

# Complete Streets Advisory Council



March 24, 2016

# Agenda

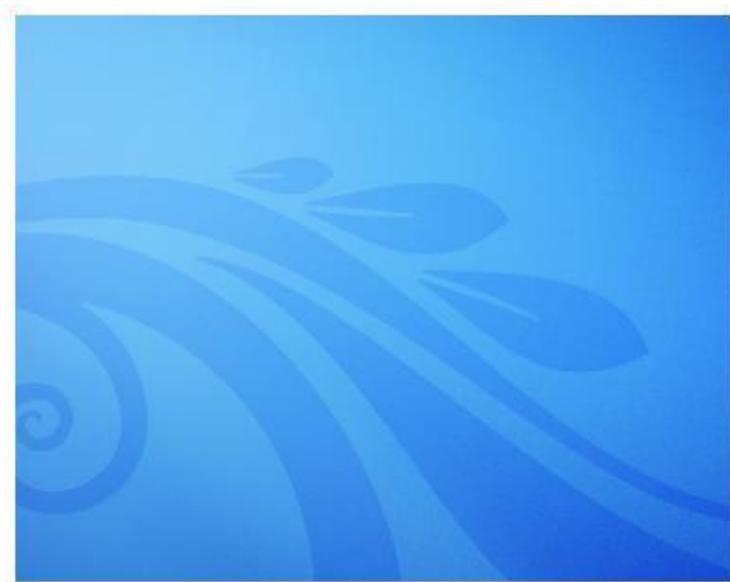
- Welcome
- Approve draft minutes from December 4, 2014 & January 29, 2015 meetings
- Approve 2015 Annual Report
- Update from MDOT's Multi-Modal Development and Delivery (M2D2) Team
- Update on State & Federal Transportation Funding
- Break
- Proposed Speed Limit Changes
- Economics of Bicycling Study
- Public Comment
- 
- Wrap-Up
- Adjournment

# Approve Draft Minutes



# Approve 2015 Report





# Multimodal Development & Delivery (M2D2)

Claire Stevens

MDOT's Strategic Alignment & Outreach Specialist



**Smart Growth America**  
Making Neighborhoods Great Together

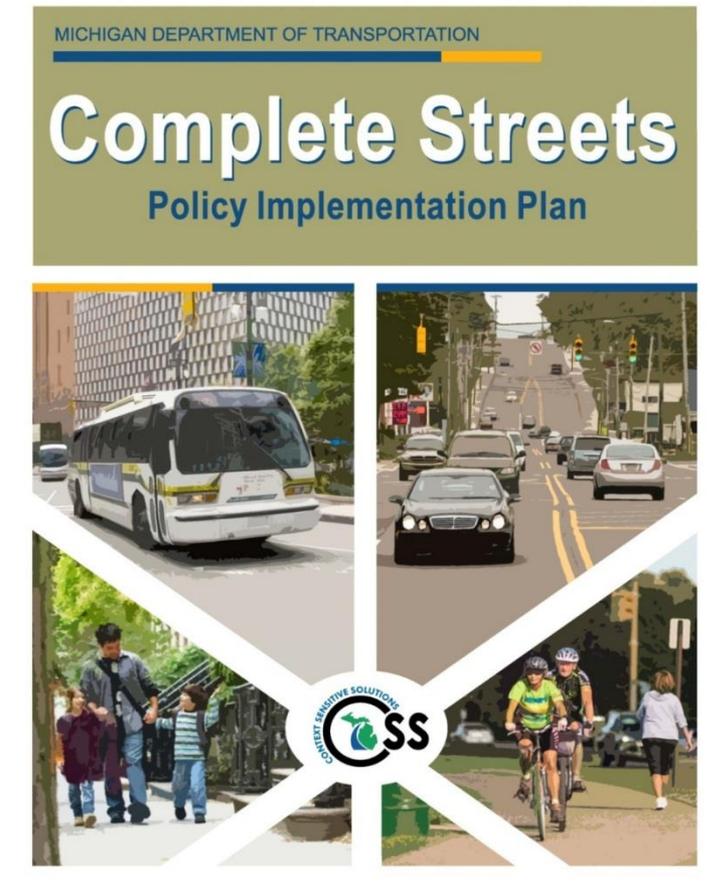
# Purpose of M2D2

A project to support Michigan's economic recovery by improving MDOT's institutional capacity to plan, design, construct, operate & maintain Michigan's transportation system for Complete Streets & multiple modes.



# Why?

- Weigh conflicting interests, standards & guidelines
- Accommodate public need vs. existing guidance
- Better respond to situational-related requests
- Balance needs & expectations for each transportation mode & identify ways MDOT can balance those needs collectively when multiple modes exist



# Goals of M2D2



- Explore needs & expectations for each transportation mode
- Identify ways MDOT can balance those needs
- Understand barriers, gaps & opportunities that exist in current MDOT practices, standards & guidance

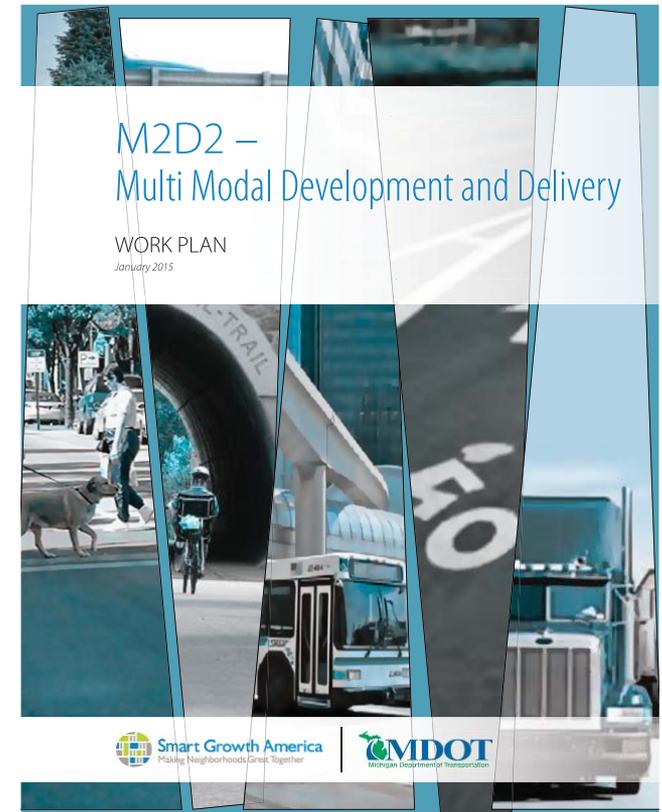
# MDOT Project Stakeholder Group

Held 6 workshops/reviewed gaps & opportunities in policy & standards

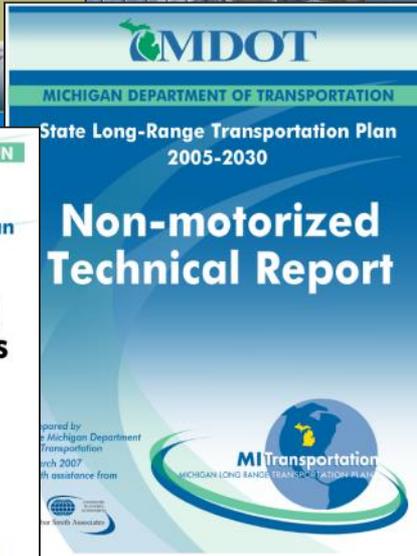
| 1  | 2  | 3   | 4   | 5  | 6   |   |
|--|--|---|---|--|---|---|
| March 10   | April 14   | May 1   | May 19  | June 9   | June 16-17  |   |
|  <p><b>Transportation and Land Use</b></p> <ul style="list-style-type: none"> <li>History and legal basis of planning and zoning</li> <li>Planning</li> <li>Zoning</li> <li>Subdivision</li> <li>Economic and Fiscal Health</li> <li>Integrating land use and transportation</li> </ul> |  <p><b>Active Transportation</b></p> <ul style="list-style-type: none"> <li>History and trends</li> <li>Walking</li> <li>Bicycling</li> <li>Complete Streets</li> </ul> |  <p><b>Public Transportation</b></p> <ul style="list-style-type: none"> <li>System Characteristics: Intercity, Regional, Trunk Line, Local, Special Needs</li> <li>Bus-based systems and technology</li> <li>Rail-based systems and technology</li> <li>Mobility management</li> </ul> |  <p><b>Intelligent Transportation Systems (ITS)</b></p> <ul style="list-style-type: none"> <li>Overview of ITS</li> <li>State of the ITS Practice in MDOT/Michigan</li> <li>ITS strategies and applications for all modes</li> <li>Integrated corridor management (ICM)</li> <li>Advancing multimodal ITS in MDOT programs, processes, and projects</li> </ul> |  <p><b>Transportation Demand Management (TDM)</b></p> <ul style="list-style-type: none"> <li>What is TDM and why do it?</li> <li>Typical (and atypical) tools for TDM &amp; Implementation</li> <li>Setting up Success in Michigan</li> <li>State role in TDM</li> <li>How much? Measuring and reporting</li> <li>Developing a TDM program</li> </ul> |  <p><b>Freight Logistics</b></p> <ul style="list-style-type: none"> <li>System characteristics</li> <li>Truck-based systems</li> <li>Rail-based systems</li> <li>Intermodal hubs: Ports, Airports, Distribution centers</li> </ul> |  <p><b>Multimodal Integration and Trade-Offs</b></p> <ul style="list-style-type: none"> <li>Summary of findings from past workshops</li> <li>Planning considerations</li> <li>Design considerations</li> <li>Construction considerations</li> <li>Operations and maintenance considerations</li> </ul> |

# M2D2 Products

- Report that lists procedures, practices, standards, guidance documents & manuals that require revisions or modifications
- Work plan that identifies agency or department responsible for making revisions & expected completion date
- Recommendations for ongoing training & development for MDOT staff & other stakeholders to understand & utilize revised practices



# Workshop Results



## Poll: MDOT standards, guidance, policies, and documents to revise

Top 1  
Top 2  
Top 3

### Documents

### Workshops

| Documents   | Active Transpo | Public Transpo | Workshops |     |         |
|---|----------------|----------------|-----------|-----|---------|
|   |                |                | ITS       | TDM | Freight |
| MMUTCD  | 2              | 2              | 1         | 1   |         |
| Geometric Design Guide  | 9              | 9              | 0         | 1   |         |
| Road Design Manual  | 11             | 1              | 5         | 2   |         |
| Bridge Design Guide   | 1              | 0              | 0         | 1   |         |
| Sidewalk Participation Rules  | 5              | 2              | 0         | 0   |         |
| Complete Streets Policy   | 7              | 2              | 0         | 3   |         |
| Crosswalk Guidance  | 1              | 2              | 1         | 1   |         |
| Gap: Bus stop design standard   | n/a            | 6              | n/a       | n/a |         |
| CSS Guideline for Stakeholder Engagement  | 1              | 3              | 0         | 1   |         |
| Highway Capacity Manual   | n/a            | n/a            | 1         | 2   |         |
| ITE Trip Generation Manual  | n/a            | n/a            | 0         | 1   |         |
| ITS Guidance  | 1              | 0              | 3         | 0   |         |
| Local Agency Program (LAP) Guidelines for Geometrics                            | 2              | 1              | 0         | 0   |         |
| LAP Application   | 0              | 0              | 0         | 0   |         |
| Signalization Capacity Software   | n/a            | n/a            | 1         | 2   |         |
| Call for Projects Memo & Instructions   | 14             | 3              | 2         | 0   |         |
| Program/Project Management System: Preconstruction Process Documentation Manual | n/a            | n/a            | 6         | 2   |         |
| Scoping Manual & Checklist  | 5              | 10             | 5         | 6   |         |
| Monitoring and Reporting Projects   | 1              | 0              | 0         | 0   |         |
| Funding template  | 24             | 15             | 9         | 7   |         |
| STIP  | 0              | 2              | 0         | 0   |         |
| Strategic Plan / Scorecard  | n/a            | n/a            | 0         | 3   |         |
| State Long Range Plan   | n/a            | n/a            | 0         | 6   |         |
| 5-year Transportation Program   | 4              | 1              | 3         | 2   |         |
| MPO LRP / Work plans  | n/a            | n/a            | 2         | 3   |         |
| Standard Plans  | 1              | 1              | 3         | 0   |         |
| Stewardship Agreement (MDO-FHWA)  | n/a            | n/a            | 0         | 2   |         |

# Recommended Documents/Processes for Revision

| DOCUMENTS/PROCESSES                           | WHO LEADS               |
|---|-------------------------|
| Road Design Manual                            | BHD/Design Division     |
| Bridge Design Manual                          | BHD/Design Division     |
| Sidewalk Participation Rules (Act 51)         | BHD/Devel. Services/LAP |
| LAP Guidelines for Geometrics                 | BHD/Devel. Services/LAP |
| LAP Application                               | BHD/Devel. Services/LAP |
| Project Scoping Manual/Checklist              | BHD/Design Division     |
| Call for Projects Memo/Instructions           | CAO/COO/BTP             |
| Funding Template                              | CAO/COO/BTP             |
| MDOT/FHWA Stewardship and Oversight Agreement | CAO/COO                 |
| Crosswalk Design Guidance                     | BHD/Design Division     |
| Bus Stop Design Guidance                      | BHD/Design Division     |

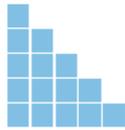
# Stakeholder Collaboration

- Internal department staff
- Other impacted/interested state agencies
- FHWA & FTA staff
- Regional governments
- Local governments
- Other governmental/quasi-governmental agencies
- State chapters of associated professional organizations
- Planning & Engineering consultants
- Traveling public



# Internal & External Training

Table 6. Levels, Attendees, Purpose, and Duration of Training



Level



Attendees



Purpose

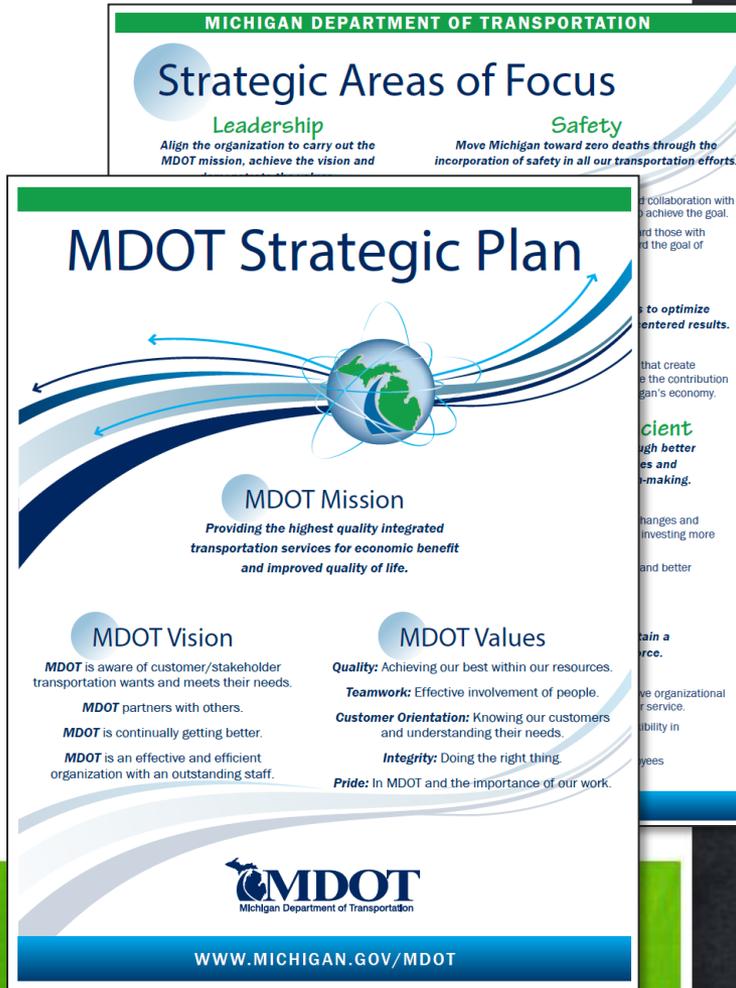


Duration

| Level  | Attendees   | Purpose   | Duration   |
|--|---|---|--|
| Level 1 – Executive Overview                               | Upper management, region engineers, FHWA/FTA representatives, State Transportation Commission | Basic understanding of the new multimodal focus and the internal/external training to be conducted.   | 1 to 2 hours   |
| Level 2 – Manager’s Overview                               | Bureau/Division managers, planners/design engineers, other key management staff               | Understanding of the new multimodal focus and how it will impact staff responsibilities and activities.   | 2 to 3 hours   |
| Level 3 – Division and Region Full Training                | Frontline staff in affected bureaus/divisions/regions   | Thorough understanding of the new documents and processes and how to integrate them into routine activities.  | 8 hours<br>– possibly held in conjunction with other MDOT meetings       |
| Level 4 – City, County, Urban/Rural Planning Organizations | Management and frontline staff in cities, counties, planning organizations                    | Understanding of the new documents and processes and how local agencies will coordinate with MDOT on plans, projects and issues within their jurisdictions. | 3 to 4 hours<br>– possibly held in conjunction with routine MPO meetings |

*The complete curriculum for the 8-hour Level 3 training will cover all aspects of the revised documents and procedures in the document/process work plan.*

# MDOT's Role



The image shows the cover of the Michigan Department of Transportation (MDOT) Strategic Plan. At the top, it reads "MICHIGAN DEPARTMENT OF TRANSPORTATION" in a green bar. Below this is the title "Strategic Areas of Focus" with two main areas: "Leadership" and "Safety". Under "Leadership", it says "Align the organization to carry out the MDOT mission, achieve the vision and...". Under "Safety", it says "Move Michigan toward zero deaths through the incorporation of safety in all our transportation efforts." The main title of the document is "MDOT Strategic Plan" in large blue letters. Below the title is a graphic of a globe with blue and green lines representing roads or paths. The "MDOT Mission" is stated as "Providing the highest quality integrated transportation services for economic benefit and improved quality of life." The "MDOT Vision" is "MDOT is aware of customer/stakeholder transportation wants and meets their needs. MDOT partners with others. MDOT is continually getting better. MDOT is an effective and efficient organization with an outstanding staff." The "MDOT Values" are listed as: "Quality: Achieving our best within our resources. Teamwork: Effective involvement of people. Customer Orientation: Knowing our customers and understanding their needs. Integrity: Doing the right thing. Pride: In MDOT and the importance of our work." At the bottom, there is the MDOT logo and the website address "WWW.MICHIGAN.GOV/MDOT".

- Provide flexibility in standards / guidance
- Identify stakeholders & engage them early
- Facilitate conversations & decision-making, build partnerships
- Be a resource to communities

# Where Are We Now?

*“I think [M2D2] opened my eyes to where transportation needs to go to meet the needs of the future.*

*It helped me understand there are many different uses for the roadway and right of way.”*

*-- MDOT participant*

- Formed implementation team that meets monthly
- Finalized work plan for implementation, creating 3 tiers of priority
- Reached out to all owners of documents that need updating & created teams to work on each
- Developing a statement on state’s design flexibility

# Thank You!



**Smart Growth America**  
Making Neighborhoods Great Together

# Update on State & Federal Transportation Funding



# Fixing America's Surface Transportation Act (FAST Act)

## *Highlights*



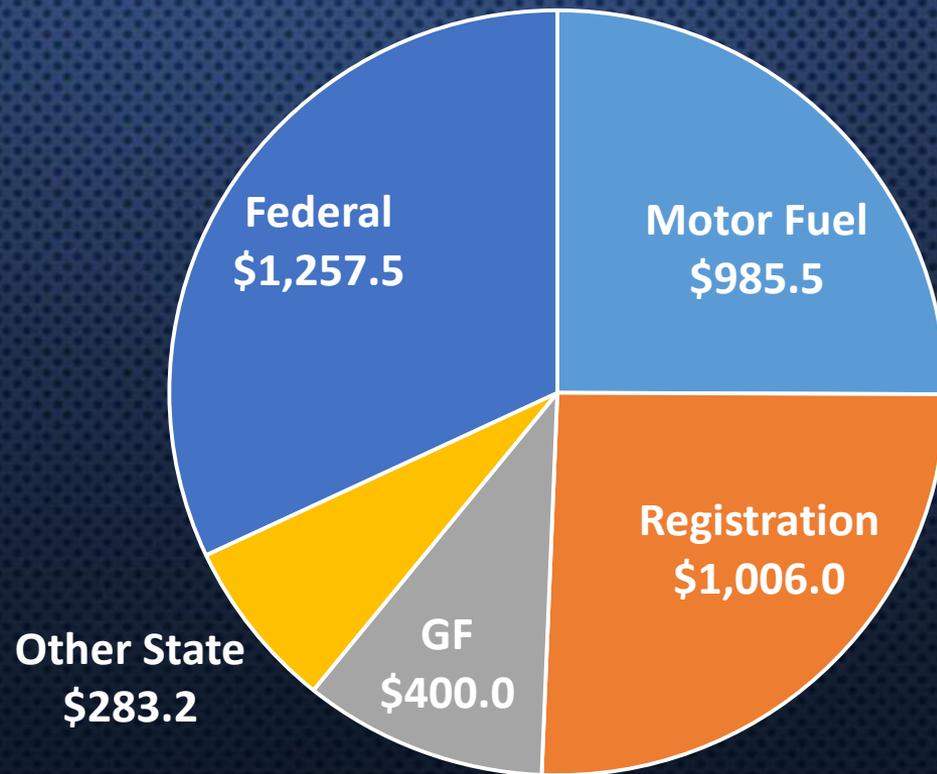
Michigan Department of Transportation





# Federal-Aid Highway Program Importance

State Transportation Budget = \$3.9 billion



# Fixing America's Surface Transportation (FAST) Act

- Five years of federal funding certainty
  - FY 2016-2020
- Largely avoids controversial new initiatives
- Fully paid for
- Continues & improves changes in MAP-21
  - Performance management
  - Freight planning
  - Program simplification



# FAST Act Nationwide Funding

| (in millions) | FY 2015         | FY 2016-2020 Annual Average | Increase FY 15 vs. FY 2016-20 annual avg. | FY 2016-2020 Total |
|---------------|-----------------|-----------------------------|---|--------------------|
| Highways      | \$40,995        | \$45,038                    | 9.9%                                      | \$225,190          |
| Transit       | \$10,689        | \$12,223                    | 14.3%                                     | \$61,113           |
| Safety        | \$1,252         | \$1,392                     | 11.2%                                     | \$6,960            |
| Rail          | \$1,390         | \$2,071                     | 49.0%                                     | \$10,355           |
| Other         | \$98            | \$308                       | 213.6%                                    | \$1,541            |
| <b>Total</b>  | <b>\$54,424</b> | <b>\$61,032</b>             | <b>12.1%</b>                              | <b>\$305,158</b>   |



# FAST Act Highway Funding to Michigan

| (in millions)                             | MAP-21  | FAST Act |         |         |         |         |
|---|---------|----------|---------|---------|---------|---------|
|   | FY 2015 | FY 2016  | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
| Total Apportioned Highway Program Funding | \$1,016 | \$1,068  | \$1,090 | \$1,114 | \$1,139 | \$1,166 |
| Increase from Prior Year                  | 0.0%    | 5.1%     | 2.2%    | 2.2%    | 2.2%    | 2.4%    |



# Highway Funding to Michigan





# Highway Highlights

- Maintains existing formula-based programs
- New project eligibilities include:
  - V2I – Vehicle to Infrastructure ITS
  - Projects to reduce critical infrastructure failure
  - Projects to separate pedestrians & traffic
  - Enhancement of pollinator habitat
- Lost eligibility for some non-infrastructure safety projects



# Highway Highlights

- Continues focus on freight
  - National highway freight network & national freight strategic plan
- National highway freight program
  - Formula-based
  - Investments on Interstate & freight connecting routes
- Nationally significant freight & highway projects
  - Competitive
  - Aimed at large projects - \$100M or more

# Transit Funding for Michigan

| (in millions)                             | MAP-21  | FAST Act |         |         |         |         |
|---|---------|----------|---------|---------|---------|---------|
|   | FY 2015 | FY 2016  | FY 2017 | FY 2018 | FY 2019 | FY 2020 |
| Total Apportioned Transit Program Funding | \$131.6 | \$133.7  | \$136.4 | \$139.4 | \$142.6 | \$145.7 |
| Increase from Prior Year                  | 0.2%    | 1.6%     | 2.1%    | 2.2%    | 2.3%    | 2.2%    |



# Transit Highlights

- Reinstates funds for Bus & Bus Facilities
- Raises Fixed Guideway Small Starts threshold
- Allows funds for joint transit/rail projects
- Pilot program to coordinate services
- Expands cooperative procurement options





# Rail Highlights

- Rail Highlights
  - Separates accounting for Amtrak
    - NEC
    - National Network
  - Creates state supported routes committee
  - Authorizes \$440M/yr for passenger rail projects



# Highway Trust Fund

- Some issues remain on horizon
  - Continues reliance on non-transportation revenue sources
    - Federal Reserve Surplus Fund: \$53B
    - Strategic Petroleum Reserve: \$6B
    - Bank to bank dividends: \$6B
    - Customs fees: \$5B
  - Deficit between revenue & funding to approach \$20B/yr by end of this authorization
- Authorizes funding to study funding alternatives

# Complete Streets Highlights



- CS considerations
  - Required for NHS projects
  - Encouraged for federal-aid projects
- USDOT to report on best practices
- Design Standard Flexibility
  - NACTO & other guides

# Thank You!



# Break

Please be back in 15 minutes



# Proposed Speed Limit Changes



# Community & Economic Benefits of Bicycling in Michigan



**Michigan Complete Streets Advisory Council  
Lansing, Michigan  
March 24, 2016**

# More People Riding for Fitness



# For Transportation



# More & Better Infrastructure



# Because we love riding in a cool breeze



# So our kids can experience two-wheeled adventures



# We ride for fun



# Whatever the Reason!



- Gear is purchased
- Trips are taken
- Events are organized
- Individuals are a little healthier, and
- **MONEY IS SPENT** – how much?

# Phase I – Industry and Business Benefits

- Statewide
- Five case study communities
  - Ann Arbor
  - Grand Rapids
  - Holland
  - Traverse City
  - 2 Detroit neighborhoods \*

\*SW Detroit and area around Conner Creek Greenway

# Phase I – Industry and Business Benefits



- Household spending on bicycle related purchases
- Manufacturing – revenues/ employment
- Avoided health costs
- Reduced absenteeism
- Event & tourism spending by locals
- Retail business – employment

# Unique Blended Data Approach

- Qualitative and Quantitative Data
  - Qualitative data – interviews 70
    - Impacts bicycling has on business or community
    - Understand unique and different roles of bicycling in each community
    - Quotes throughout the report making for a more interesting read.



# Unique Blended Data Approach

- Qualitative and Quantitative Data
  - Quantitative data –
    - Household surveys
      - 3200+ surveys
    - American Community Survey (ACS)
    - Dun and Bradstreet (D&B)
    - MDCH
    - CDC
    - Journal of Occupational and Environmental Medicine
    - National Bicycle Dealers Association



# RESULTS

- Detroit Neighborhoods\*
  - Greenway Expansion and Emerging Manufacturing
  - \$5.2 Million – *Manufacturing*
  - \$1.6 Million – Local Event & Vacation Spending
  - 59 – Persons Employed by Bicycle Industry
- Contribution \$20.7 Million



# RESULTS

- Ann Arbor
  - Commuting and Transportation Emphasis
  - \$3.0 Million – *Retail Revenue*
  - \$3.4 Million – Local Event & Vacation Spending
  - 39 – Persons Employed by Bicycle Industry
- Contribution \$25.4 Million



# RESULTS

- Grand Rapids
  - Commitment to an Expanded Network and Strong Support from Business Leaders
  - \$1.7 Million – *Retail Revenue*
  - \$4.3 Million – Local Event & Vacation Spending
  - 32 – Persons Employed by Bicycle Industry
- Contribution \$39.1 Million



# RESULTS

- Holland
  - Side-Path Network Attracts Tourists Residents
  - \$1.9 Million – *Retail Revenue*
  - \$557,000 – Local Event & Vacation Spending
  - 29 – Persons Employed by Bicycle Industry
- Contribution \$6.4 Million



# RESULTS



- Traverse City
  - Important role in tourism and transportation
  - \$3.3 Million – *Retail Revenue*
  - \$765,000 – Local Event & Vacation Spending
  - 41 – Persons Employed by Bicycle Industry
- Contribution \$5.5 Million

# RESULTS

- STATEWIDE

- \$63.0 Million – *Retail Revenue*

- \$38 Million – Local Event & Vacation Spending

- 796 – Persons Employed by Bicycle Industry

- **IMPACT \$668 Million**



# Bicycling in MICHIGAN



Population: 9,897,264

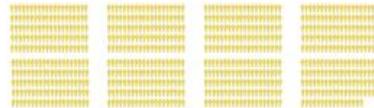
Total annual economic impact of bicycling  
**\$668 million**



Bicycling retail revenue  
**\$63 million**

Total annual spending associated with bicycling events and vacations in Michigan  
**\$38 million**

People employed by bicycling industry: 796



**44%** Residents who place an annual value of at least \$100 on the ability to use bicycle infrastructure

**39%** Households that reported that someone in their home used a bike for transportation in the last year

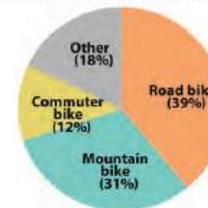
**28%** Bicyclists who commute by bicycle at least twice a week

**4%** Residents who participated in a bicycling event or bicycle-oriented vacation in Michigan in the past year

## Key barriers to bicycling



## Top primary bicycle types



Study funded by MDOT

For more information contact Josh DeBruyn, MDOT Bicycle and Pedestrian Coordinator at [debruynj@michigan.gov](mailto:debruynj@michigan.gov)

# Phase II – Events and Bicycle Travel



- Out of State Tourism Impact
  - Length of stay
  - Party Size
  - Distance Traveled
  - U.S. Bicycle Route Use
  - General Route
  - General Facility Type Used
  - Expenditures

# Phase II – Events and Bicycle Travel



- Organized Bicycling Events
  - Intercept Surveys – **2,100 complete**
    - Michigander Tour
    - Ore to Shore
    - DALMAC
    - Tour de Troit
    - Apple Cider Century
    - Iceman Cometh
  - Other Events – Online Survey  
**2,400 complete**

# Phase II – Events and Bicycle Travel

## Out-of-State Impact per Event

| Event                                   | Amount of Impact |
|---|------------------|
| Apple Cider Century (ACC)               | \$1,944,875      |
| Dick Allen Lansing to Mackinac (DALMAC) | \$292,588        |
| Bell's Beer Iceman Cometh Challenge     | \$1,279,978      |
| Michigander                             | \$175,777        |
| Ore-to-Shore                            | \$1,130,280      |
| Tour de Troit (TdT)                     | \$298,185        |

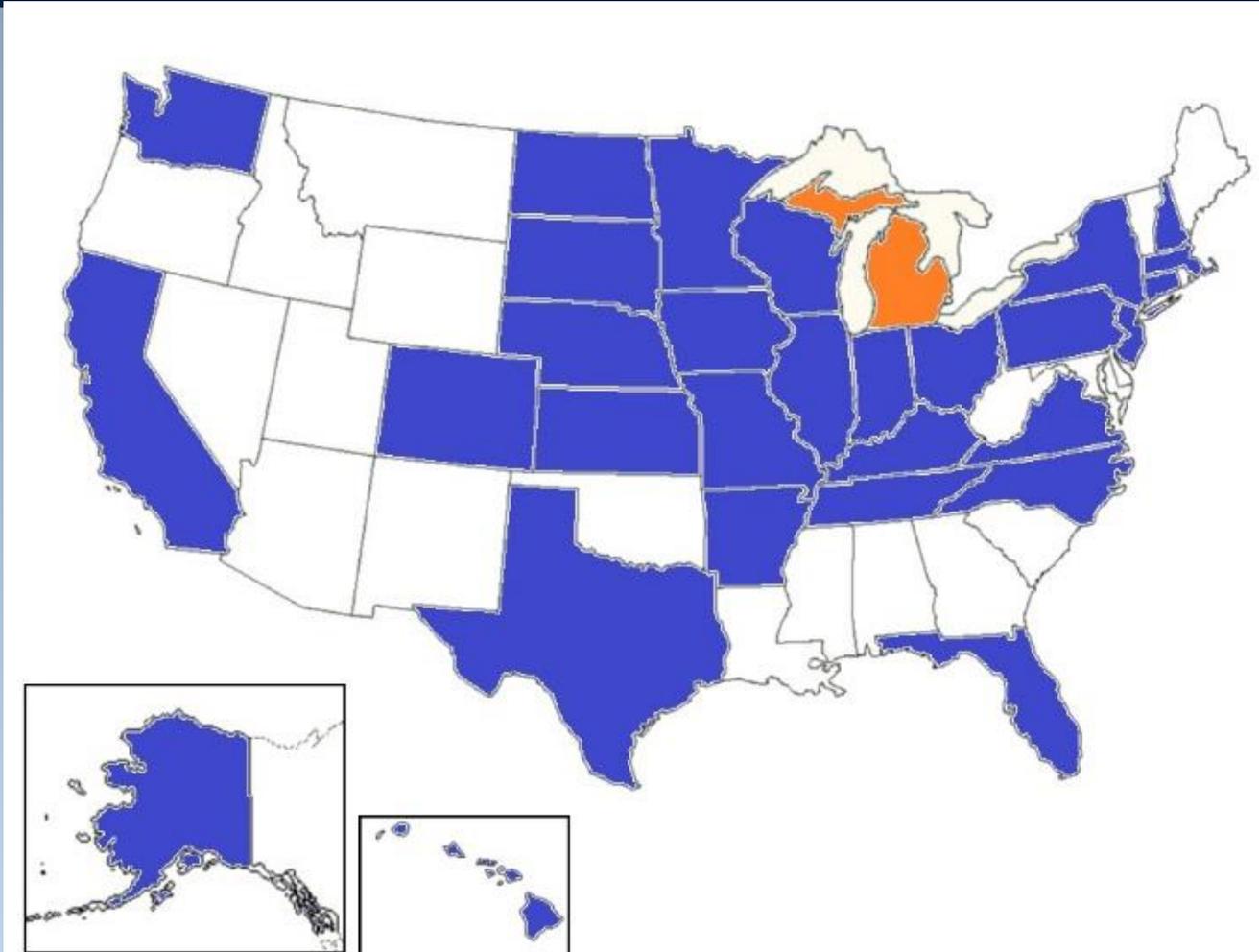
# Phase II – Events and Bicycle Travel

Where they come from

**29 States**

**3 countries:**

Canada  
Australia  
Netherlands



# Phase II – Events and Bicycle Travel

## Out-of-State Expenditure Totals

| Expenditure                  | Total Direct Spending |
|------------------------------|-----------------------|
| Food and beverage            | 4,439,503             |
| Lodging                      | 4,259,198             |
| Registration                 | 2,188,279             |
| Transportation               | 2,013,424             |
| Shopping and Entertainment   | 1,783,892             |
| Bicycle Related Retail       | 867,412               |
| <b>Total Direct Spending</b> | <b>\$15,551,708</b>   |

# Phase II – Events and Bicycle Travel



## Preliminary Estimates

- Events Alone
- Out of State Visitor

• **\$21.9 Million**

# Phase II – Events and Bicycle Travel



- Long distance touring bicyclists
  - Online Survey - **360+**
    - Adventure Cycling Association
  - Mackinaw Bridge – USBR 35
  - SS Badger – USBR 20 & 35

# Phase II – Events and Bicycle Travel

US Bicycle Routes in Michigan  
Nov. 20, 2014



## Self-supported Long Distance Touring Bicyclists

- About 50% between ages 55-64
- >80% over age 45
- 47% reported income of \$100,000 +
- Trips average 6 days
- > 2/3 used one a U.S. Bicycle Route
- Nearly 30 percent stayed >10 days
- **Average total trip expenditures \$520**

the economic impacts of

# BICYCLE TOURISM IN MICHIGAN



The total economic impact of organized bicycling events in 2014 was

## \$21.9 million

### GENERAL FINDINGS

The average economic impact of self-supported touring bicyclists per trip:

## \$760



## 69%



of out-of-state self-supported touring bicyclists reported using US Bicycle Routes 20 or 35

### CASE STUDY EVENTS

#### Apple Cider Century

Total economic impact:

## \$1.94 million

#### DALMAC

## 1 in 3

out-of-state participants traveled from a non-neighboring state

#### Iceman Cometh Challenge

participants traveled from:

**36** different states and **2** countries

#### Michigander

Highest average expenditures per participant of the six case study events

## \$742



## 97%

were non-local participants



## 7,500

participants in 2014

For more information contact Josh DeBruyn, MDOT Bicycle and Pedestrian Coordinator at [debrujn@michigan.gov](mailto:debrujn@michigan.gov)

This study was made possible through the Federal Highway Administration State Planning and Research Program administered by the Michigan Department of Transportation.



# Transportation



# Events/ Recreation



# Manufacturing



# Community



- [www.michigan.gov/mdot-biking](http://www.michigan.gov/mdot-biking)

# www.michigan.gov/mdot-biking

Roads and Travel

MDOT > ROADS AND TRAVEL > BICYCLING

Mi Drive

Bicycling

Ridesharing

Safety

Mi Commute

Courtesy Patrol

ITS Traffic Centers

Rail and Public Transit

Bridges, Borders and Ferries

News and Information

Projects and Programs

Maps and Publications

About MDOT

Doing Business

Aeronautics

Sign up for email from MDOT!

## Biking in Michigan

MDOT is working to create a better, safer roadway for all users by providing a variety of services and information supporting walking and bicycling, including:

- Training for engineers and planners
- Educational and safety videos and publications
- Road and trail bicycle maps to view, order or print
- U.S. Bicycle Routes 20 and 35 information
- State and national parks information for bicyclists
- Information on the use of ferries and major bridges

Bicyclists are urged to prepare their own assessment of traffic, roads, and trails, and plan routes appropriate to their riding skills.

### Explore Michigan by bicycle!

For information, call The League of Michigan Bicyclists at 517-334-9100 or request a free [Michigan Biking & Tourism Information packet](#).

## Maps and Brochures

- MDOT Road and Trail Bicycling Maps
- Order MDOT Bicycling Maps
- On-Road Biking
- Off-Road Biking
- U.S. Bicycle Routes in Michigan
- Michigan State Transportation Map
- What Every Michigan Bicyclist Must Know
- What every Michigan DRIVER should know about bicycle lanes [PDF](#)



## Training

Training Wheels [PDF](#)

An educational course on planning and design of on-road bicycle facilities.

Walkability Reviews [PDF](#)

A hands-on evaluation of the walking conditions in a portion of the community and a discussion of design improvement ideas.

## Biking Quick

### LINKS

- Economic Benefits of Bicycling
- Non-Motorized Plans by MDOT Region
- Tourism Information
- Promotional Organizations
- Biking in State/National Parks
- Bicycles on Ferries
- Biking on Major Bridges
- Mi Commute - Biking
- Mi Drive: Traffic and Construction by Location or Route

### Video Links

Northwestern Highway Bicycle Lane: A Safer Place to Ride "Share the Road" PSA U.S. Bicycle Route 35 opening event in Traverse City HAWK Walk event in Ann Arbor Mi Commute - My Bike and I

## SAFETY >

--- Safety

## PLANNING >

--- Planning and Design

## RESEARCH >

--- Research

### Safe Routes to

Michigan Safe Routes

National Safe Routes

- Evaluating Pedestrian Safety Improvements (RC-1585)
- Impact of Non-Freeway Rumble Strips - Phase 1 (RC-1575)
- RC-1542 - Improving Driver's Ability to Safely and Effectively Use Roundabouts: Educating the Public to Negotiate Roundabouts
- Sharing the Road: Optimizing Pedestrian & Bicycle Safety & Vehicle Mobility (RC-1572)

[Congestion Mitigation and Air Quality \(CMAQ\)](#)



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## The Economic Benefits of Bicycling

- This *Community and Economic Benefits of Bicycling in Michigan* report is separated into two Phases that highlight the economic benefit bicycling has on Michigan's local and statewide economies. The 2014 Phase I report finds that bicycling provides an estimated \$668 million per year in economic benefit to Michigan's economy, including employment, retail revenue, tourism expenditure, improved health, and increased productivity. Using both quantitative and qualitative data, the report takes a unique approach to illustrate both the economic benefits of bicycling on a statewide basis, as well as broader benefits bicycling can have on communities. Phase II of this project includes data on the economic impact of bicycling "events," bicycle touring, and Michigan as a bicycle destination. Released in the spring of 2015, the report estimates out-of-state participation in organized bicycle events contributes nearly \$22 million to the State economy. It also includes a detailed analysis of the direct expenditures of six large organized events along with secondary impacts of these events.

### Phase I Reports

- [Statewide Report](#) 
- [Statewide Infographic](#) 
- [Ann Arbor Case Study](#) 
- [Ann Arbor Infographic](#) 
- [Detroit Neighborhoods Case Study](#) 
- [Detroit Neighborhoods Infographic](#) 
- [Grand Rapids Case Study](#) 
- [Grand Rapids Infographic](#) 
- [Holland Case Study](#) 
- [Holland Infographic](#) 
- [Traverse City Case Study](#) 
- [Traverse City Infographic](#) 

### Phase II Report

- [Economic Impacts of Bicycling Events and Bicycle Touring in Michigan](#) 
- [Bicycle Events Infographic](#) 



### Quick Links

- [Title VI Nondiscrimination](#)
- [Tribal Governments](#)
- [Twitter Facebook YouTube](#)
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- [State Map](#)

# Public Comment



# Wrap-Up



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