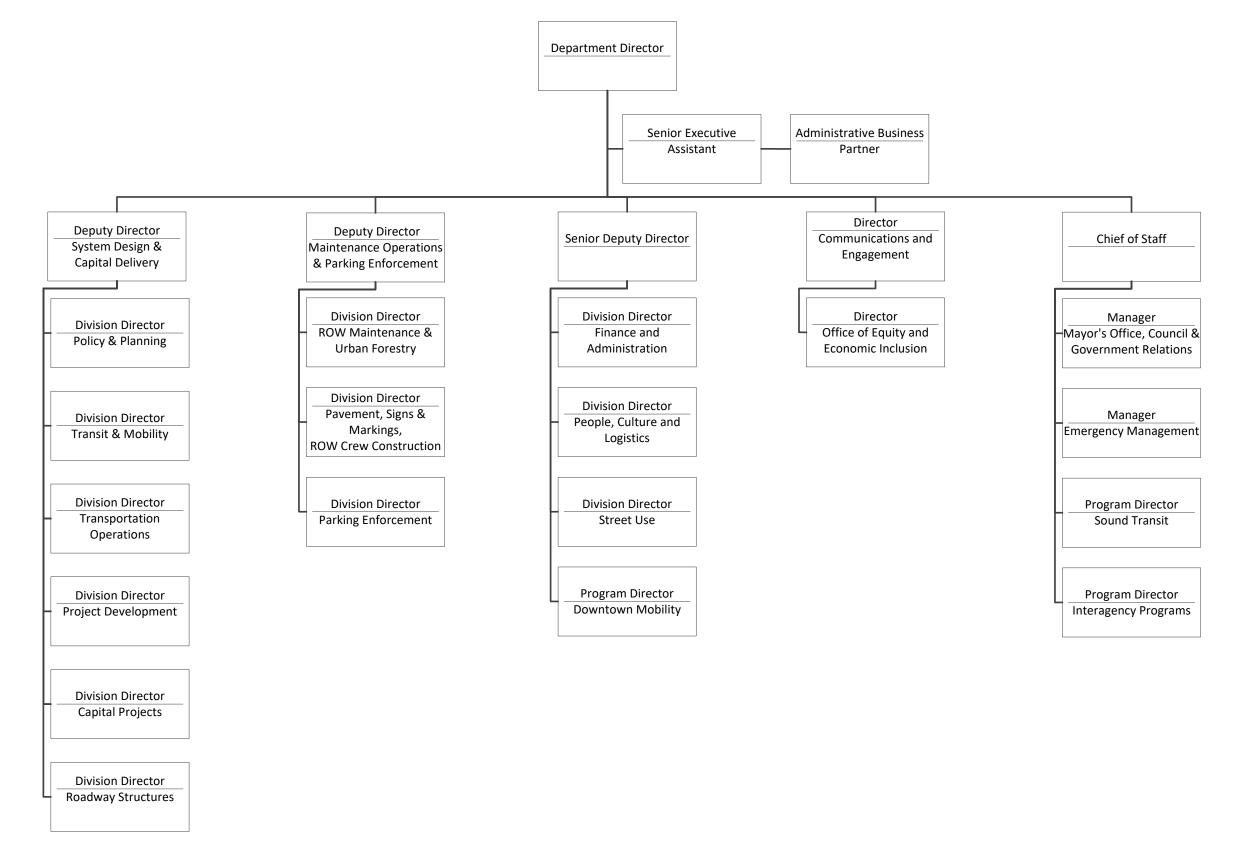
NACTO Structured For Success 77 ______



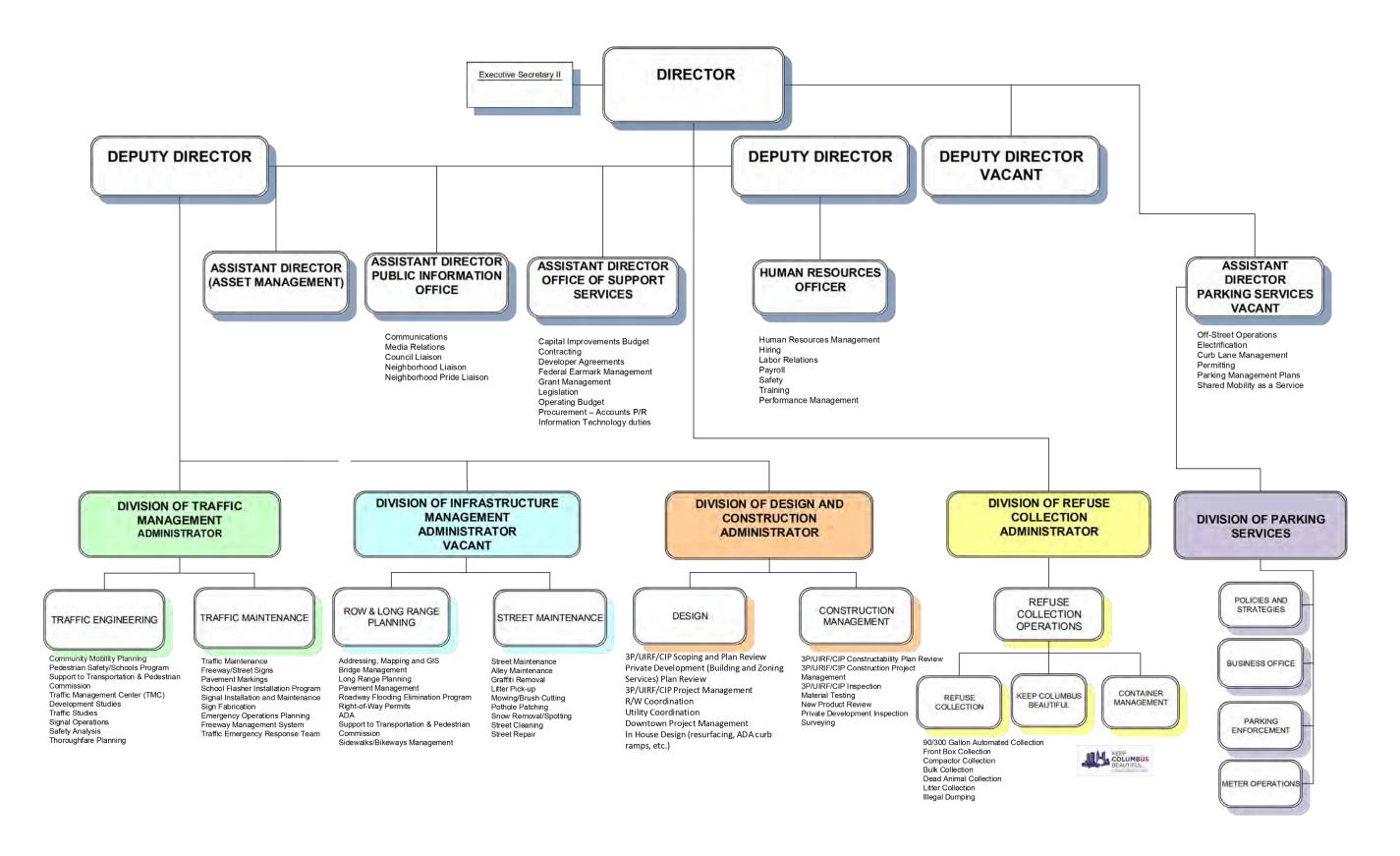
78 NACTO Structured For Success 79 _____

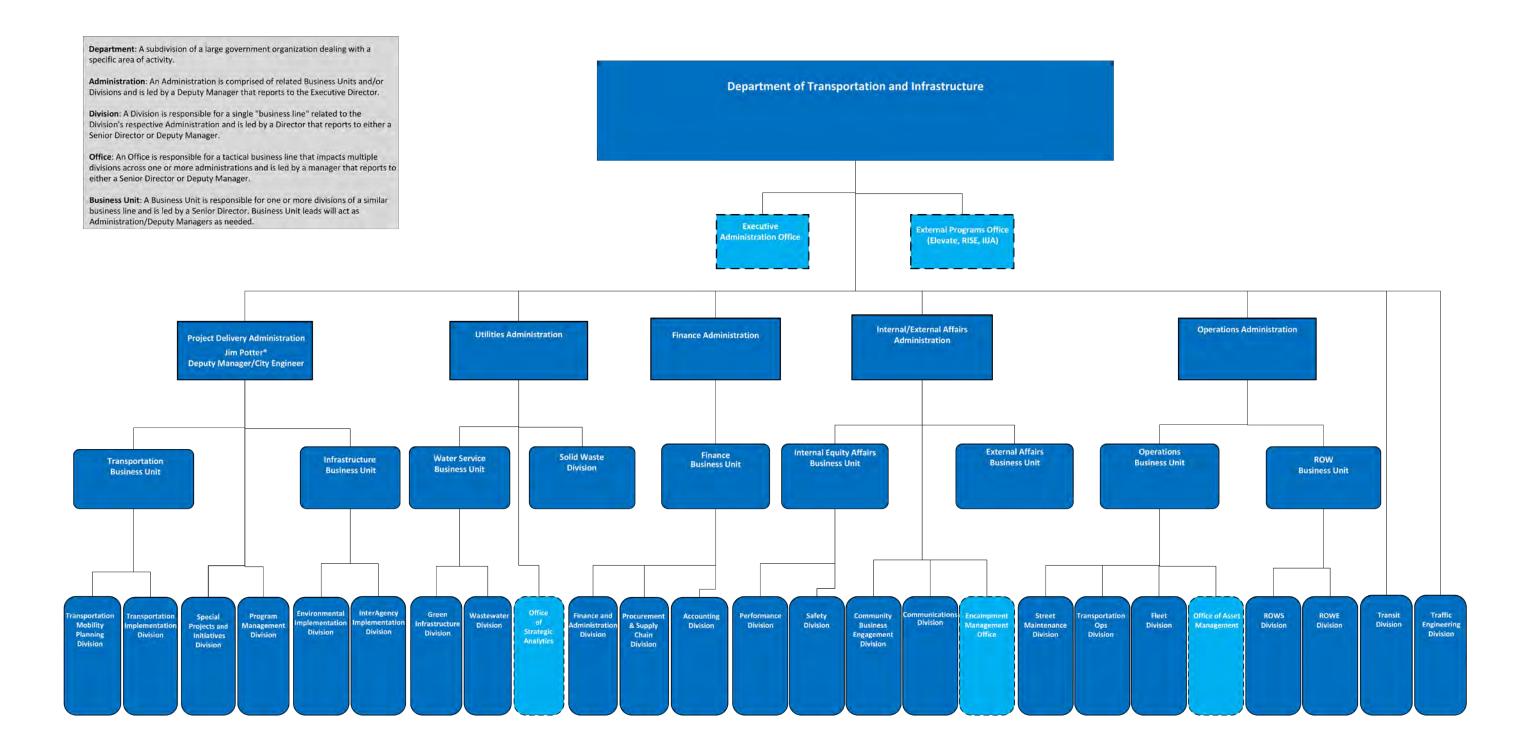


NACTO Structured For Success 81 _____



82 NACTO Structured For Success 83 _____





NACTO Structured For Success 87 _____

