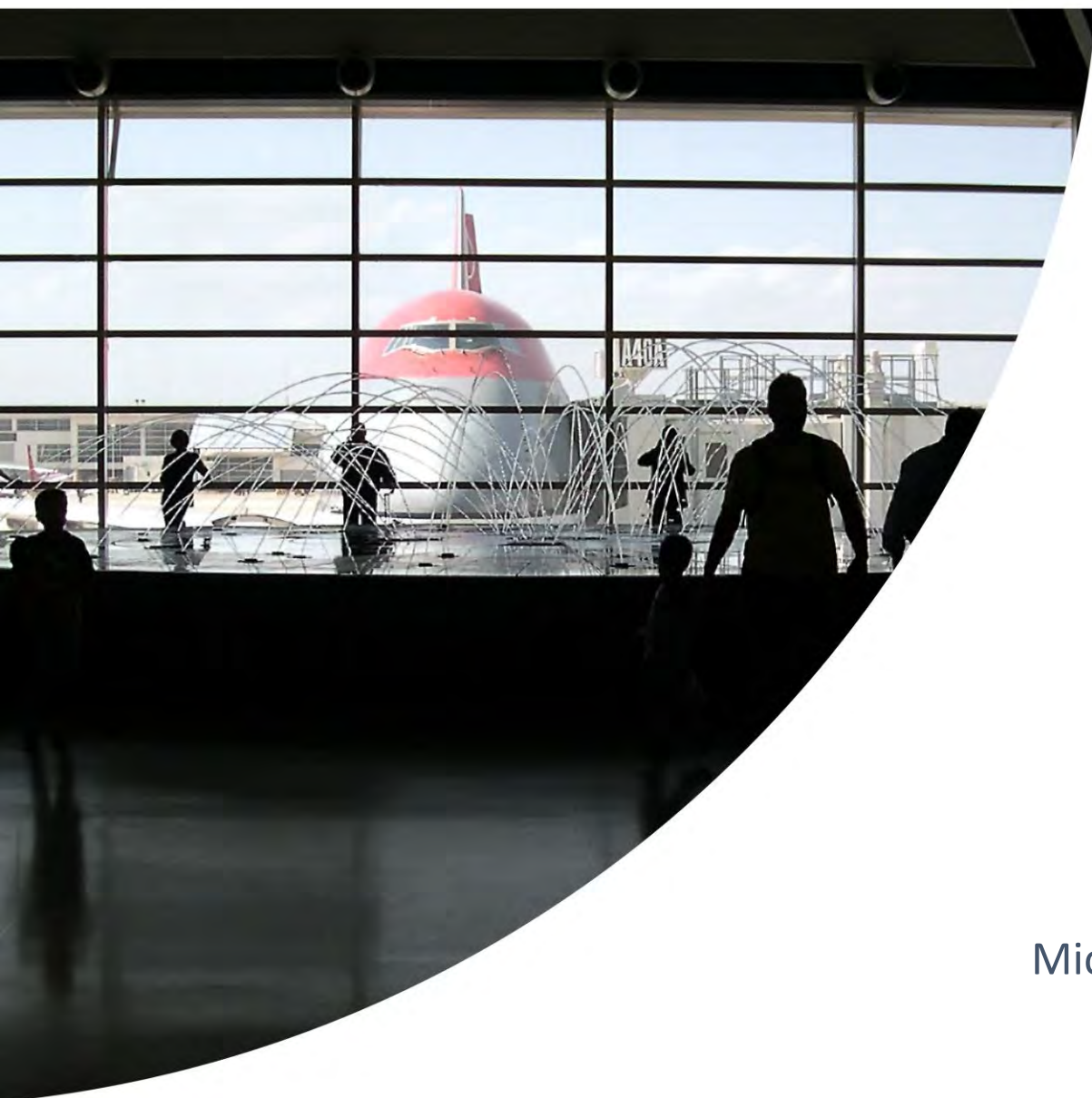


08/20/20



Michigan Department of Transportation

# Michigan 2045

# Mobility

A transportation plan for a connected future #MM2045

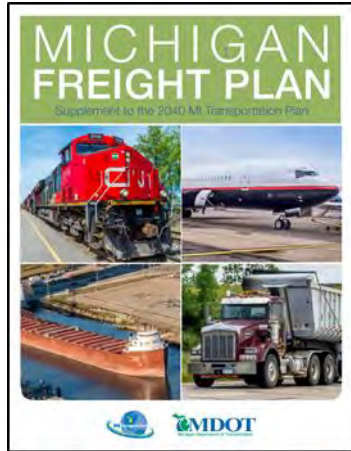
A row of ten blue icons representing different modes of transportation: a ship, a truck, a car with a Wi-Fi signal, an airplane, a train, a bus, a car, a bicycle, and a pedestrian.

## MID-AMERICA FREIGHT COALITION (MAFC) ANNUAL MEETING

Michigan's Integrated State Long-Range Transportation Plan

Elisha Wulff, Michigan DOT

# MM2045: Plan Integration



# SLRTP, Freight, and Rail Plans

## SLRTP

- 2007: 2030 Plan completed by consultant – “MI Transportation Plan”
- 2012: 2035 reaffirmation completed by MDOT
- 2016: 2040 reaffirmation completed by MDOT

## Freight Plan

- 2013: MDOT’s first freight plan, completed by MDOT
- 2017: Update completed by MDOT

## Rail Plan

- 2011: MDOT’s first rail plan, completed by consultant





# Modal Elements

- Modal overlap among the plans
  - Long range plan spans modal focus of other two plans
  - Freight plan includes freight rail
  - Long range plan includes both freight rail and passenger rail
- Plans have different requirements

State Plans - Modal Coverage

	Long Range Plan	Freight Plan	Rail Plan
<b>Freight</b>			
Aviation (Cargo)	●	●	
Intermodal	●	●	●
Marine/Ports	●	●	
Motor Carrier/Highway	●	●	
Pipeline	●	●	
Railroad	●	●	●
<b>People</b>			
Aviation	●		
Bicycle	●		
Commuter Rail	●		●
Intercity Bus	●		
Intercity Rail	●		●
Passenger Vehicle/Highway	●		
Pedestrian	●		
Transit	●		

# Requirements - SLRTP

- Broadly defined
- Articulated in the form of goals
- No plan structure specification

## FEDERAL PLANNING FACTORS (LONG RANGE PLANS)

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency

Increase the safety of the transportation system for motorized and nonmotorized users

Increase the security of the transportation system for motorized and nonmotorized users

Increase the accessibility and mobility of people and for freight

Protect and enhance the environment, promote energy conservation, and improve quality of life; and promote consistency between transportation improvements and State and local planning growth and economic development patterns

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight

Promote efficient system management and operations

Emphasize the preservation of the existing transportation system

Improve transportation system resiliency and reliability and reduce or mitigate stormwater impacts on the surface transportation system

Enhance travel and tourism

# Requirements - SFP

- More prescriptive than SLRTP requirements
- Direction on what to consider
- Stipulates an investment plan
- Defines aspects of stakeholder participation: State Freight Advisory Committee
- No plan structure specification

Freight Plan Requirements
An identification of significant freight system trends, needs, and issues with respect to the State;
A description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;
When applicable, a listing of— <ul style="list-style-type: none"> <li>a. multimodal critical rural freight facilities and corridors designated within the State under section 70103 of title 49 (National Multimodal Freight Network)</li> <li>b. critical rural and urban freight corridors designated within the State under section 167 of title 23 (National Highway Freight Program);</li> </ul>
A description of how the plan will improve the ability of the State to meet the national multimodal freight policy goals described in section 70101(b) of title 49, United States Code and the national highway freight program goals described in section 167 of title 23;
A description of how innovative technologies and operational strategies, including freight intelligent transportation systems, that improve the safety and efficiency of the freight movement, were considered;
In the case of roadways on which travel by heavy vehicles (including mining, agricultural, energy cargo or equipment, and timber vehicles) is projected to substantially deteriorate the condition of the roadways, a description of improvements that may be required to reduce or impede the deterioration;
An inventory of facilities with freight mobility issues, such as bottlenecks, within the State, and for those facilities that are State owned or operated, a description of the strategies the State is employing to address those freight mobility issues;
Consideration of any significant congestion or delay caused by freight movements and any strategies to mitigate that congestion or delay;
A freight investment plan that, subject to 49 U.S.C. 70202(c), includes a list of priority projects and describes how funds made available to carry out 23 U.S.C. 167 would be invested and matched; and
Consultation with the State Freight Advisory Committee, if applicable.

# Requirements - SRP

- Highly prescriptive
- Stipulates six chapters and content
- Itemization of specific content of each chapter
- Appendix to 2013 Guidance itemizing supporting information elements
- Detailed investment program: project impacts, funding sources
- Project prioritization

## Rail Plan Requirements

### The Role of Rail in Statewide Transportation (Overview)

- **The State's goals for the multimodal transportation system.**
- **A conceptual analysis of rail transportation's role within the State's transportation system.**
- A description of the institutional governance structure of the State rail program(s) and local agencies involved in delivering rail services,
- **A description of the State's authority for grant, loan, and public/private partnership financing;**
- A summary of the freight and passenger rail services, initiatives and plans

### The State's Existing Rail System:

- The existing freight, intercity passenger, and commuter rail transportation system, services currently operating, operating objectives, and system performance
- Major freight and passenger terminals and stations that serve as intermodal connections, including seaports and airports.
- Objectives for the passenger rail services operating within the State, including minimum service levels by route, including service frequency, capacity, and projected ridership
- A performance evaluation of intercity passenger services operating in the State (both interstate and intrastate services) according to metrics such as those established under PRIIA Section 207
- A statement on public financing for rail projects and service in the State, including a list of current and prospective public capital and operating funding resources, public subsidies, State taxation, and other financial policies
- Ongoing programs and projects intended to improve the safety and security
- **A general analysis of rail transportation's economic and environmental impacts**

### Trends and Forecasts

- Demographic and economic growth factors
- Freight demand and growth by type of service, e.g. intermodal, commodity, manifest.
- Passenger travel demand and growth
- Fuel cost trends
- Rail congestion trends
- Highway and airport congestion trends
- Land use trends

### The State's Existing Rail System: Rail Service Needs and Opportunities

Proposed Passenger Rail Improvements and Investments

Proposed Freight Rail Improvements and Investments



# Plan Integration

- **Plan Development**
  - Introduces efficiencies in developing the plan
  - Facilitates productive public engagement- avoids outreach/survey fatigue
  - Ensures holistic multimodal perspective
  - Advances “mainstreaming” of freight
- **Plan Content**
  - Provides a multimodal perspective of transportation matters
  - Consistency in delivery
  - Single source – transportation information, policies, strategies, investments
  - Condensed, reader-friendly





# MM2045 Table of Contents

- **PURPOSE OF THE PLAN**
  - Letter from MDOT Director
  - Chapter 1 – What is Mobility Michigan 2045?
- **LOOKING TO THE FUTURE**
  - Chapter 2 – Socioeconomic and Technology Trends, Forecasts, and Scenarios
  - Chapter 3 – Revenue Forecast
- **SHAPING THE FUTURE**
  - Chapter 4 – Vision, Goals, Objectives, and Performance Measures
  - Chapter 5 – Partnerships
  - Chapter 6 – Mobility and Accessibility
  - Chapter 7 – Community and Environment
- **NETWORK PERFORMANCE**
  - Chapter 8 – Multimodal Performance Measures
- **NETWORK NEEDS**
  - Chapter 9 – Network Preservation
  - Chapter 10 – Network Expansion
  - Chapter 11 – Transportation Safety and Security
  - Chapter 12 – Network Management & Operations
  - Chapter 13 – Network Resiliency
- **RECOMMENDED STRATEGIES**





# Two-Phased Approach



## Phase 1

### Framing the Plan

Reviewed Peer States & Best Practices

Reviewed current MDOT/partner transportation initiatives

Established strategy for integrating freight and rail plans

Obtained input from the public on MM2045 Vision



## Phase 2

### Plan Development

Establish Vision, Goals, Objectives, and Strategies

Scenario analysis

Policy development & strategic direction

Develop Multimodal Plan (Freight, Rail, Transit & Active Transportation)

Implementation process



# Integration Matrices

FREIGHT PLAN REQUIREMENTS (49 USC §70202)	MM2045 CHAPTER	TASK
1. An identification of significant freight system trends, needs, and issues with respect to the State;	Chapter 2: Socioeconomic & Technology Trends, Forecasts & Scenarios Chapter 7: Community, Environment & Health	2, 4, 5, 6
2. A description of the freight policies, strategies, and performance measures that will guide the freight-related transportation investment decisions of the State;	Chapter 4: Vision, Goals, Objectives, and Performance Measures	3, 11

RAIL PLAN REQUIREMENTS (49 CFR §266.15)	MM2045 CHAPTER	TASK
1. An inventory of the existing overall rail transportation Network and rail services and facilities within the State and an analysis of the role of rail transportation within the State's surface transportation Network.	Chapter 6: Mobility & Accessibility	2
2. A review of all rail lines within the State, including proposed high-speed rail corridors and significant rail line segments not currently in service.	Chapter 6: Mobility & Accessibility	2

**Also developed matrix for the SLRTP Requirements, Federal Planning Factors for SLRTPs & League of American Bicyclists Recommended Elements**



# Public Outreach – Phase 1

#MM2045



## ➤ 30+ MEETINGS AND EVENTS AROUND THE STATE

- Pre-existing meetings/public events
- Reached 1,300 people

## ➤ METROQUEST SURVEY

- Interactive web-based survey
- 6,300 participants

## ➤ ATTITUDES AND PERCEPTIONS (A&P) SURVEY

- Statistically valid transportation survey
- 1,500 people – representative population of Michigan

## ➤ TELEPHONE TOWN HALLS

- Public phone-based meetings
- 3,000 Michiganders participated

## Public Outreach – Phase 2



### METROQUEST SURVEY

- Mid June – October 2020
- <http://www.michiganmobility.org/>



### TELEPHONE TOWN HALLS

- 3,300 Michiganders participated



### VIRTUAL REGIONAL FREIGHT FORUMS

- Four Regionally Based Zoom Sessions





# Michigan Mobility 2045 Vision

“In 2045, Michigan’s mobility network is **safe, efficient, future-driven,** and **adaptable.** This interconnected **multimodal** system is **people-focused, equitable, reliable, convenient** for all users and enriches Michigan’s **economic and societal vitality.**”

Through **collaboration and innovation,** Michigan will deliver a **well-maintained and sustainably-funded** network where strategic investments are made in **mobility options** that **improve quality of life, support public health, and promote resiliency.**”





# Freight Advisory Committee Visioning Findings

## Key Factors Enabling Performance

1. Asset Management-Infrastructure Durability
2. Comprehensive Modal Inclusion
3. Economic Geography
4. Workforce Access
5. Stakeholder Collaboration
6. Technology Deployment
7. Environmental Sustainability
8. Resiliency
9. Supply Chain Visibility
10. Productivity



# MM2045 GUIDING PRINCIPLES



Modal Choice



Preservation



Future Oriented



Quality of Life

# MM2045 Goals



## **SAFETY AND SECURITY:**

ENHANCE THE SAFETY AND ENSURE THE SECURITY OF THE TRANSPORTATION NETWORK FOR ALL USERS AND WORKERS.



## **NETWORK CONDITION:**

THROUGH INVESTMENT STRATEGIES AND INNOVATION, PRESERVE AND IMPROVE THE CONDITION OF MICHIGAN'S TRANSPORTATION NETWORK SO THAT ALL MODES ARE RELIABLE, RESILIENT, AND ADAPTABLE.



## **MOBILITY:**

ENHANCE MOBILITY CHOICES FOR ALL USERS OF THE TRANSPORTATION NETWORK THROUGH EFFICIENT AND EFFECTIVE OPERATIONS AND RELIABLE MULTIMODAL OPPORTUNITIES.



## **QUALITY OF LIFE:**

ENHANCE QUALITY OF LIFE FOR ALL COMMUNITIES AND USERS OF THE TRANSPORTATION NETWORK.



## **ECONOMY AND STEWARDSHIP:**

IMPROVE THE MOVEMENT OF PEOPLE AND GOODS TO ATTRACT AND SUSTAIN DIVERSE ECONOMIC OPPORTUNITIES WHILE INVESTING RESOURCES RESPONSIBLY.



## **PARTNERSHIP:**

STRENGTHEN, EXPAND AND PROMOTE COLLABORATION WITH ALL USERS THROUGH EFFECTIVE PUBLIC AND PRIVATE PARTNERSHIPS.







# MM2045 Objectives - Freight

- **Network Condition**

- Achieve and maintain a state of good repair of transportation assets within the limitations of available resources
- Incorporate resiliency, adaptability, and redundancy in the transportation network, systems management, and operations

- **Mobility**

- Improve access and connectivity between modes
- Mitigate travel delays and alleviate congestion to provide predictable, reliable travel times

- **Economy and Stewardship**

- Pursue transportation asset and operational improvements that will expand access to economic opportunities, jobs, and core services
- Create and enlarge competitive advantage for Michigan supply chains through higher productivity and dependability in the state freight system, supporting economic growth and strengthening economic resilience



# Challenges of Creating & Implementing an Integrated Transportation Plan

- **Multiple owner and operators of transportation system (all modes)**
- **New technologies**
- **Coordination/outreach with partners, public and stakeholders**
- Performance measures
- Integration of three federally required documents
- Funding challenges





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<b>Dan Belcher, Kevin McKnight</b>	<b>TASK 3</b> Data Gathering/Cap Analysis	<b>Kevin Ford (HS)</b>
<b>Kelly Travelbee</b>	<b>TASK 4</b> Infrastructure Condition/Performance Measures	<b>Erin Dean (HS)</b>
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# Coordination & Organizational Structure



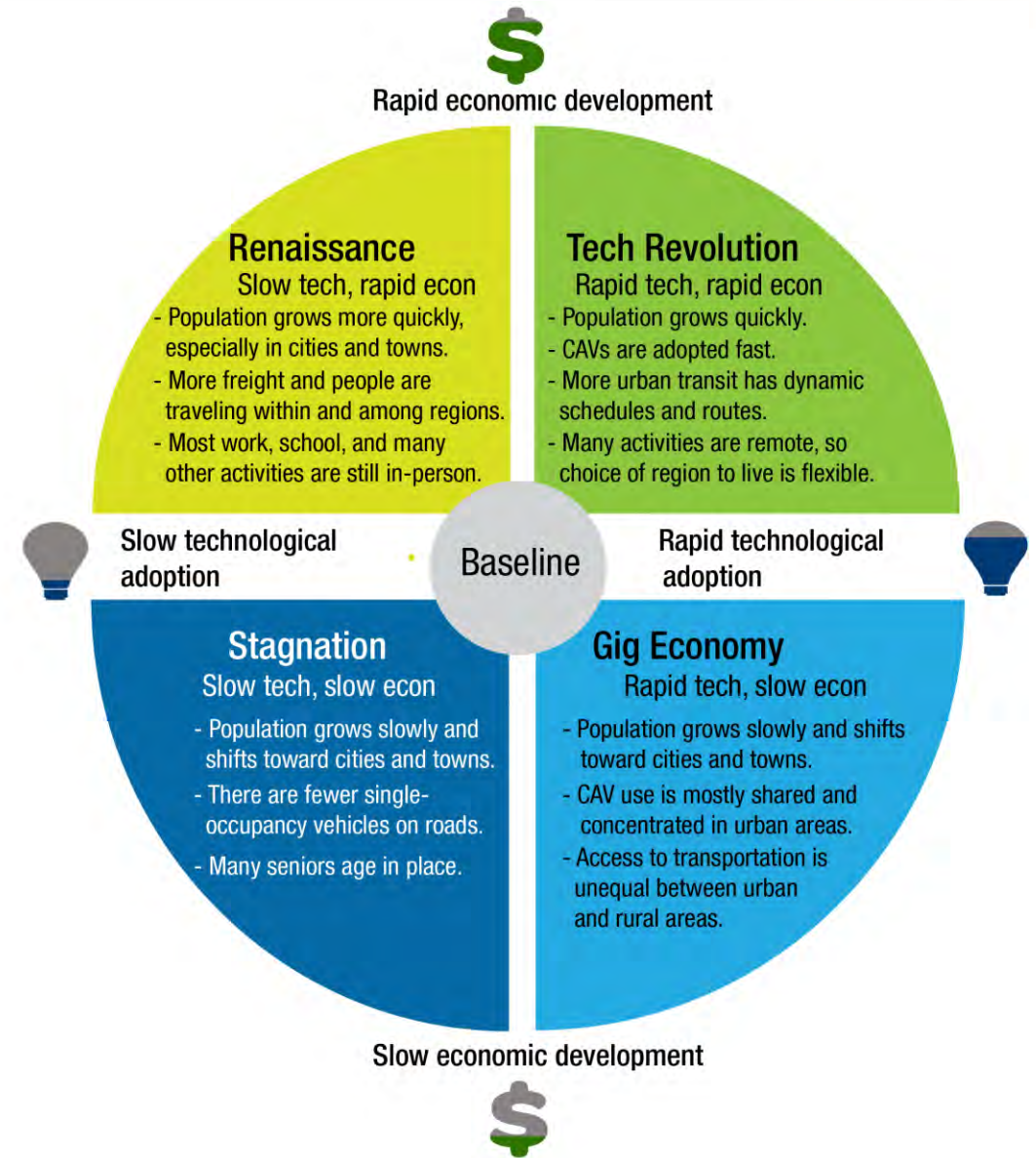
# Multiple Owners & Operators

- **226** airports - 130 public, 96 private
- Bike and ped infrastructure – all levels of government ownership
- Freight rail - Michigan owns **665** miles, 4 Class I rail carriers, and non-class owners
- Passenger rail - Michigan, Amtrak, and Class I railroads
- **121,000** miles of road (MDOT 8% of route miles, 53% of traffic), **83** counties and **533** cities and villages
- **33** active cargo ports – public authorities and private owners
- **14** MPOs
- **90** transit organizations representing all 83 counties



# Future Alternative Economic & Technology Futures

Using scenario planning to identify qualitatively impacts of alternative policies, plans, & programs to help MDOT set its strategic direction, develop policies and strategies, and inform organizational needs.





## Michigan Mobility 2045 - Timeline

March – April 2021	Plan Development
June – October 2020	Public Input (Policy, Objectives, Strategies)
April 2021	Draft Plan Complete (30-day comment period)
July 2021	Adopt Final Plan (State Transportation Commission)





*Michigan*<sup>2045</sup>  
**>>> Mobility**



**QUESTIONS?**