Michigan DOT Research Program

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Presentation Outline

- Program Overview
- Recently Completed and Soon to Be Completed Research
- 2015 Research Summit
- Information Availability
Annual Research Program

- $6 to $8 Million
- 10 to 15 Individual Projects per Year
- 10 to 15 Multi-State Pooled Fund Studies
- University Transportation Centers and Research Centers of Excellence
- National Research Programs
Recently Completed Research

- Evaluating Pedestrian Safety Improvements (RC-1585)
- Sharing the Road: Optimizing Pedestrian and Bicycle Safety and Vehicle Mobility (RC-1572)
- Evaluating the Appropriate Level of Service for Michigan Rest Areas and Welcome Centers Considering Safety and Economic Factors (RC-1570)
Recently Completed Research

- Evaluating the Performance and Safety Effectiveness of Roundabouts (RC-1566)
- Evaluating the Performance of Passing Relief Lanes (RC-1565)
- Impact of Non-Freeway Rumble Strips, Phase 1 (RC-1575)
- Meeting the Needs of Michigan’s Aging Population (RC-1592)
Recently Completed Research

- Strategies for Improving Traveler Information (RC-1559)
- Best Practices for Emergency Re Routing (RC-1581)
- Implementation of Quick Clearance (RC-1583)
- Safety Analysis of 3 to 4 lane Conversions (RC-1555)
Recently Completed Research

- Study of High Tension Cable Barrier on Michigan Roadways (RC-1612)
- Evaluating Speed Limit Policy Alternatives (RC-1609)
- Timing Issues for Traffic Signals Interconnected with Highway/Railroad Grade Crossings (RC-1578)
Recently Completed Research

- Evaluation of Concrete Pavements with Materials-Related Distress (RC-1533)

- Impact of Hydrated Cement Paste Quality and Entrained Air-Void System on the Durability of Concrete (RC-1552)

- Laboratory Evaluation of Warm Mix Asphalt (RC-1556)
Recently Completed Research

- Improved Performance of JPCP Overlays (RC-1574)

- Effect of Pile-Driving Induced Vibrations on Nearby Structures and Other Assets (RC-1600)

- Non-Destructive Evaluation Techniques for Bridge Inspection (RC-1597)
Recently Completed Research

- Improving Bridges with Prefabricated Precast Concrete Systems (RC-1602)
- Accelerated Bridge Construction (RC-1610)
- Design and Construction Guidelines for Strengthening Bridges with Fiber Reinforced Polymers (RC-1614)
Notable “soon to be completed” Research

- Connected Vehicle Test Track “Mobility Transformation Facility”
- Evaluating the use of Tow Plows
- Evaluation of UAV’s for Transportation Purposes
2016/2017/2018 Program Development

- Strategic Priorities (Aug-Sept 2013)
- Call for Ideas (Nov-Dec 2013)
- Idea Development (Jan-May 2014)
- Research Summit (May 2015)
- Problem Statements Developed for 2016/2017 Projects (May-June 2015)
- 2016/2017 Program Approval (July-August 2015)
2015 Research Summit

- May 6 & May 7
- Horatio Earle Center, State Secondary Complex
- Discuss 20 to 25 Research Ideas (Handouts)
- Basis of the 2016, 2017 and 2018 Research Program
Program Development

Strategic Research Direction

- Research Executive Committee (REC)
  Consists of Chief Operations Officer, Chief Administrative Officer, Engineer of Research, Research Advisory Committee (RAC) Chairs and Region Bureau Management Team (RBMT) Liaison.

Advisory
- Research Advisory Committees (RAC)
  - Program/Project Development
  - Delivery & Operations
  - Multi-Modal Transportation
  - Planning & Finance
  Each RAC includes a Bureau Director or Administrator(s) as chair or co-chairs, a Research Manager, RBMT Liaison, and five to six Focus Area Managers and Region Representatives.

Management
- Research Advisory Panels (RAP)
  - 1 panel per project
  Each Research Advisory Panel includes a Project Manager from a specific focus area, a Research Manager and subject-area experts.
Information Availability

- www.michigan.gov/mdotresearch
- Gov Delivery (Listservs)
- Publications
  - Newsletters
  - Spotlights
  - At A Glance
  - Success Stories
Questions???

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