



Meeting Agenda

October 18, 2023 1:00 p.m. – 4:00 p.m.
Appropriations Committee Hearing Room
Room 120, House Office Building, Annapolis, Maryland

1.	Opening Remarks	Frank J. Principe <i>Chairman</i>
2.	MDOT Project Prioritization Survey Results	Steve McCulloch <i>Department of Legislative Services</i> Caleb Weiss <i>Maryland Department of Transportation</i>
3.	Perspective from Local Government: Counties	Michael Sanderson <i>Maryland Association of Counties</i> The Honorable Calvin Ball <i>Maryland Association of Counties</i> Siera Wigfield <i>Garrett County</i> Bruce Gartner <i>Howard County Department of Transportation</i>
4.	Perspective from Local Government: Municipalities	Bill Jorch <i>Maryland Municipal League</i>
5.	Planning to Prioritization: A National Perspective	Matthew Hardy <i>Spy Pond Partners</i>
6.	Case Study: North Carolina Constructing a Prioritization System	Brian M. Wert <i>North Carolina Department of Transportation</i>
7.	Case Study: Illinois Data Driven Decisions	Holly Bienman <i>Illinois Department of Transportation</i>
8.	Closing Remarks	Frank J. Principe <i>Chairman</i>

Livestreaming and public notice of meetings will be posted on the Maryland General Assembly's Public Hearing Schedule (<https://mgaleg.maryland.gov/mgawebsite/Meetings/Month>) and the Commission's website (www.mdot.maryland.gov/commission). Meeting materials will be posted on the Commission's website (www.mdot.maryland.gov/commission).

AGENDA ITEM 1

VERBAL

AGENDA ITEM 2

Project Prioritization Survey Results

**Presentation to the
TRAIN Commission**



October 2023



Background

- The Maryland Department of Transportation (MDOT), seeking to develop an updated project prioritization process that would be an input into project selection and investment decisions, developed and distributed a survey seeking stakeholder input.



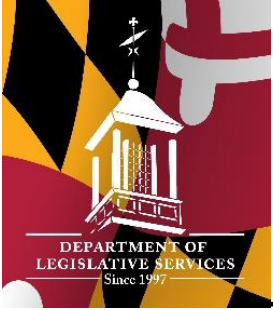
Background (cont.)

- MDOT received 33 responses (excluding 2 test responses by MDOT).
- Responses were received from the following self-identified affiliations:
 - County (12)
 - City (4)
 - Metropolitan Planning Organization (4)
 - Other (13)



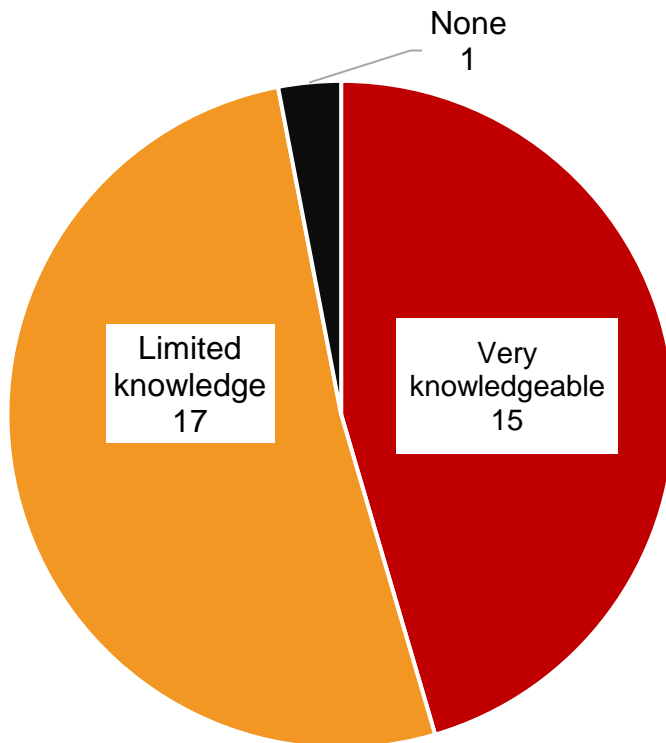
Observations

- The intent of the survey was to generate feedback and was neither designed to nor conducted in a manner which would allow drawing inferences from the responses received and applying them to any larger populations.
- Breakouts by self-identified affiliations are not meaningful; therefore, the following summaries use all responses.

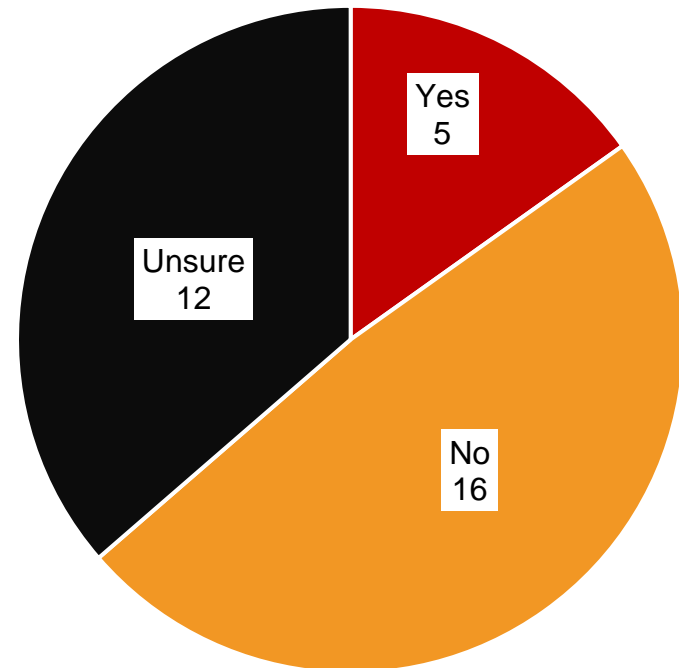


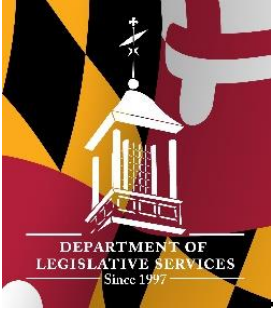
Current Consolidated Transportation Program (CTP) Project Selection Process

Knowledge of Process



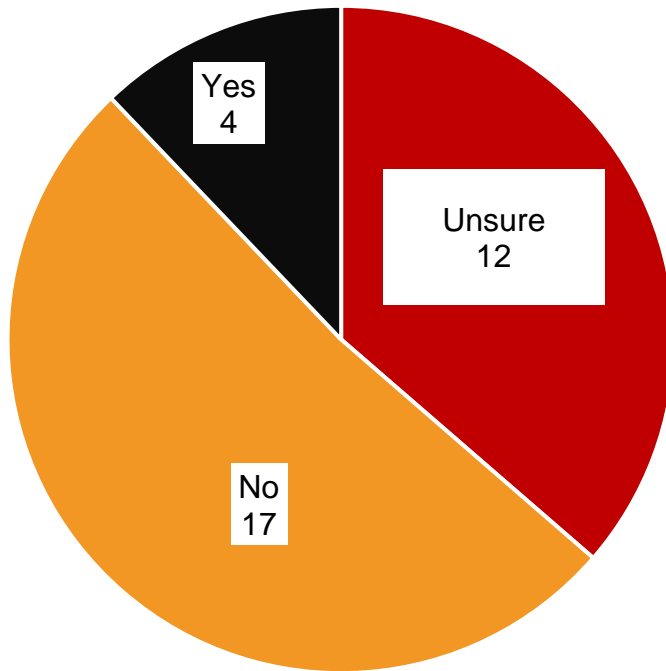
Understand Why Project Was/Was Not Funded



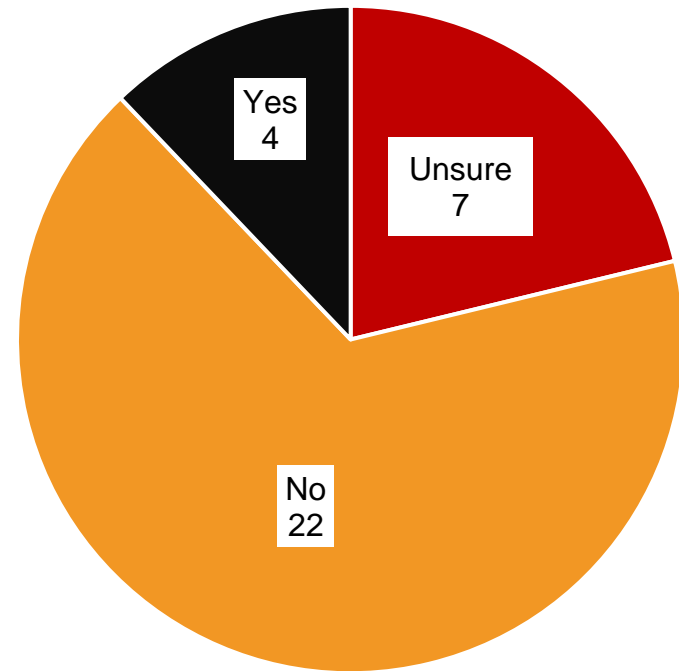


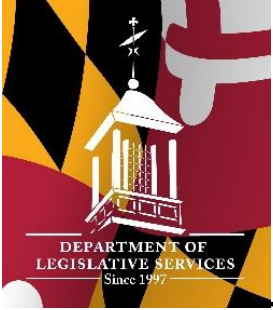
Current CTP Project Selection Process (cont.)

CTP Process Unbiased?



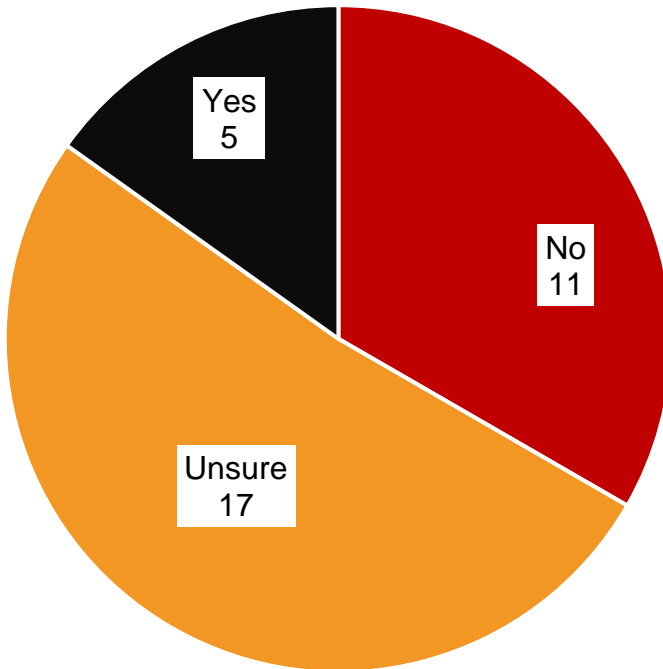
CTP Process Transparent?



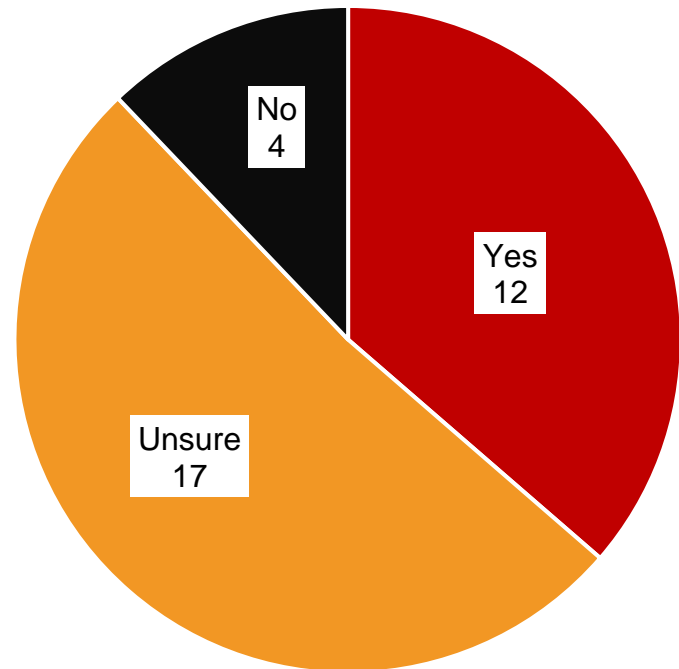


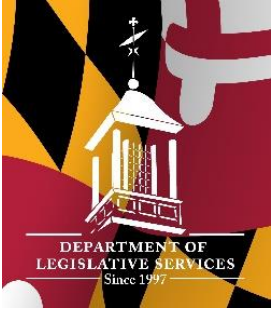
Current CTP Project Selection Process (cont.)

CTP Process Data Driven?



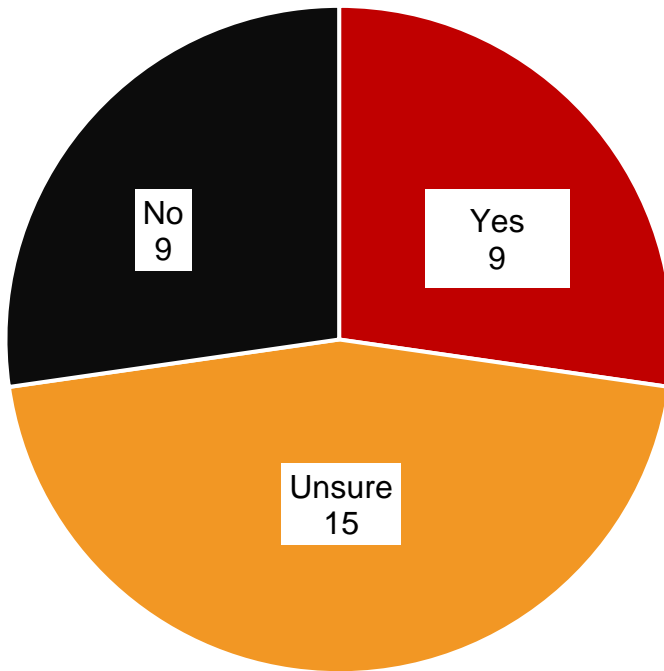
CTP Process Factors in State Goals?



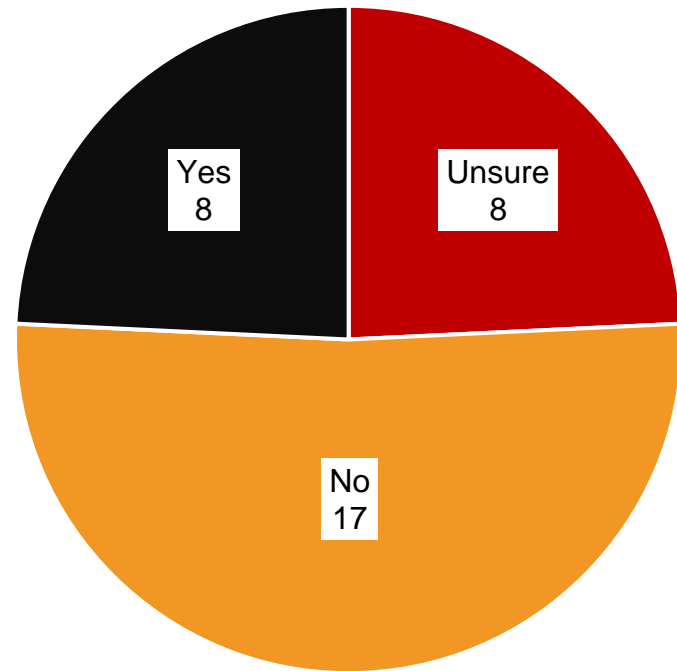


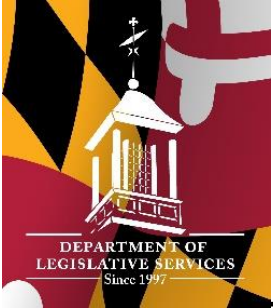
Current CTP Project Selection Process (cont.)

Respondent's Agency Input Considered in Project Selection?



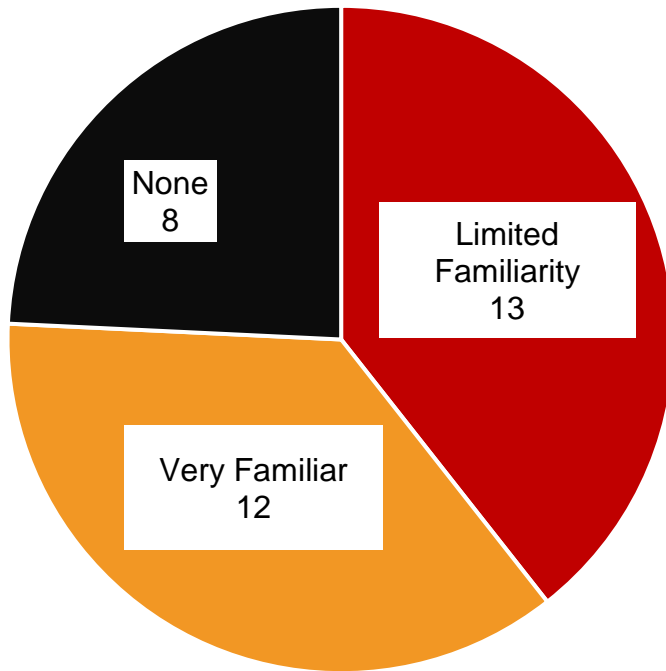
Was Feedback on Agency Input Received Regardless of Project Selection?



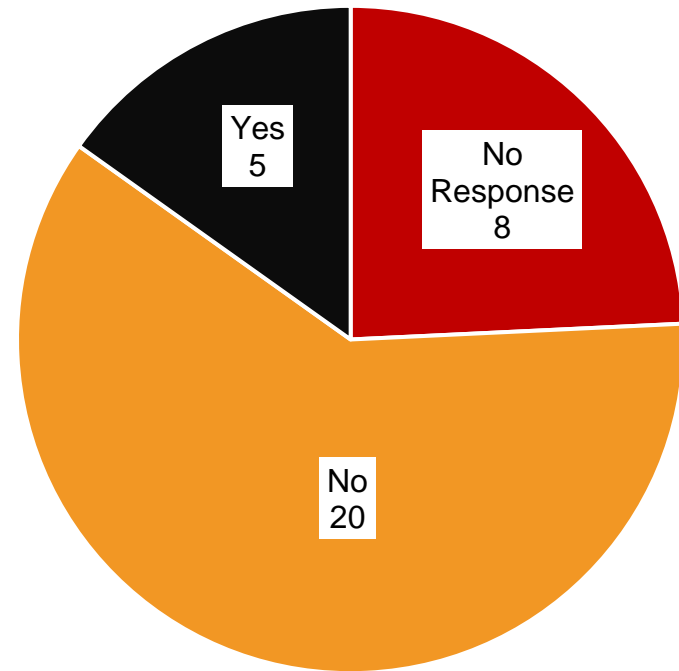


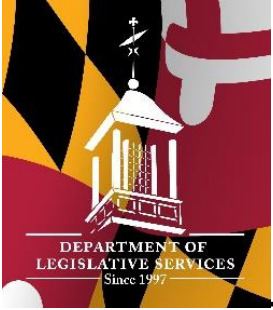
Chapter 30 of 2017 Scoring Model

Familiar with Process MDOT Uses to Score Projects?



Scoring Results Reflected in Projects Selected for Inclusion in CTP?

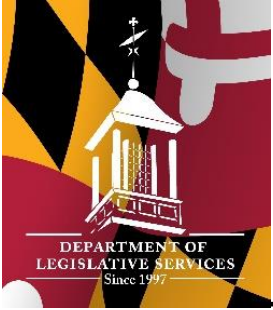




Future Prioritization Process

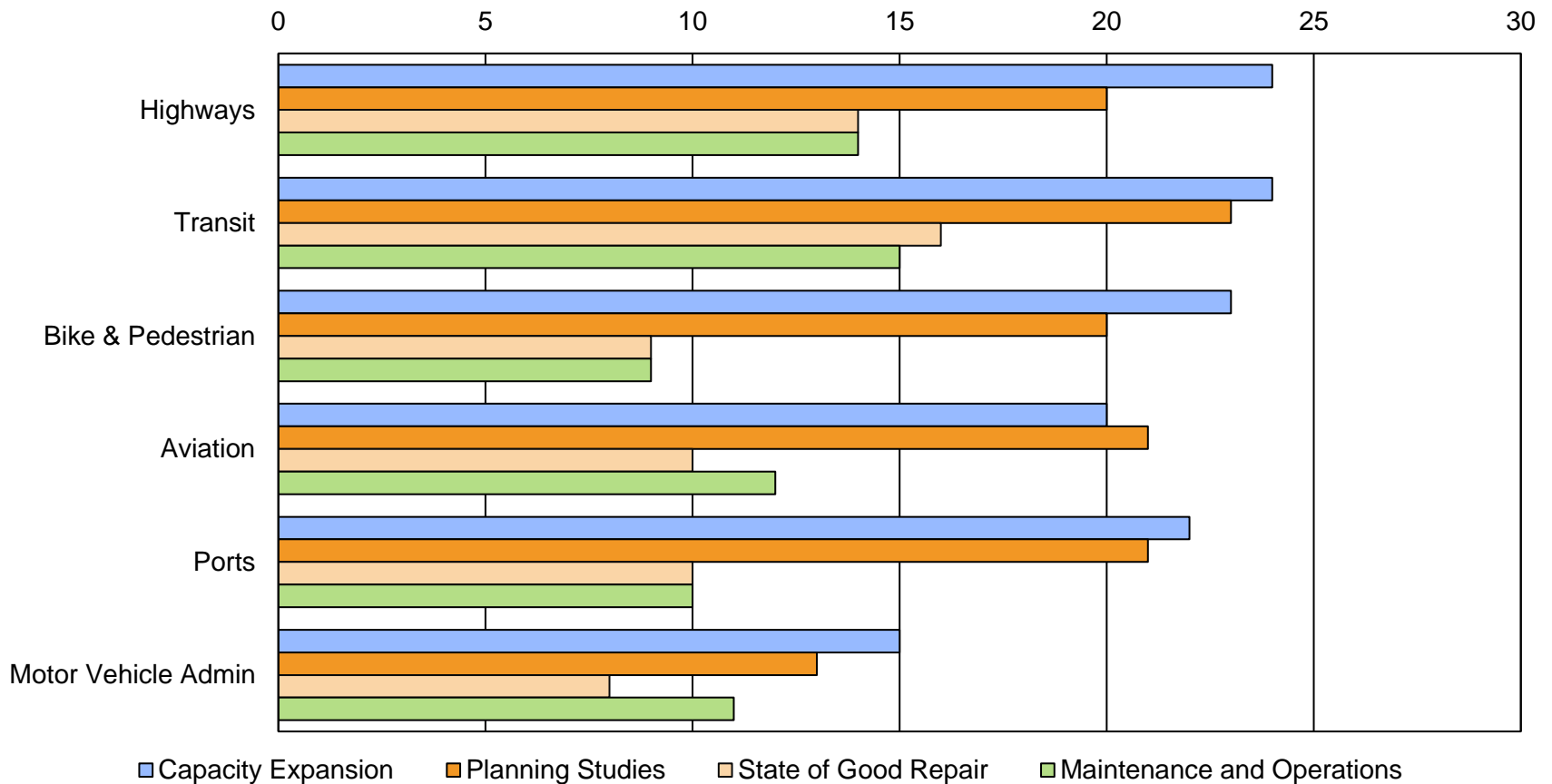
How important is it for an MDOT project prioritization process to address the following elements?

	<u>Important</u>	<u>Neutral</u>	<u>Not Important</u>
Resource Allocation	29	4	0
Benefit-cost Analysis	29	3	1
Goal Alignment	25	6	2
Public Engagement	23	9	1
Data-driven Decision Making	30	1	2
Alignment with Existing Plans	21	10	2
Equity and Social Considerations	28	4	1
Adaptability to Changing Conditions	26	7	0



Future Prioritization Process (cont.)

By mode, which types of projects should go through a prioritization process? (Number of responses)





Conclusions

- Keeping in mind that the limited number of responses prevents drawing inferences to larger populations:
 - most responses related to the current CTP project selection process and Chapter 30 scoring system were not positive;
 - most responses agreed that it was important for a future prioritization process to address all elements listed in the survey; and
 - most responses indicated that both capacity expansion and planning studies for most modes should go through a prioritization process.

AGENDA ITEM 3



October 18, 2023

Frank J. Principe, Jr.
Chair, Maryland Commission on Transportation Revenue and Infrastructure Needs
7201 Corporate Center Drive
Hanover, Maryland 21076

Dear Mr. Principe,

The Maryland Association of Counties (MACo) appreciates the chance to share views with the Commission on behalf of its 24 subdivisions. Counties have played a guiding but advisory role in the development of state projects for years, and generally believe that this system serves multiple interests to help align state-level projects with needs, patterns, and growth planning all experienced and managed locally. MACo and its county members stand ready to work with the Commission, and State transportation leaders, to help improve and refine these processes as warranted.

Some broad comments on these processes are included below for the Commission's consideration:

Local Engagement Serves an Important Coordinating Interest

Specifics aside, a process that seeks priority projects from local leaders is an important process to mesh the eventual State transportation priorities with other related considerations. Local governments -- with their broad responsibility for infrastructure, public safety, and land use planning -- bring the on-the-ground perspective both from today and for tomorrow. Current traffic patterns, sites in need of safety improvements, and targets for future water/sewer infrastructure expansion are all in the purview of county governments -- and surely are worthy components of any State project considerations.

Standardization of Priority Submissions -- Potential Benefit, With Practical Considerations

Among the topics raised in early Commission meetings and cued for county input here, is the potential for more uniformity of the priority submissions from counties to the Department. County input on this topic has varied widely, with some jurisdictions indicating that a more standardized process may have benefits, by setting clearer expectations of the scope needed for proper State consideration.

However, one broad consideration is that a reformed process should not, itself, become a barrier to worthy projects gathering fair consideration. If the pursuit of uniformity translates to a far more complex and burdensome set of required submissions, some jurisdictions may lack the in-house

expertise to fully prepare materials of a high standard, and may leave worthy projects without the full documentation required/expected. This is a concern of county governments in particular, in light of the still-lingering reduction in Highway User Revenues (state support for local transportation), where county governments still receive only a modest fraction of their longtime funding allocation (since reductions made in 2009). Without any authority to levy local transportation revenues, many counties continue to operate with very thin public works personnel, as they remain deeply under-funded.

Counties Would Welcome Clearer and Earlier Information About Project Selection

Procedurally, county leaders typically coordinate across multiple local agencies and gather community input to submit their MDOT priority lists in April of each year. Feedback is solicited through direct conversations in August during the MACo conference, and later in the year based on early draft CTP documents. Multiple jurisdictions have expressed interest in receiving clearer indications of favored projects, and potential deficiencies in projects not selected for inclusion sooner in the timetable, in an effort to avoid a ritual “sift through the whole report” process needed to ascertain local project status. If there are changes to the process that would help MDOT provide more constructive feedback to counties, MACo would be interested in working with MDOT on those improvements.

Any Scoring System Used in Project Selection Can Benefit From “Lessons Learned” Already

While county governments are not central to the internal state process for project selection, MACo advises that Maryland’s earlier forays into this field may serve to illuminate a wise path forward for any such efforts. In its prior form, a proposed Maryland scorecard that sought to award points to every project across Maryland’s consolidated, multi-modal surface transportation system was fraught with regional and political concerns. Any scoring system to be used for project evaluation may benefit from recognizing the inherent difficulties of a single tool directly assessing a pressing congestion or safety issue of today against a dramatic capacity increase for tomorrow.

Virginia’s own “Smart Scale” scoring system embeds these principles in multiple ways, with state funding tiered into different structural priorities in advance of any application of the numeric evaluation system. Even with such safeguards, the Commonwealth’s own process review currently underway continues to contemplate systemic biases across modes and regions. Their “area and type factor weighting” is among the components under review for refinement, based on years of implementation thus far.

The Importance of State Projects Towers in Local Planning, Due to Funding Cuts

In 2009, responding to the “great recession,” Maryland made mid-year reductions to Highway User Revenues, cutting 90% of the funds sent to nearly every local jurisdiction for that troubled year. That seemingly temporary measure found its way as a permanent funding base, with formulas rewritten for

subsequent years. Incremental progress has benefitted municipal governments and Baltimore City, but 23 county governments remain funded at roughly one fourth of their 2009 levels, in nominal terms. County transportation efforts have suffered a lost decade and then some – a diversion of billions of dollars away from community-level infrastructure.

The ideal partnership in Maryland worked for decades – with centralized state revenues supporting both state and local transportation needs. Without any local transportation revenue authority, counties have been compelled to divert funds from education and public safety, among other needs, to maintain even a spartan system repair effort. State projects, especially those interacting with local roads (often the most challenging safety issue) are a critical component to help fill in this persistent and unwelcome funding gap. A longer-term plan to restore the true funding partnership is the more welcome outcome.

Again, county governments welcome the opportunity to weigh in on these matters before the Commission. We stand ready to work together to advance wise and efficient transportation investments to serve Maryland's communities for this generation and beyond.

Regards,

A handwritten signature in black ink, appearing to read "Michael Sanderson". The signature is fluid and cursive, with a large initial "M".

Michael Sanderson
Executive Director, MACo

AGENDA ITEM 4



Maryland Municipal League

The Association of Maryland's Cities and Towns

September 26, 2023

Thank you for the opportunity to provide comments to the Commission on Transportation Revenue and Infrastructure Needs on behalf of the 160 local governments represented by the Maryland Municipal League (MML). The long-term viability of State transportation funding is critical to local governments and our shared constituents.

Municipalities' primary interest in the Consolidated Transportation Program (CTP) is the apportionment of highway user revenues (HURs) to local governments. For decades, State law has prescribed a formula for the calculation of total HURs: funds are deposited into an account within the Transportation Trust Fund called the Gasoline and Motor Vehicle Revenue Account (GMVRA), with a distribution allocation to the State and local governments. This revenue-sharing arrangement is critical to local governments' ability to maintain local roads and other transportation infrastructure.

As new transportation revenue and distribution plans are evaluated, maintaining at least the current level of funding to municipalities is essential. Municipalities represent some of the most densely populated areas of the State and serve as the economic hubs of their region. This results in a disproportionately high deterioration of municipal roadways. The General Assembly increased the share of HURs to local governments in 2022 yet in many cases, municipalities use general funds to supplement HURs to maintain or upgrade their transportation systems.

Municipalities also engage in the CTP process through local priority letters and Chapter 30 project evaluations. The large-scale transportation projects more commonly found in the CTP are less common in municipalities than use of HUR funds for local projects; however, access to the CTP development process is still important. Local letters allow for municipal voices to be heard on large-scale projects in their region and promote local government collaboration. Chapter 30 scoring also contains a local priority element that assists in identifying important projects. While most of the State-funded projects are not on municipal roadways, they have a local impact, and maintaining a process by which local governments can provide meaningful input in some manner is imperative.

Local governments are partners with the State in maintaining safe and effective transportation for all Marylanders. MML is available as a resource as the Commission weighs options for transportation funding and expenditures.

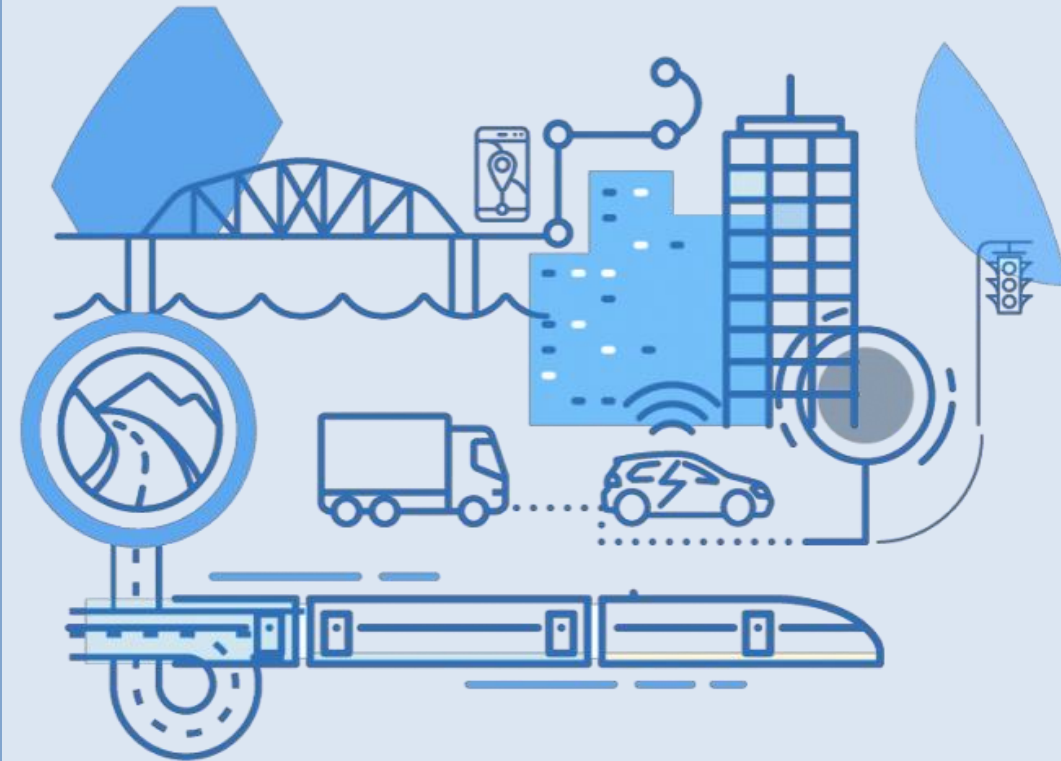
Theresa Kuhns
Chief Executive Officer
Maryland Municipal League

AGENDA ITEM 5

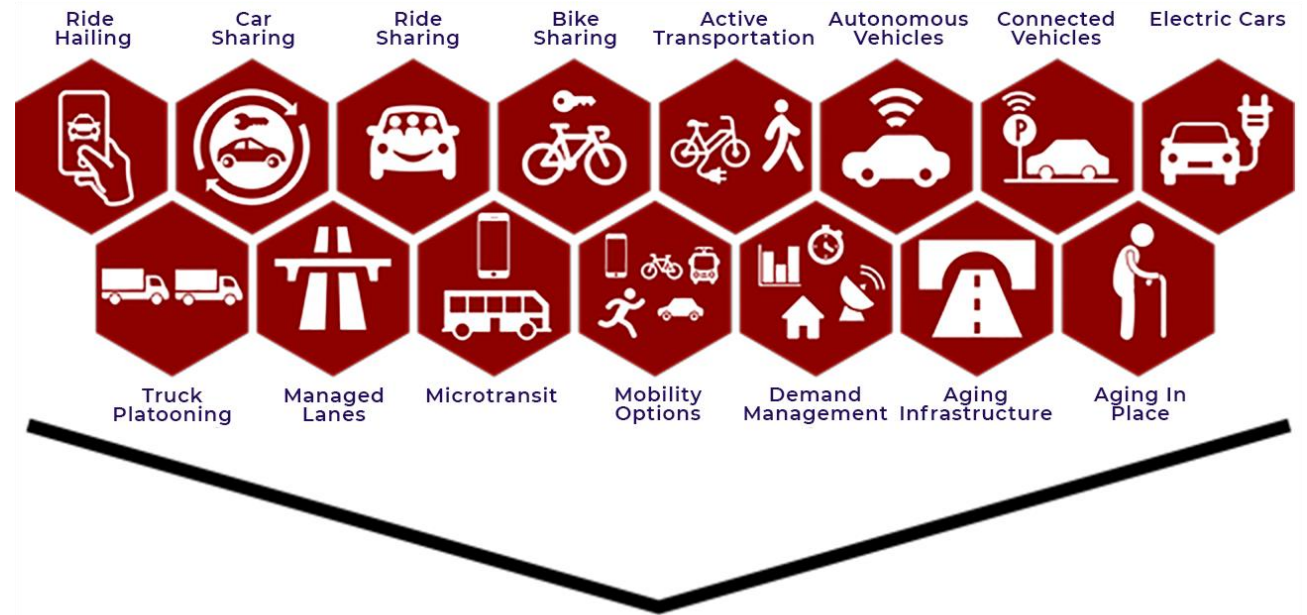
Planning to Prioritization: A National Perspective

Matthew Hardy, Ph.D.
Senior Manager
mhardy@spypondpartners.com

October 18, 2023



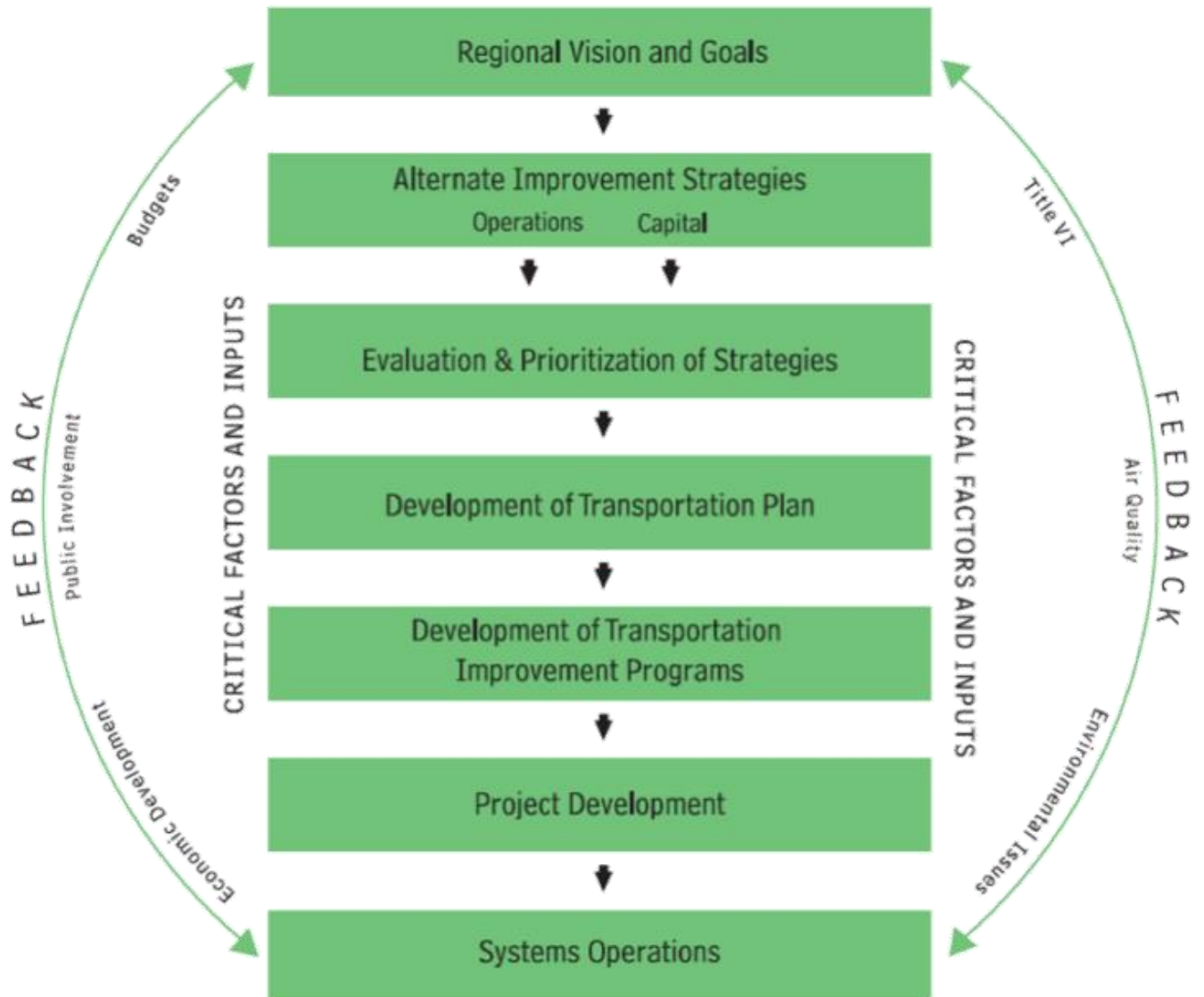
What is transportation planning?



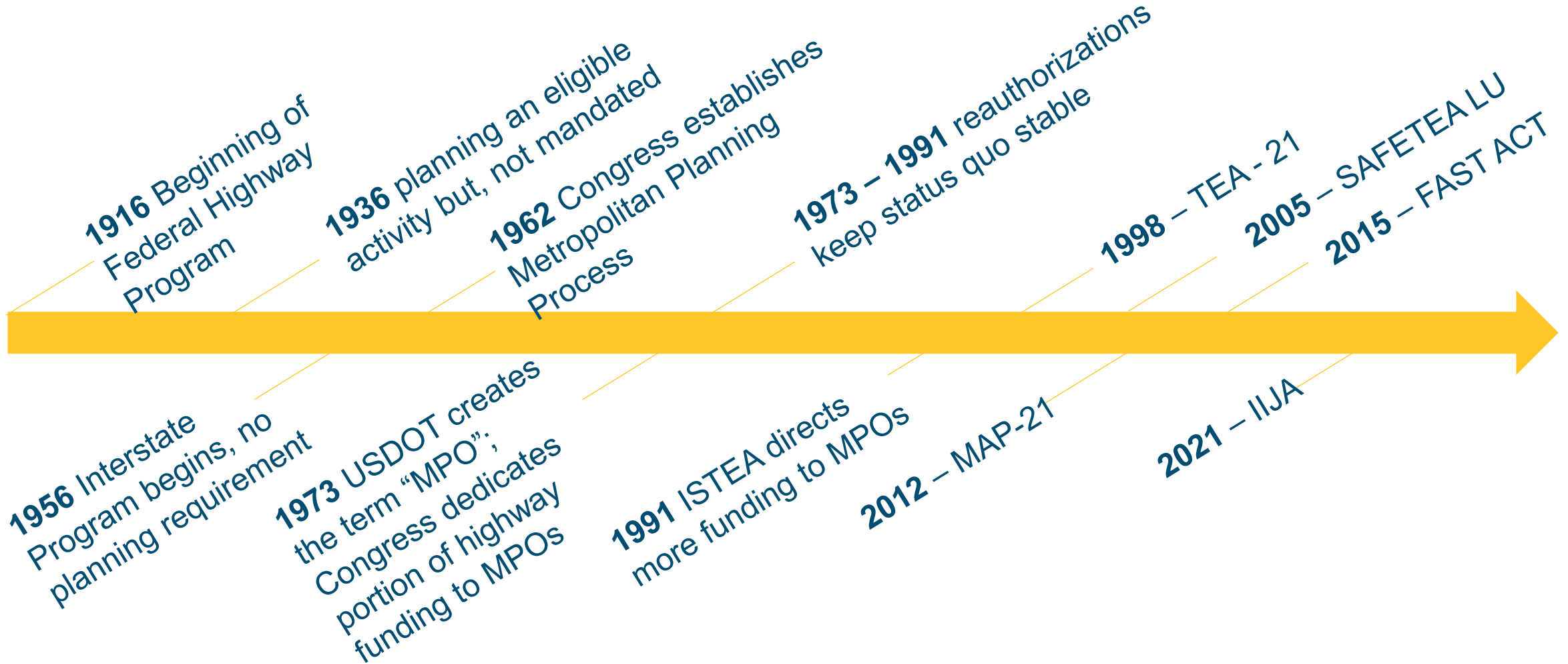
Who does Transportation Planning?



A...
Continuous...
Cooperative...
Comprehensive...
Process



A Very Brief Federal Legislative History



Planning Products and Process

Also...

Transportation Asset Management Plan
Strategic Highway Safety Plan
ITS, ADA, TSMO, CAV, Facilities, etc.

Minnesota GO 50-year Vision

What are we trying to achieve?

Statewide Multimodal Transportation Plan

How are we going to achieve it?

Modal and System Plans

What does that mean for each type of transportation?

< Considered by the State Highway Investment Plan >



Greater
Minnesota
Transit
Investment Plan



Pedestrian
Plan



Bicycle
Plan



State
Highway
Investment
Plan



Freight
System
Plan



Aviation
Plan



Rail
Plan



Ports &
Waterways
Plan

< Considered by the Freight System Plan >



Planning Products and Process: Iteration



2012
SMTP sets
broad
direction
for
bicycling

2013
MnSHIP
allocates
funding % for
bicycling for
first time, not
based on clear
strategy or
performance

2016
State Bicycle
Plan articulates
state bicycle
route corridors,
strategies and
funding
direction

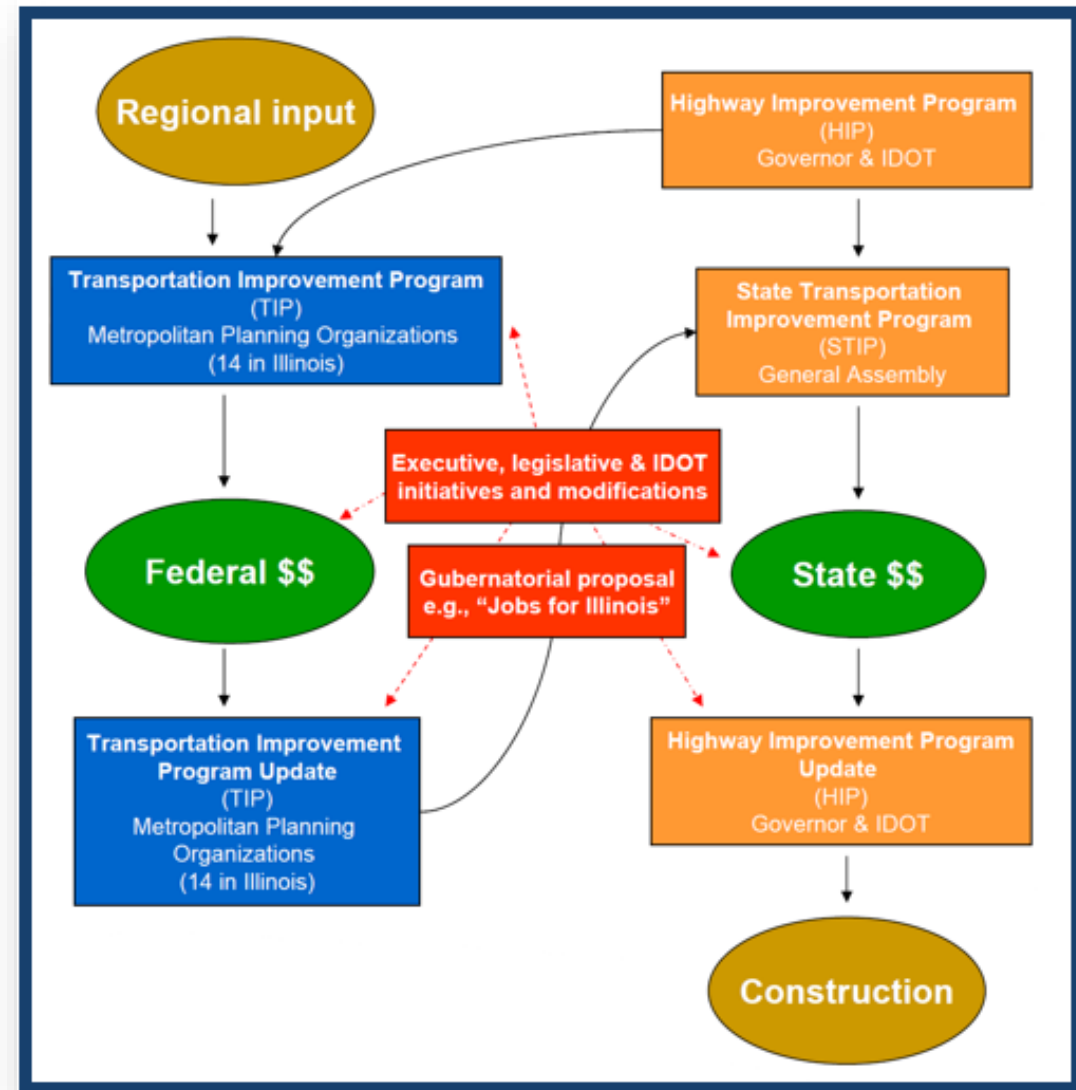
2017
SMTP – new
performance
measure &
strategies /
MnSHIP updated
need # based
on state bicycle
plan

2019
District bicycle
plans detailed
routing and
needs estimate
for next
MnSHIP
& new Bicycle
Facility Design
Manual



Linking Planning to Project Selection

- Limited coordination between regional and state plans.
- Confusion with limited transparency.
- No apparent, consistent and scalable prioritization system.
- No ongoing scientific measurement of effectiveness of investments.



Federal Requirements: MAP-21

1. National Goal Areas
2. National Performance Measures
3. Performance Targets
4. Performance-Based Planning and Programming

Statewide and nonmetropolitan transportation planning: “The statewide transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals...and the general purposes [of the public transportation program]. The performance measures and targets established [in relation to national performance measures] shall be considered by a State when developing policies, programs, and investment priorities reflected in the statewide transportation plan and statewide transportation improvement program.” 23 USC Section 135(d)(2); 49 USC Section 5304(d)(2).

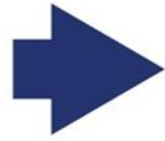
Metropolitan transportation planning: “[MPOs]..., in cooperation with the State and public transportation operators, shall develop long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning.” 23 USC Section 134(c)(1); 49 USC Section 5303(c)(1). “The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals...” 23 USC Section 134(h)(2); 49 USC Section 5303(h)(2).



Performance Management Principles



Investment Decisions



**Aimed at a Better Performing
Transportation System**

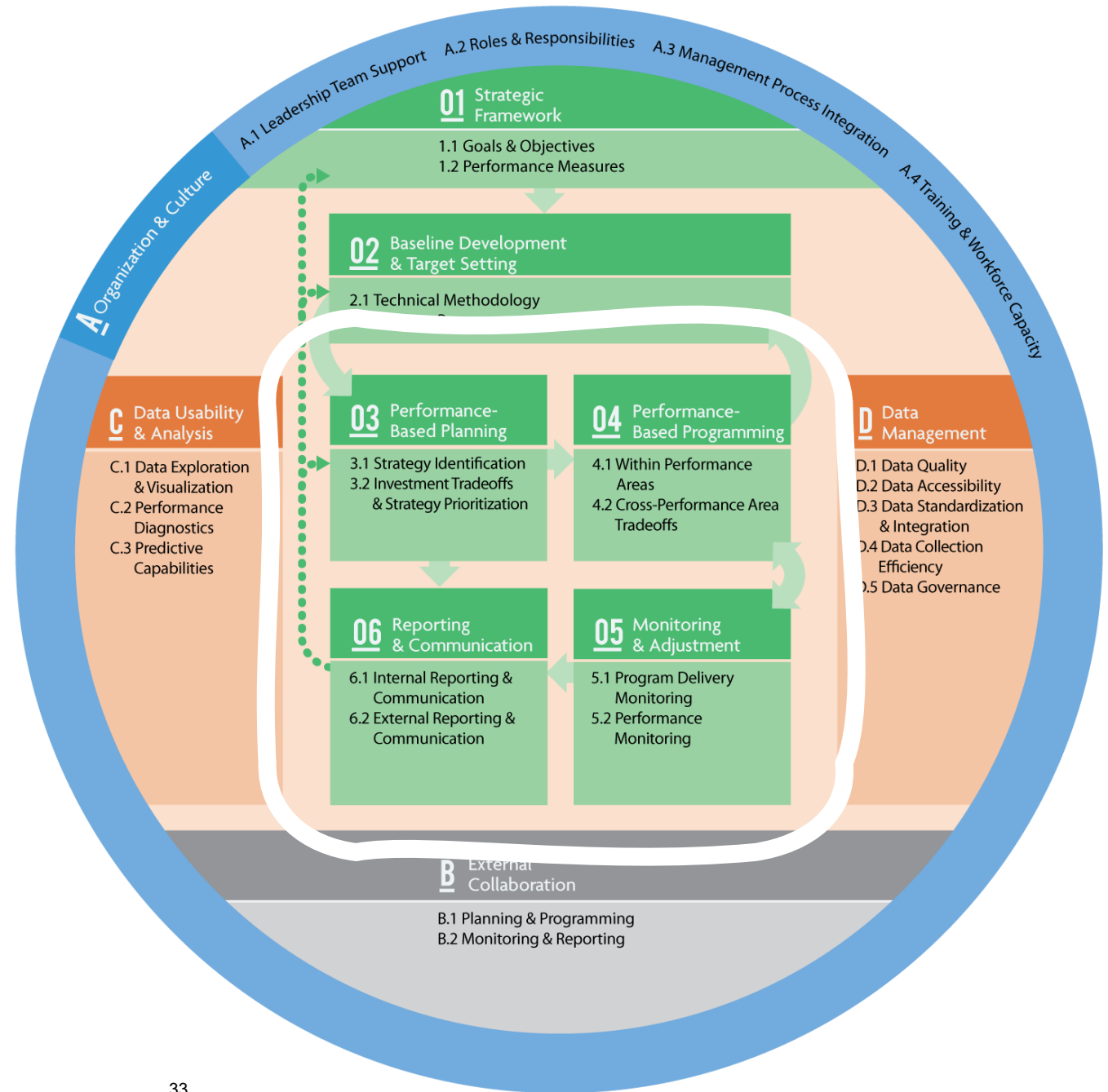


**For Connected and
Productive Communities**

Performance Management



Project Selection



**Q: Why do Project
Prioritization?**

**A: To improve the
transportation
system.**

- 1. Make informed
decisions.**
- 2. Make the most of
limited resources.**
- 3. Be transparent and
accountable.**



Peer State Programs

- Build trust in a data-driven process
- Promote transparency and accountability
- Support efficient allocation of revenue
- Legislatively required
- Funding availability

NORTH CAROLINA
Department of Transportation

Home » Initiatives & Policies » Transportation » State Transportation Improvement Program » Strategic Transportation Investments

Strategic Transportation Investments

Passed in 2013, the [Strategic Transportation Investments Law](#) equips the N.C. Department of Transportation to use funding efficiently and effectively to enhance infrastructure while supporting economic growth, job creation and a higher quality of life.

The process encourages thinking from a statewide and regional perspective providing flexibility to address local needs.

The STI Law establishes the [Strategic Mobility Formula](#), which is based on data-driven scoring and local input. It is used to develop the State Transportation Improvement Program (STIP), which identifies the projects that will be funded in the coming year period.

Federal law requires the STIP to be updated at least every four years and updates it approximately every two years.

2022 SHOPP
State Highway Operation And Protection Program

Fiscal Years
2022-23 through 2025-26

March 17, 2022



UDOT Project Prioritization

The Utah Transportation Commission, in consultation with the Utah Department of Transportation (UDOT) and the state's Metropolitan Planning Organizations (MPOs), developed a robust prioritization process to guide the decision-making process for programming Transportation Investment Fund (TIF) and Transit Transportation Investment Fund (TTIF) money for transportation-related projects. This site houses everything about the TIF/TTIF prioritization process, including the modeling process, information on requirements, the approval requirements, and frequently asked questions.

What is the TIF and TTIF?

According to the [UDOT Business Overview](#), the TIF and TTIF account for roughly 50% of the UDOT funding. The funding is used to support capacity projects in addition to bond payments and other transportation infrastructure.

General Project Prioritization Information

- Bills and Codes**: Take a look at the various bills and codes that have guided the prioritization process.
- Utah Transportation Commission Materials**: View current and past Transportation Commission materials that have tracked the prioritization process.
- Model Documentation**: Review the current model documentation.

7,119 MILES OF RAIL

7 CLASS I RAILROADS

26,809 BRIDGES
3rd in the Nation

17 MAJOR AIRPORT FACILITIES

54 TRANSIT SYSTEMS ACROSS IL

145,976 MILES OF PUBLIC ROADS

306,524 LANE MILES IN IL

1,118 MILES OF NAVIGABLE WATERWAYS

INTERSTATE MILES
3rd in the Nation

Common Characteristics: Modes

Type	CA	IL	MN	NC	OH	UT	VA
Highways (SHA)	✓	✓	✓	✓	✓	✓	✓
Transit (MTA)	✓				✓	✓	✓
Ports (MPA)							
Secretary's Office (TSO)*	✓	✓	✓	✓	✓	✓	✓
Toll Facilities (MDTA)	✓				✓	✓	✓
Aviation (MAA)				✓			

** No other state included in this analysis has a separate modal agency like the Secretary's Office. Looking through the CTP, most projects are surface transportation related to highways or transit.*

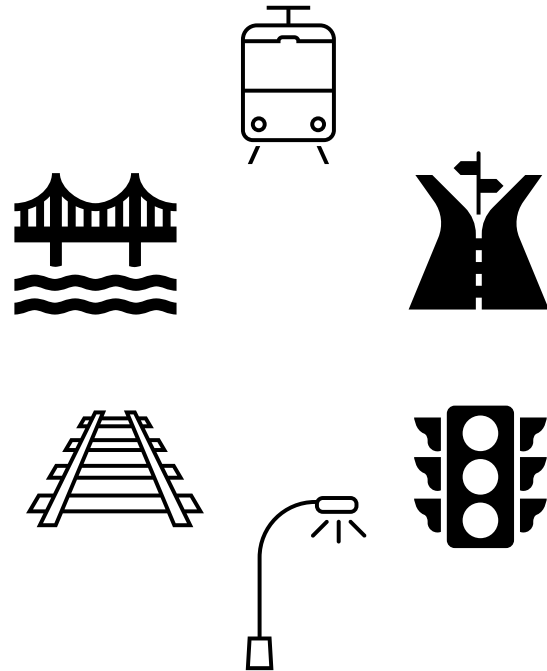


Common Characteristics: Project Types

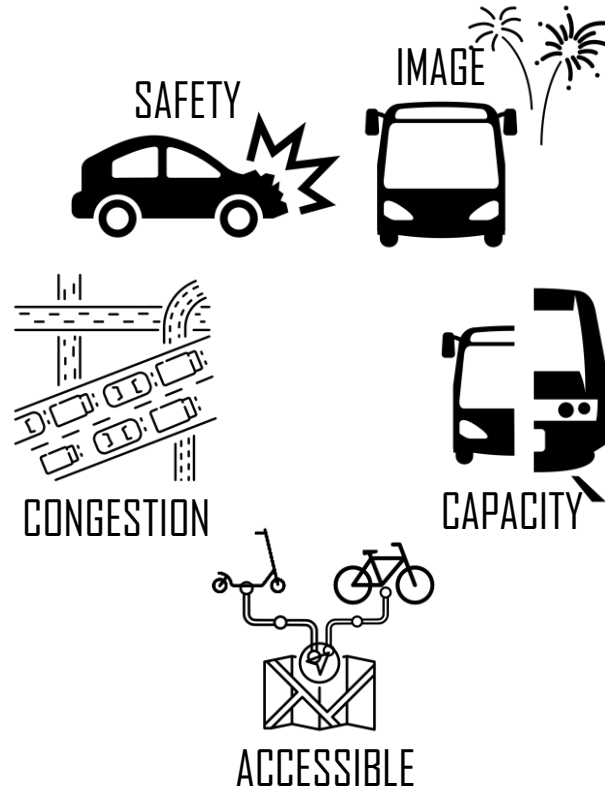
Current Project in CTP	CA	IL	NC	OH	UT	VA
Stand-Alone Planning Studies						
Highway SGR						
Transit SGR						
Safety	✓	✓	✓	✓	✓	✓
Highway Capacity Expansion/Enhancements	✓	✓	✓	✓	✓	✓
Transit and Rail Capacity Expansion/Enhancements	✓		✓	✓	✓	✓
Bike/Ped Improvements	✓				✓	✓
Transportation Demand Management	✓				✓	✓



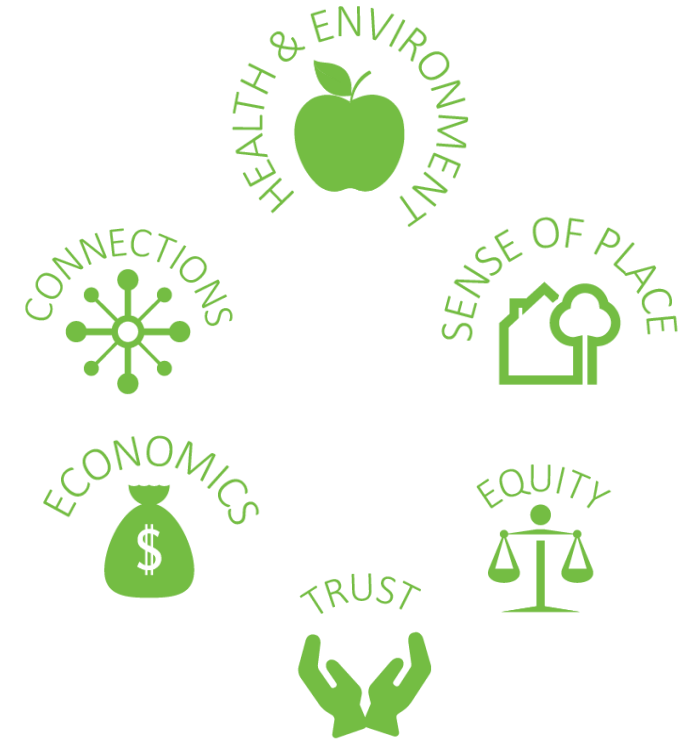
Common Characteristics: Performance Metrics



ASSETS
(components)



OUTPUTS
(service quality)



OUTCOMES
(benefits)



Common Characteristics: Benefits

1. **Better Project Selection**—Create a data-driven process to get the right project funded.
2. **Ensure Project Readiness**—Improve the project development and delivery pipeline so projects are ready to go when funding is available.
3. **Increase Transparency**—Stakeholders and constituents know how the process works.
4. **Provide accountability**—Know how projects being funded meet state goals and provide feedback to project sponsors.



Concluding Thoughts

Why Do
Project
Prioritization?

- 1. Make informed decisions.**
- 2. Make the most of limited resources.**
- 3. Be transparent and accountable.**



Discussion



AGENDA ITEM 6



NORTH CAROLINA
Department of Transportation

Constructing a Prioritization System

NCDOT SPOT Office

October 18, 2023

Today's Topics

- Background
- STI Education
- Key Takeaways



Background



Project Selection Reform

Previous perception:

I'll agree to your project if you agree to mine...



Public wanted politics removed from decision-making

NCDOT needed transparency in project selection

This led to Transportation Reform...



Strategic Prioritization: Why Prioritize?

FROM

- McKinsey Diagnostic stated NCDOT has an inconsistent, ineffective, and ad-hoc prioritization process
 - Too many decision-makers
 - Not visible
 - Statewide needs underemphasized
- Portfolio of projects, programs, services, and initiatives not explicitly linked to NCDOT's goals
- Portfolio is near-term oriented, rather than focused on meeting long-term needs



TO

- Formal, documented, and visible prioritization process
- Collaborative between NCDOT and stakeholders
- Ranking with appropriate perspective (statewide, regional, local)
- Allows for the business case to be made for additional flexibility and funding
- Outcome and data-driven approach, geared towards meeting Goals and Objectives

Prioritization and Programming

*Article 14B.
Strategic Prioritization Funding
Plan for Transportation
Investments.*

§ 136-189.10. Definitions.
*The following definitions apply
in this Article...*



2011 - 2012

Prioritization Process is now in Law

*“The Department shall develop and utilize a **process for selection of transportation projects** that is based on professional standards in order to most efficiently use limited resources to benefit all citizens of the State.*

*The strategic prioritization process should be a **systematic, data-driven process** that includes a **combination of quantitative data, qualitative input, and multimodal characteristics, and should include local input.***

The Department shall develop a process for standardizing or approving local methodology used in Metropolitan Planning Organization and Rural Transportation Planning Organization prioritization.” - S.L. 2012-84



**STRATEGIC
TRANSPORTATION
INVESTMENTS**

Smart decisions to keep North Carolina moving.

STI Education

STI Law Definitions

STI Law (§ 136-189.11) defines:

- Funding Categories and Percentages
- Project Eligibility
- Highway Scoring Criteria Names
- Funding Constraints

Recommendations developed by Workgroup and NCDOT BOT adopts:

- Scoring Process (timeframe, submittals, carryovers, etc.)
- Highway Measures and Weights
- Non-Highway Criteria, Measures, and Weights
- Normalization (funding allocation between modes)
- Local Input Points

Legislation - Scoring

Per § 136-189, scoring includes:

- Criteria:
 - Quantitative Criteria (data-driven) – all funding categories
 - Qualitative Criteria/ Local Input- Regional and Division funding categories
- 0 to 100 scale
- Selection of projects in ranked order
- Workgroup flexibility in determining the methodology used to calculate criteria

Legislation lists the highway quantitative criteria names as:

Congestion	Benefit/Cost	Safety	Freight	Economic Competitiveness
Accessibility/ Connectivity	Multimodal	Lane Width	Shoulder Width	Pavement Score

STIP Funding Distribution

Statewide Mobility



Programmed First
 Interstate Maintenance
 Bridge Replacement
 Bridge Rehabilitation
 Highway Safety

Regional Impact



↓ % of State Population ↓



Programmed First
 Bridge Replacement
 Bridge Rehabilitation
 Highway Safety

Division Needs

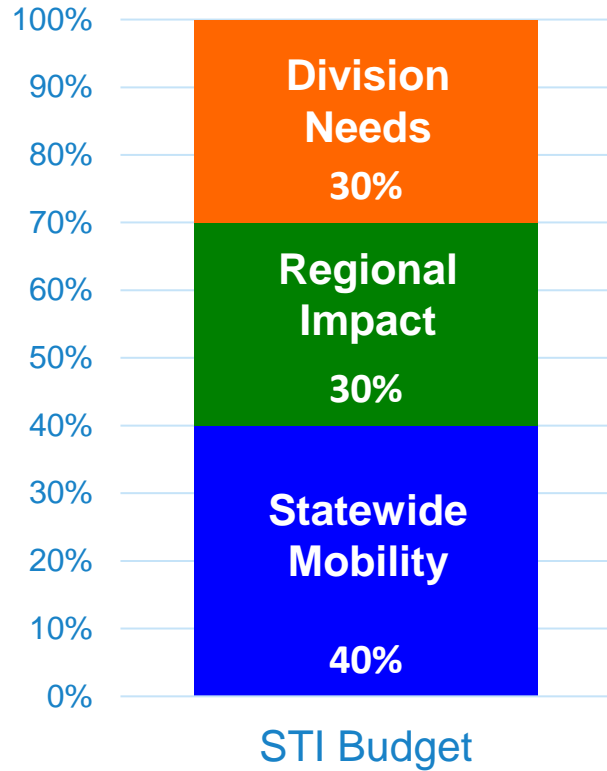


↓ Equal Share ↓



Programmed First
 Bridge Replacement
 Bridge Rehabilitation
 Highway Safety
 MPO Direct Attributable
 Transportation Alternatives
 Highway-Rail Crossing
 Economic Development

STI Categories

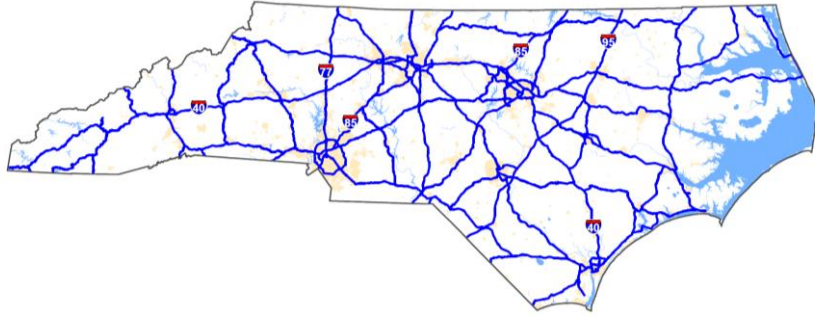


Mode	Statewide Mobility	Regional Impact	Division Needs
Highway	<ul style="list-style-type: none"> Interstates (existing & future) National Highway System routes (as of 2013) STRAHNET¹ Designated Toll Facilities 	Other US and NC Routes	<ul style="list-style-type: none"> All Secondary Roads (SR) Federal-Aid Eligible Local Roads
Aviation	Large Commercial Service Airports <i>cap - \$500K / project / year</i>	Other Commercial Service Airports not in Statewide <i>cap - \$300K / project / year</i>	All Airports without Commercial Service (General Aviation) <i>cap - \$18.5M annual program</i>
Bicycle-Pedestrian	N/A	N/A	All projects (\$0 state highway trust funds)
Public Transportation	N/A	Service spanning two or more counties (10% cap)	All other service, including terminals and stations
Ferry	N/A	Vessel or infrastructure expansion	Replacement vessels
Rail	Freight Service on Class-I Railroad Corridors	Rail service spanning two or more counties not in Statewide	All other service, including terminals and stations (no short lines)

¹ STRAHNET – Strategic Highway Network, system of roads deemed necessary for emergency mobilization and peacetime movement of personnel and equipment to support U.S. military operations

Project Eligibility

Highway



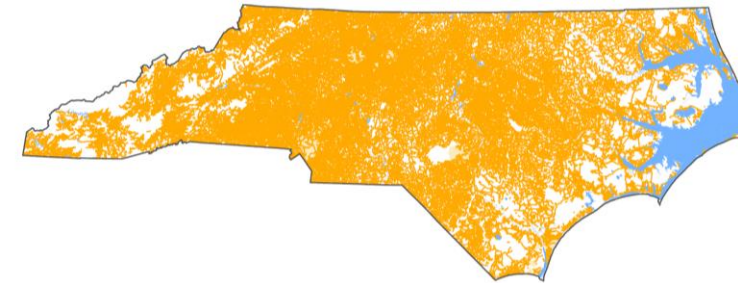
Statewide Mobility eligible:

- ~5 % of all centerline miles



Regional Impact eligible:

- ~15 % of all centerline miles

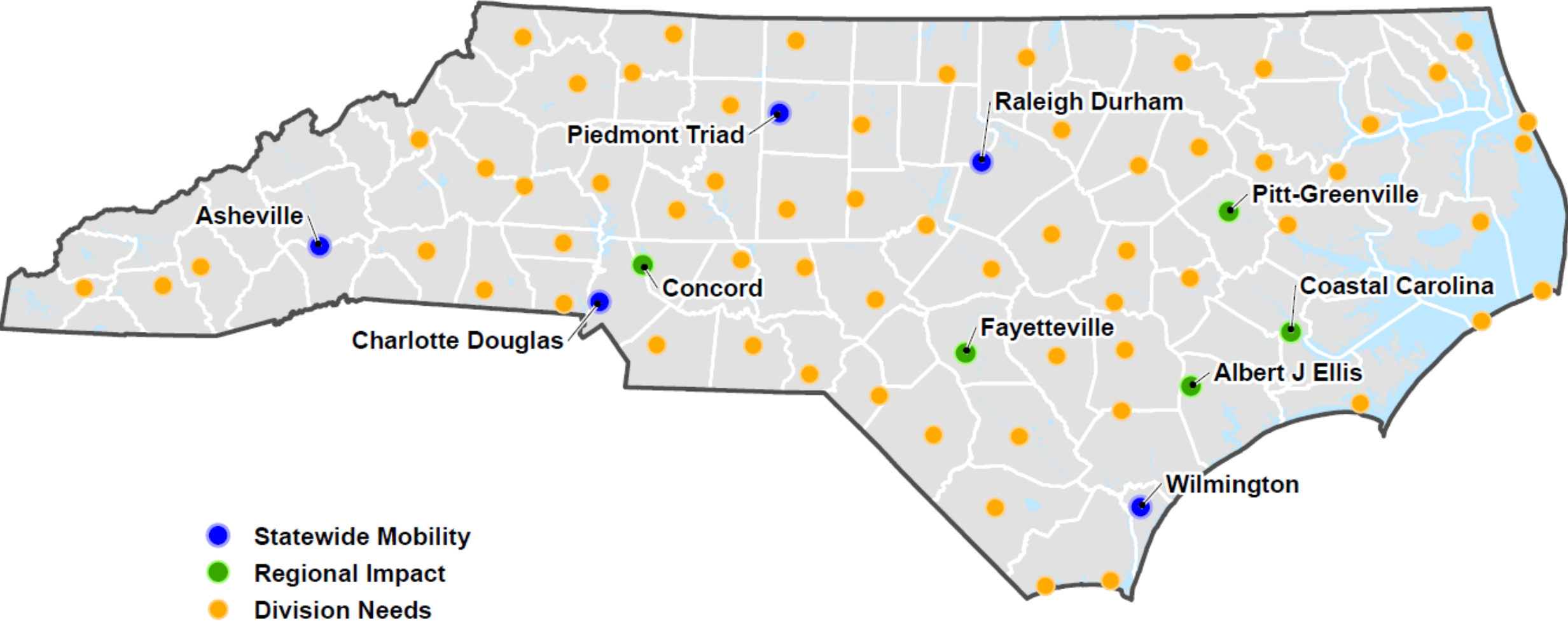


Division Needs eligible:

- ~80 % of all centerline miles

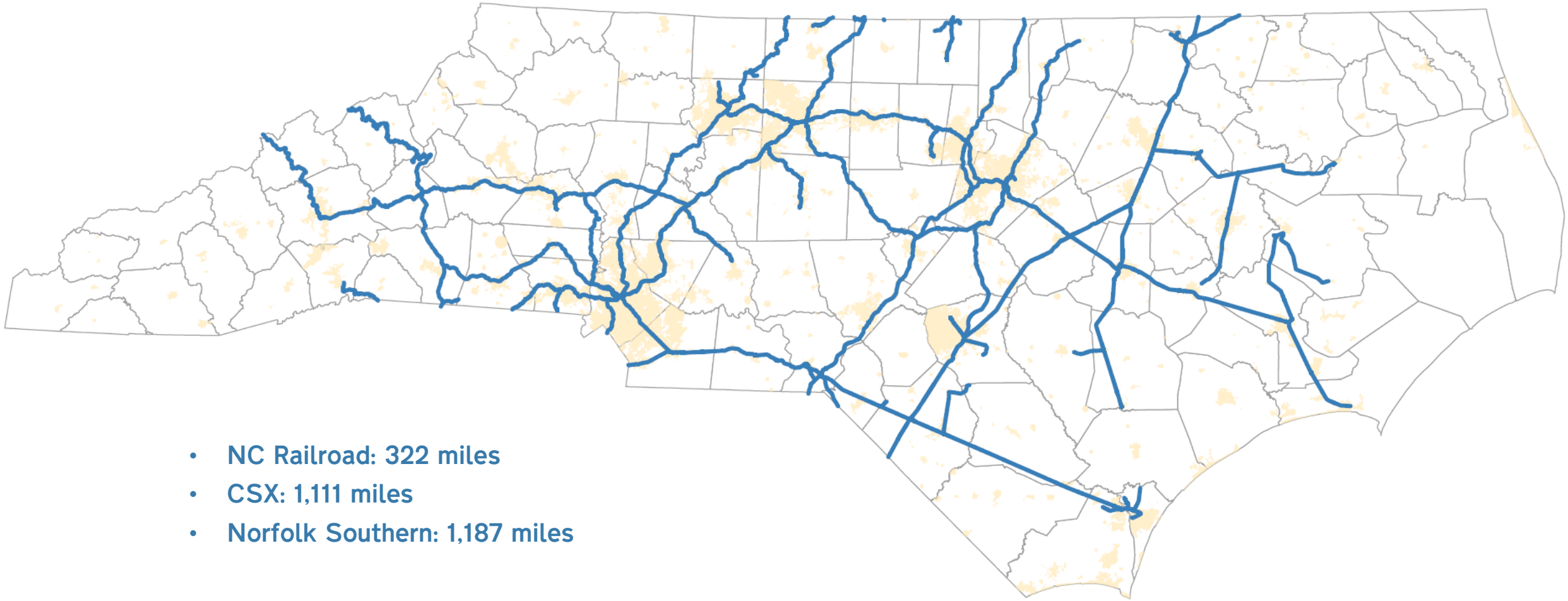
Project Eligibility

Aviation



Project Eligibility

Rail



- NC Railroad: 322 miles
- CSX: 1,111 miles
- Norfolk Southern: 1,187 miles

STI Legislation Funding Caps and Restrictions Impacting Programming



Corridor Cap:
Statewide Mobility



Funding limits:
Light rail and commuter
rail projects



Funding limits:
Regional Impact
transit projects



Funding limits:
Airport projects in all
categories



Prohibition:
Using state funds to match federal-aid for
independent bicycle and pedestrian projects

Legislation – Workgroup process

§ 136-189.11. Transportation Investment Strategy Formula.

(h) Improvement of Prioritization Process. –

The Department shall endeavor **to continually improve the methodology and criteria** used to score highway and non-highway projects pursuant to this Article, including the use of normalization techniques, and methods to strengthen the data collection process.

The Department is directed to continue the **use of a workgroup process** to develop improvements to the prioritization process.

Workgroup Structure

Members (26)			
MPO Representatives	x4	RPO Representatives	x4
Metro Mayors Coalition	x1	League of Municipalities	x1
Regional Council of Governments	x1	Association of County Commissioners	x1
NC Rural Center	x1	NCDOT Division Engineers	x4
NCDOT Multi-Modal	x1	NCDOT Subject Matter Experts	x8

Advisory / SME
Modal Directors
Legislative Staff
FHWA
Technical Experts
Support Staff

* Department participants in the workgroup shall not exceed half of the total group

Meeting Frequency

- **In-person:** monthly, anticipated through May 2022 – for purpose of discussion and consensus
- **Virtual:** in between in-person meetings – for purpose of information and technical breakouts

Key Takeaways

Key Takeaways

Takeaway 1 – Build the right balance between flexibility and rigidity

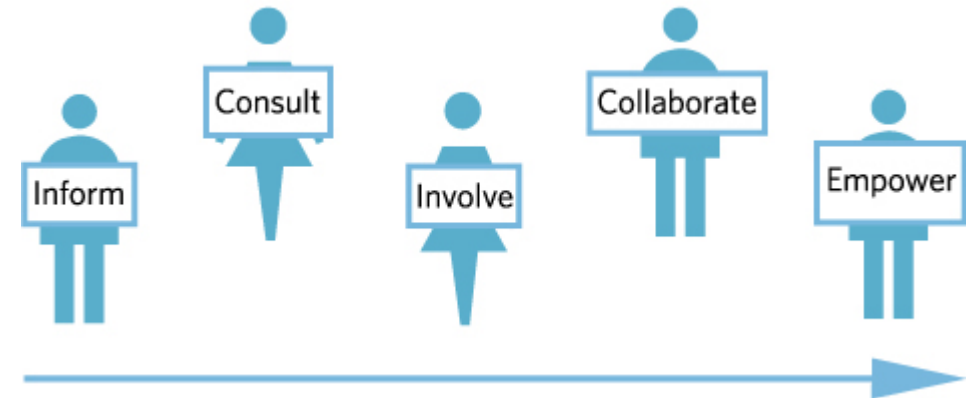
- The NC Legislation defines several items
- Legislation leaves several details for implementation to be worked out
- This combination leads to:
 - Difficulty scoring some projects
 - Helps with system development
 - People trying to game the system



Key Takeaways

Takeaway 2 – Build engagement and buy-in into the system

- The Workgroup helps in many ways
 - Diverse perspectives are included
 - They aid in transparency
 - They provide buy in
 - They help educate others about the system
- The Workgroup can be seen as a position of power
 - Need to be intentional about who is represented
 - Need to be thoughtful on the decision-making process
 - Need to be intentional on how the Workgroup will operate



Key Takeaways

Takeaway 3 – Data is our friend and a limiting factor

- Data provides transparency
 - If the data is trusted and the application is accurate the results can be replicated
- You cannot measure what you do not have data for
- Be certain you are measuring what matters



**STRATEGIC
TRANSPORTATION
INVESTMENTS**

Smart decisions to keep North Carolina moving.

Strategic Prioritization Office of Transportation (SPOT)

SPOT@ncdot.gov

AGENDA ITEM 7



Data Driven Decisions

Holly Bieneman
Director, Office of Planning and Programming



Key Transportation Metrics

The Tool will help IDOT identify which expansion projects provide the most benefit to the state and its residents.

2,185

INTERSTATE MILES
3rd in the nation

145,976

MILES OF PUBLIC ROADS

306,524

LANE MILES IN IL

1,118

NAVIGABLE
WATERWAYS

7,119

MILES OF RAIL

7

CLASS I
RAILROADS

26,809

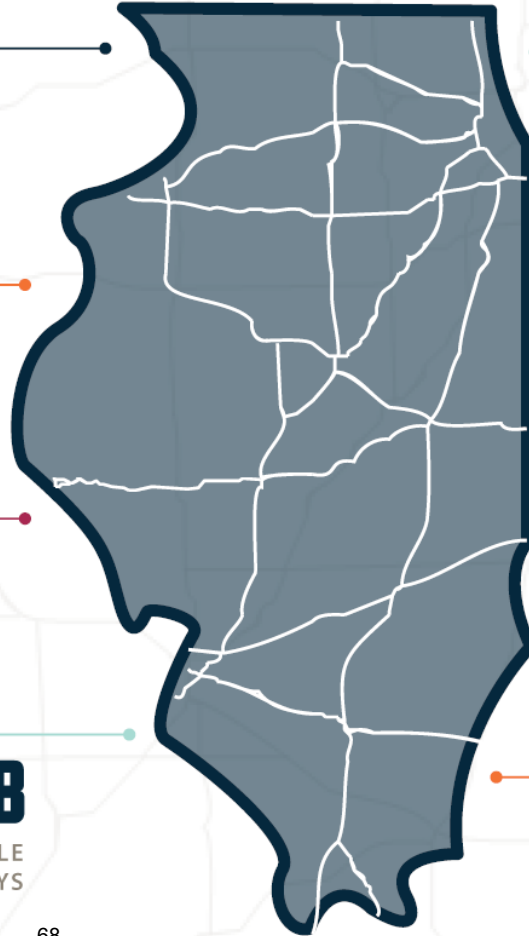
BRIDGES
3rd in the nation

17

MAJOR AIRPORT
FACILITIES

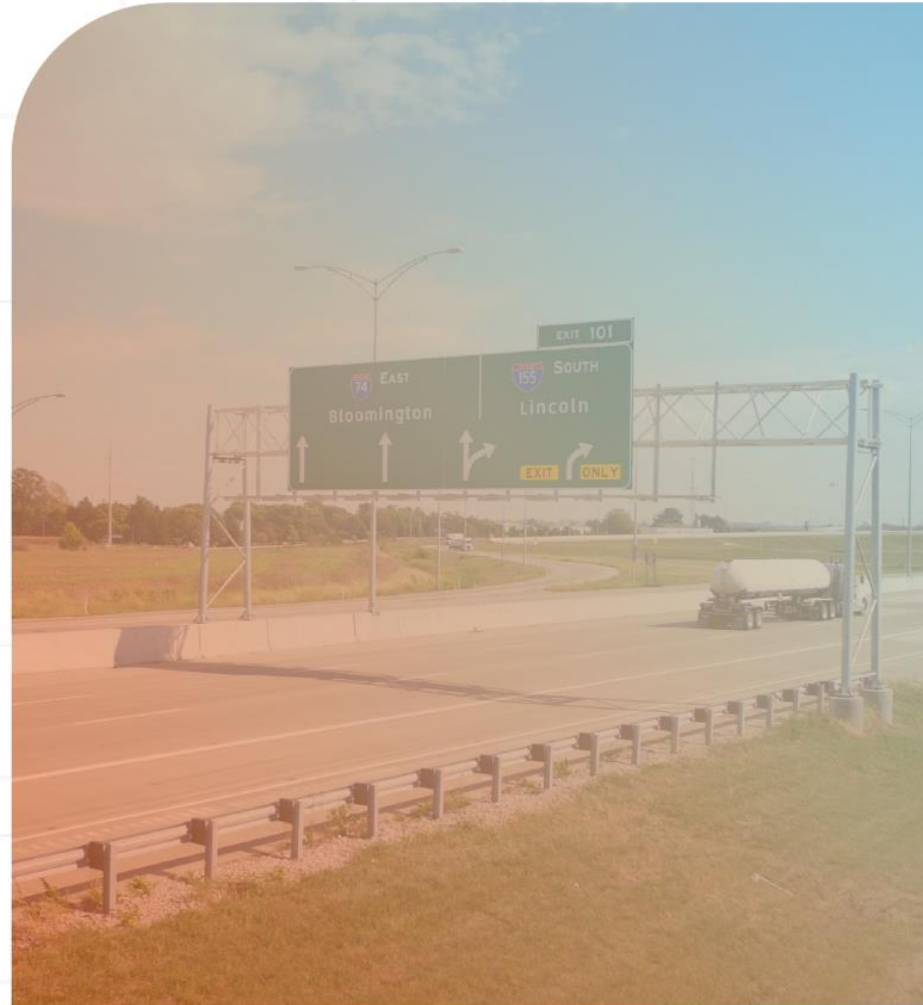
54

TRANSIT SYSTEMS
ACROSS IL



Transportation Funding Background

- IDOT's funding is limited and cannot address all the state needs
- A majority of IDOT's funding comes from multiple sources including:
 - Motor Fuel Tax (MFT)
 - Portion of the Motor Vehicle Registration (MVR)
 - Federal Funding
- **Majority of these funds are allocated toward system maintenance projects**
- **Remaining funds can then be allocated toward expansion, capacity, or other types of projects.**
- A small portion of IDOT's **annual program** goes towards capacity projects, with most being bridges.



HB0253/Public Act 102-0573

- Solidified MAP-21's Asset Management requirement for pavement/bridges and transit into state law.
- Requires capacity changing projects on state assets to be prioritized using data.
- Requires Regional Transportation Authority to do the same for their system.

(a) The General Assembly declares it to be in the public interest that a project prioritization process be developed and implemented to: improve the efficiency and effectiveness of the State's transportation system and transportation safety; enhance movement and multi-modal connections of people and goods; mitigate environmental impacts; and promote inclusive economic growth throughout the State.

(b) In accordance with Section 2705-200, the Department of Transportation shall develop and publish a statewide multi-modal transportation improvement program for all transportation facilities under its jurisdiction. The development of the program shall use the following methods:

(1) use transportation system information to make investment and policy decisions to achieve statewide and regional performance goals established in the State's long-range transportation plan;

(2) ensure transportation investment decisions emerge from an objective and quantifiable technical analysis;

(3) evaluate the need and financial support necessary for maintaining, expanding, and modernizing existing transportation infrastructure;

(4) ensure that all State transportation funds invested are directed to support progress toward the achievement of performance targets established in the State's long-range transportation plan;

(5) make investment decisions transparent and accessible to the public;

(6) consider emissions and increase infrastructure resilience to climate change; and

(7) reduce disparities in transportation system performance experienced by racially marginalized communities, low-income to moderate-income consumers, and other disadvantaged groups and populations identified under the Environmental Justice Act.

Legislation Negotiation

- **Specific Criteria**
- **Existing Projects**
- **Regional Priorities**
- **Project Identification**



HOW

is IDOT
Developing
the Tool?

- Guidance from existing IDOT planning documents, specifically the **Long-Range Transportation Plan**
- Federal guidance urging performance based project selection
 - Moving Ahead for Progress in the 21st Century Act (MAP-21)
- Counsel from state and national experts
 - IDOT/FHWA industry standards
- Input from the public, local and regional leaders
 - MPO
 - Transportation/ Livability Advocacy Organizations
- Industry accepted metrics



HOW

Guiding Document

Long-Range Transportation Plan (LRTP)

- Provides the strategic direction for the development of the Illinois transportation system.
- The vision for transportation in Illinois is to provide innovative, sustainable and multimodal transportation solutions that support local goals and grow Illinois' economy.

The Tool was developed based on the goals identified through the LRTP:



Economy

Improve Illinois' economy by providing transportation infrastructure that supports the efficient movement of people and goods.



Livability

Enhance the quality of life across the state by ensuring that transportation investments advance local goals, provide multimodal options, and preserve the environment.



Resiliency

Proactively assess, plan and invest in the state's transportation system to ensure that our infrastructure is prepared to sustain and recover from extreme events and other disruptions.



Mobility

Support all modes of transportation to improve accessibility and safety by improving connections between all modes of transportation.



Stewardship

Safeguard existing funding and increase revenues to support system maintenance, modernization, and strategic growth of Illinois' transportation system.



WHAT

is the Tool?

The following are the **five goal** areas with **thirteen evaluation criteria** that are under consideration:



Traffic Operations/ Congestion

CRITERIA: Annual Average Daily Traffic (AADT)

CRITERIA: Change in Annual Vehicle Miles Traveled (AVMT)

CRITERIA: Travel Time Index



Safety

CRITERIA: Crash Frequency



Economic Development

CRITERIA: National Highway Freight Network

CRITERIA: Major Development

CRITERIA: Intermodal Accessibility



Environmental Impacts/ Livability

CRITERIA: Environmental Justice

CRITERIA: Level of Environmental Impact Analysis Required

CRITERIA: Equity

CRITERIA: Emissions

CRITERIA: Resiliency



Regional Rating

CRITERIA: Subjective portion allowing regional input, to consider local factors which may not be shown in data



Implementation

- Tool already under development

- Public Comment

- Webinar
 - MetroQuest Survey

- Documentation

- Identification of projects

- Analysis of projects

- Documentation

Weighting

Each criteria will be weighted differently to reflect the goals and objectives of the agency.

- Traffic Operations/ Congestion**
CRITERIA: Annual Average Daily Traffic (AADT)
CRITERIA: Change in Annual Vehicle Miles Traveled (AVMT)
CRITERIA: Travel Time Index
- Safety**
CRITERIA: Crash Frequency
- Economic Development**
CRITERIA: National Highway Freight Network
CRITERIA: Major Development
CRITERIA: Intermodal Accessibility
- Environmental Impacts/ Livability**
CRITERIA: Environmental Justice
CRITERIA: Level of Environmental Impact Analysis Required
CRITERIA: Equity
CRITERIA: Emissions
CRITERIA: Resiliency
- Regional Rating**
CRITERIA: Subjective portion allowing local and regional input, to consider factors which may not be shown in the data

20:01 / 49:06

Data Driven Decisions Webinar – September 29, 2021

What Projects?

- 34 Projects Evaluated
 - Across entire state
 - Different phases of project development
 - Cost/Benefit

Project Name	District	Next Phase Approve	Next Phase to Func	Location	Limits	MODA Value	AADT	AVMT	TTI	Crash Frequent	NHFN	Major Developme	Intermodal Accessibili	Level of Environmental Impact Analysis Required	Environmental Justice	Resiliency	Regional Rankin
-55 from IL 113 (Coal City Rd) to I-80	1	N	PE I	Will County, City of Braidwood, Village of Channahon	IL 113(Coal City Rd) St in Braidwood to I 80 in Channahon	35.9	39,758	32.89%	1.23	50	1	1	2	1	0	0	10
-90 Dan Ryan Expwy from Ohio St to 31st St	1	Y	PEL	City of Chicago, Cook County	Ohio Street to 31st Street	60.3	187,212	0.00%	2.12	230	1	0	0	2	1	0	11
LL 120 (Belvidere Rd) from US 45 to Almond Rd	1	N	PE I	Lake County, Village of Grayslake	US 45 to Almond Rd	20.9	21,079	0.37%	1.77	46	0	0	0	3	0	0	8
LL 131 from Russell Rd to Wadsworth Rd	1	N	PE II	Lake County, City of Zion, City of Waukegan, Village of Wadsworth, Village of Beach Park	Russell Rd to Wadsworth Rd	28.5	11,659	0.37%	1.43	67	0	0	0	2	1	0	4
LL 47 from I-90 to Plank Rd in Pingree Grove	1	Y	PE I	Kane County, Village of Pingree Grove	S of I-90 to S of Plank Road in Pingree Grove	38.6	17,241	23.76%	1.70	57	0	1	0	3	1	0	9
LL 47 from Reed Rd to US 14	1	N	PE II	McHenry County, Village of Lakewood, Village of Lake in the Hills, Village of Huntley	Reed Road to US 14	19.0	14,792	17.73%	1.36	32	0	0	0	2	0	0	5
LL 53 from IL 56 to Park Blvd Downers Grove	1	N	CONSTR/LA	Downers Grove, DuPage County	In Downers Grove, IL 56 to Park Blvd	22.2	17,512	3.55%	1.76	7	0	0	0	3	0	0	2
LL 56 (Butterfield Rd) from ILL 25 to IL 59	1	N	PE I	Kane County, Du Page County, City of Aurora, City of Warrenville, Village of North Aurora	IL 25 to IL 59 (Joliet Rd)	20.5	15,453	13.74%	1.65	24	0	0	0	3	0	0	7
LL 62 from ILL 25 to ILL 68	1	N	PE II	Kane and Cook Co. and Barrington Hills	L 25 (Kennedy Dr) to Il 68 (Dundee Rd)	16.9	21,506	7.22%	1.45	31	0	0	0	2	0	0	6
US 30 from IL 47 to ILL 31	1	N	PE II	Villages of Montgomery and Yorkville, Kane and Kendall Counties	IL 47 to IL 31	27.9	13,379	23.76%	1.54	28	0	0	0	3	0	0	1
US 45 from IL 132 to Washington St	1	Y	PE II	Lake County, Village of Third Lake, Village of Lindenhurst, Village of Gurnee	N of IL 132 (Grand Ave) to Washington St	39.6	16,832	0.37%	1.70	155	0	0	0	3	0	0	3
-39 from I-88 to Blackhawk Rd	2	N	PE I	Rochelle, Ogle County, Winnebago County	I-88 S of Rochelle to Blackhawk Rd E of Rockford	33.5	28,918	5.35%	1.08	19	1	0	2	1	0	1	2
-74/ILL 5 Interchange	2	Y	PE II	City of Moline, Rock Island County	I-74: 0.1 N of N Shore Dr to 0.4 mi N of 38th Ave; IL 5: 16th St to 40th Ave; 38th Ave: 25th St to I-74; 26th St: IL 5 to 0.1 mi N of 38th Ave	36.2	29,651	0.00%	1.59	17	1	0	2	3	0	0	1
-57 at ILL 17 Interchange in Kankakee	3	Y	CON/LA	Kankakee in Kankakee County	S of Waldron Rd to 0.5 mi N of ILL 17	39.0	26,255	5.10%	1.15	10	1	1	0	3	1	0	2
-80 Seneca Intchg to Morris Intchg	3	N	PE I	City of Morris, Grundy County	0.35 mi east of Seneca Interchange to 0.41 mi west of Morris Interchange	22.1	32,086	16.94%	1.05	14	1	0	0	1	0	0	1
US 45/52 6000N Rd to Kathy Dr in Bourbonnais	3	N	PE I	Burbonnais, Kankakee County	6000N Rd to Kathy Drive in Bourbonnais	13.5	10,413	5.10%	1.60	4	0	0	0	1	0	0	3
LL 29 Chillicothe Viaduct Replacement	4	N	CONSTR/LA	Chillicothe in Peoria County	Senachwine Creek to Truitt Ave in Chillicothe, IL	10.5	8,109	0.00%	1.38	0	0	0	0	1	0	0	3
US 34 from E of Gulfport to W of Biggsville	4	Y	PE II	Henderson County	1.6 mi W of ILL 116 to 0.5 mi E of RR in Gull	35.0	6,483	0.00%	1.15	26	0	1	2	1	0	1	1

Relaying Information

- Share it all
- Explaining not selecting top down
- TRANSPARENCY



Illinois Department of Transportation

Memorandum

To: Interested Parties
From: Secretary Omer M. Osman, P.E. *OSM*
Subject: Data Driven Decisions Results
Date: August 11, 2022

In accordance with Public Act 102-0573, the Illinois Department of Transportation developed a highway capacity project prioritization process referred to as the Data Driven Decisions (DDD) tool to score new highway capacity projects prior to inclusion in the FY 2023-2028 Proposed Multi-Year Highway Program (MYP).

The attached project list includes the 34 highway capacity projects evaluated through the DDD tool. The projects were scored based on merit criteria described in the DDD Methodology document found on the [webpage](#). The projects are shown from high (61.6) to low (10.6) score. The evaluation and selection process included: review of the project scores, geographic distribution, total project costs and funding availability for the next phase of the project. As a result, 13 projects received approval to move forward with the next phase of the project in the current FY 2023-2028 MYP and/or future MYPs as the project progresses and funding is secured.

In the future, the projects not included for funding can be re-evaluated and as additional highway capacity projects are identified, the DDD tool will be used to evaluate the merits of the project and determining advancement of the project in future programs.

Lessons Learned

- Project size/type
- Geographic location
- Regional considerations
- Internal communication



LESSONS LEARNED FROM DATA DRIVEN DECISIONS TOOL OUTREACH

The Data-Driven Decision (DDD) Tool was developed to analyze and compare potential transportation construction projects – more specifically, “state jurisdiction added capacity projects”. These are projects that will add a lane to an existing roadway or build a new bypass, roadway, or elements to increase capacity. The DDD Tool was developed using current industry standards, input from national experts, other state DOT practices, as well as the requirements in [PA 102-0573](#). Through the outreach effort conducted by IDOT via interactive survey, email, and additional meetings with key stakeholders, IDOT has gathered some lessons learned that can be considered as the DDD Tool moves forward. Those lessons are outlined below.

1. Definitions

Many of the comments and suggestions identified the need to provide clearer definitions of the metrics being used within each goal area. For example, safety is a key aspect to project selection and in turn, the metrics identifying how the proposed capacity project can improve safety. One of the metrics to weigh projects is crash frequency. Commenters noted that frequency should not be used, as they thought severity of crashes to be a more important metric to weigh the projects. However, crash frequency does account for crash severity within the calculation, which was not clear in the definitions and information provided within the tool. Providing additional information on the factors in defining the goals would make the tool more effective and understandable to what is being used to determine project rating.

2. Messaging

The scope of the DDD tool is limited to highway capacity projects, meaning those projects that add capacity to the existing system either through add-lanes to an existing roadway, new bypass, or new roadway. It is specifically designed to weigh these capacity projects against each other for funding consideration and prioritization. This tool does not rate other modes of transportation or other types of highway improvements such as resurfacing or maintenance projects. Better messaging and education of the scope of the tool as it moves forward will be necessary to ensure that proper understanding of the scope of the DDD tool be explicitly stated to avoid confusion as to what improvement types and transportation projects are or are not considered for evaluation.



Current activities

- Advocacy group coordination
- Updated metrics
 - Equity
 - Emissions
- Regional coordination





QUESTIONS?

Holly Bieneman
Holly.Bieneman@illinois.gov