MULTI-MODAL DEVELOPMENT AND DELIVERY GUIDEBOOK

Transportation Bonanza
February 13, 2020
Brad Peterson, LLA - MDOT
Eric Dryer, AICP – OHM Advisors
WHAT DO YOU THINK OF WHEN YOU HEAR ‘STATE TRUNKLINE’?
probably something like this
but the context varies...
M2D2 SUPPORTS THE DESIGN AND IMPLEMENTATION OF CONTEXT SENSITIVE MULTI-MODAL TRANSPORTATION OPTIONS ON MICHIGAN ROADS
WHAT IS M2D2?

Program designed to support Michigan’s economic recovery by improving MDOT’s capacity to plan, design, construct, operate and maintain Michigan’s transportation system for Complete Streets and multiple modes.
WHY M2D2?

• Balance conflicting needs
• Accommodate public need vs. existing guidance
• Better respond to situational requests
• Consider ways for MDOT to achieve multiple mode integration
GOALS

• Explore needs and expectations for each mode

• Identify ways MDOT can balance those needs, including partnerships

• Understand barriers, gaps and opportunities that exist in current MDOT practices, standards and guidance

• Provide Context Sensitive Solutions to multi-modal projects
WHAT M2D2 IS NOT

• A funding commitment

• A guarantee that all wants can be addressed by MDOT

MDOT’s Guidance for Trunkline Main Streets

“all parties have a financial stake and responsibility”
“A collaborative, interdisciplinary approach that involves stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility”
APPLYING THE CSS PROCESS

CSS are grounded in 3 *key* fundamentals:
- Stakeholder Engagement
- Flexibility
- Effective Decision Making

Fundamentals are applied to environmental and social contexts.
- Rural
- Suburban
- Urban
APPLYING THE CSS PROCESS

Opportunity Curve for Meaningful Stakeholder Input

- General Planning Issues
- Specific Design Items

Project Timeline:
- Base budgets set here
- 5-Year Program Announced
- Scope Verified
- Base Plan
- Plan Review
- Plan Completion

Budgets finalized here
WHAT “COMPLETES” THE STREET?

The context of the road and surrounding land use play a pivotal role in what may be the appropriate Complete Street response.
Context Sensitive Solutions look to match the appropriate modal choice to each specific land use context.
THE GUIDEBOOK
The M2D2 Guidebook intends to serve as a process for integrating multi-modal design characteristics into the current MDOT project development process.
THE GUIDEBOOK

Built from MDOT Project Selection Process

M2D2 Chapters structured around MDOT Phases

Agencies can consult corresponding M2D2 chapter as each phase starts
IDENTIFY THE MODAL OPTIONS...

- Complete streets
- Public transportation
- AV/CV readiness
THAT ARE MOST APPROPRIATE HERE

urban  suburban

city  suburban

small town  rural
BENCHMARKING

Best practices and case studies for each modal choice

- Complete streets elements & evaluation
- Transit infrastructure improvements & new technology
- AV/CV needs & impacts

Help MDOT determine projects that are most appropriate
COMPLETE STREETS

nacto urban street design guide
AV/CV READINESS

autonomous freight
DATA GATHERING

Data can help inform project recommendations

Reliance on data is growing due to availability

Data sources and collection methods are changing with technology
CURRENT DATA SOURCES

A bikeway is a road, street, or path designated for bicycle travel, regardless of whether it is for the exclusive use of bicycles or is to be shared with other transportation modes. The Existing Bikeway Network map shows three classes of bikeways: (1) Shared-Use Paths, (2) Bike Lanes, and (3) Other Bikeways. Other Bikeways are defined as rural wide paved shoulders, shared-lane markings, and local, county, or national bike routes.

Please see the "About" tab for more information on the report’s Existing Bikeway Network.

Existing Bikeways:
- Shared-Use Path
- Bike Lane
- Other Bikeways

national, state, regional, and local agencies
EMERGING DATA TRENDS

digital bike counters
IMPLEMENTATION FRAMEWORK

Blueprint for context sensitive projects
Includes specific examples of multi-modal design elements
Summarizes the relevance of each tool in improving transportation goals

<table>
<thead>
<tr>
<th>MOBILITY TOOL/ELEMENT</th>
<th>URBAN</th>
<th>SUBURBAN</th>
<th>SMALL TOWN</th>
<th>CONNECTING CORRIDOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier-Free Ramps</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Protected Bike Lanes</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Standard Bike Lanes</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Curb Extensions</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Lane Reductions</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Mid-block Crossings</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>On-Street Parking</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Paved Shoulders</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Pedestrian Islands</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Shared-use Paths</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Streetscaping</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
<tr>
<td>Pedestrian Signals</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
<td>⚫⚫⚫⚫</td>
</tr>
</tbody>
</table>
CONTEXT SENSITIVE RECOMMENDATIONS
## RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Urban Area</th>
<th>Suburban Area</th>
<th>Small Town</th>
<th>Connecting Corridor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Must Consider</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritizing non-motorized access in transit corridors</td>
<td>Improving non-motorized safety in vehicle corridors</td>
<td>Balancing the safety needs of all users</td>
<td>Implementing technology to improve safety and efficiency</td>
</tr>
<tr>
<td>Changes in new mobility</td>
<td>Adjacent land uses</td>
<td>Connections to non-motorized facilities</td>
<td>Accommodating all users safely</td>
</tr>
<tr>
<td><strong>Should Consider</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right sized street design</td>
<td>Improve transit amenities and connections</td>
<td>Appropriate street design</td>
<td>Dedicated space for non-motorized users</td>
</tr>
<tr>
<td>Long term transit goals</td>
<td>Adapting streets to accommodate multi-modal options and AVs</td>
<td>Future mobility needs and demands</td>
<td>Utilizing connected vehicle technology</td>
</tr>
</tbody>
</table>
Through the CSS process and utilizing Complete Streets principles, M2D2 is...

- Transportation Planning
- Multi-modal
- Linking communities
- Flexible to community needs
- Partnerships
- Modal choice
- Beneficial to health
- For all legal users
- Funded by multiple methods
- For all abilities
- Endorsed by many organizations
- For all ages
- Context Sensitive
- For all communities large or small
- Rural, small town, suburban, or urban

Developed through Stakeholder Engagement, Effective Decision Making, and Flexibility
QUESTIONS?

Contact Info:
Bradley Peterson, L.L.A.
PetersonB3@Michigan.gov

Eric Dryer, AICP
eric.dryer@ohm-advisors.com
Michigan’s State Long-Range Transportation Plan

Michigan Association of Planning – Transportation Bonanza

2/13/2020

Bradley Sharlow – Project Manager
Kyle Haller, AICP – Deputy Project Manager
Outline

- Michigan Mobility 2045 (MM2045)
  - What is it?
  - Planning & Program Development Process
  - Integration of multiple plans
- Public & Stakeholder Engagement
- Vision & Goals for MM2045
  - Guiding Principles
  - Vision Statement
  - Goals
- MM2045 Timeline / Next Steps
- Questions
What is a State Long-Range Transportation Plan (SLRTP)?

- Multi-modal policy-based planning document that establishes the following for Michigan’s transportation system:
  - Vision
  - Goals
  - Objectives
  - Key Strategies
- Federally required
- 20+ Year Planning Horizon
- Michigan Mobility 2045 is in Phase 2 of development
MM2045: Plan Integration

Long-Range

Freight

Rail

Active

Transit Strategic Plan
Public Outreach – Phase 1

• 30+ meetings and events around the state
  • Pre-existing meetings
  • Conferences
  • Public Events
  • Targeted environmental justice populations
    • Minority
    • Low income
  • ADA community
  • Reached 1,300 people

• MetroQuest Survey
  • Interactive web-based survey
  • 6,300 participants
Public Outreach – Phase 1

- **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

- **Michigan Mobility website**
  - [www.michiganmobility.org](http://www.michiganmobility.org)

- **MDOT social media**
6,300 Participants
Telephone Town Halls

- Two telephone town halls in February 2019
- Phone calls to 25,271 potential participants in Michigan
- Online “Opt-In” form was publicized and 6,000 text messages were sent
- 3,048 people chose to join
- Maximum number of participants at one time was 621
- People joined on average for 5.91 minutes
- Common question topics included repairing existing roads, bus service, transit, public transportation for the elderly, roundabouts, funding/taxes, and bicycle and pedestrian accommodations
Statewide Findings

• Repairing and maintaining existing roads and bridges is the top priority
• Quality of life was important - investment that promotes:
  • Prosperity
  • Health
  • sustainability,
  • air and water quality
  • multimodal transportation options
• Transportation options for the elderly and disabled
• Addressing traffic congestion
• Issues that consistently ranked as low priorities:
  • preparing for self-driving vehicles
  • expansion of the transportation system, such as, adding new lanes to highways
Stakeholder Visioning Workshop

• 65 people attended
• Diverse set of stakeholder groups
• Crafted draft vision statement
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.
MM2045 Guiding Principles

Modal Choice

Preservation

Future Oriented

Quality of Life
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.

ECONOMIC 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.
Performance Based Planning

- Vision
- Values
- Goals
- Objectives
- Strategies
- Performance Measures
Implementation Strategies

A plan of action or policy designed to achieve the goals and objectives

- **Short-Term Strategies (5 year)**
  - Very specific near-term, with possible performance measures/targets
  - Link to Five-Year Transportation Program, S/TIP

- **Mid-Term Strategies (10 year)**
  - Slightly broader, but still measurable, with possible performance measures/targets
  - Link to Transportation Asset Management Plan (TAMP) and other modal plans

- **Long-Term Strategies (25 year)**
  - More broad-based, qualitative
  - No performance measures/targets
  - Future-driven, technology-based
  - Link to MPO long-range transportation plans
Next Steps

• Winter and Spring 2020
  • Existing Conditions and Inventory
  • Baseline Investment Strategy

• March 2020 – Establish Draft Objectives to support goals

• Summer 2020
  • Forecasting
  • Scenario Planning
  • Round 2 Public Involvement

• Fall 2020 – Establish Strategies for implementing Plan
  • Freight/Rail Service Investment Plans
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2020 – April 2021</td>
<td>Plan Development</td>
</tr>
<tr>
<td>April 2020 – September 2020</td>
<td>Public Input (Policy, Objectives, Strategies)</td>
</tr>
<tr>
<td>April 2021</td>
<td>Draft Plan Complete (30-day comment period)</td>
</tr>
<tr>
<td>July 2021</td>
<td>Adopt Final Plan (State Transportation Commission)</td>
</tr>
</tbody>
</table>
Project Schedule

• January – April 12, 2019 - Public Comment Period – Visioning
• Summer 2019 – Establish Final Vision for the Plan
• Fall 2019 – Establish Goals
• January 22, 2020 – Phase 2 Kickoff Meeting
  • May – August 2020 – Public Comment Period – Objectives, Strategies
  • March – May 2021 – Draft MM2045 Plan Completion
• July 2021 – Final MM2045 Plan Adoption
Thank you for your time!

Bradley Sharlow – Project Manager
SharlowB@michigan.gov

Kyle Haller, AICP – Project Manager
HallerK@michigan.gov