

MDOT VII Status Update

October 7, 2005

9:00 – 12:00

MDOT Metro Region

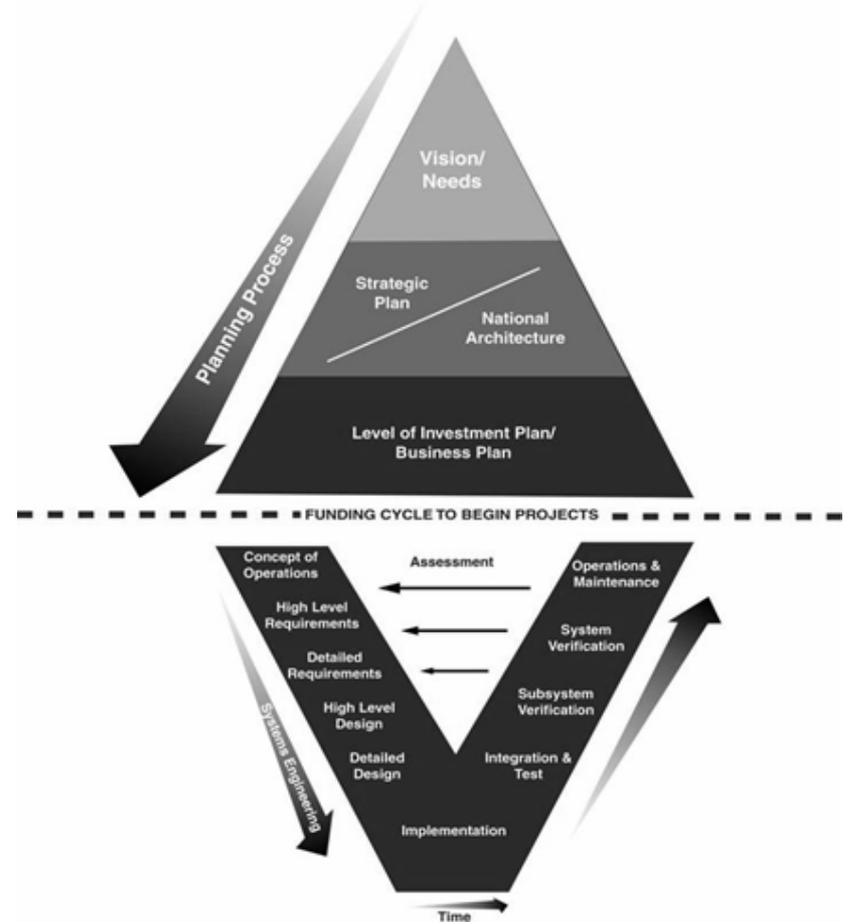
Meeting Objectives

- ❑ Last time this team met was in February / March time frame – There is a need to update everyone on MDOT VII & ITS progress to date
- ❑ Catch up on OEM VII issues
- ❑ Continue dialog on future MDOT plans

Introductions

Current MDOT VII-Related ITS Initiatives

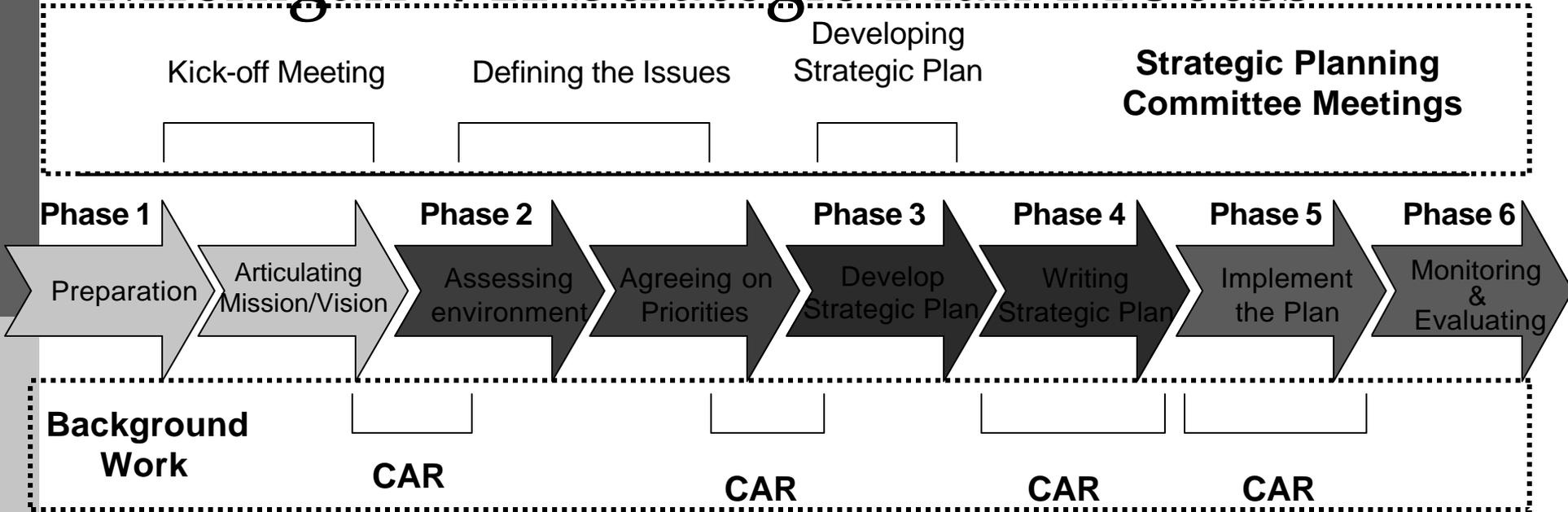
- ❑ Developing VII Strategic Plan
- ❑ Developing VII Concept of Operations (COO)
- ❑ Expanding current MITS infrastructure
- ❑ Working with OEM's on various VII-type projects



VII Strategic Plan

- Goal – Provide a document of the MDOT VII vision that incorporates:
 - MDOT Safety and Traffic and Asset Management Objectives
 - MEDC & D-LEG Economic Growth Issues
 - Issues impacting local road agencies (owners and operators of approximately 90% of the lane miles in Michigan)

Michigan VII Strategic Plan Process



Phase 1:

Individual/group work:

- Identify reasons for planning
- Check readiness
- Choose participants
- Determine info requirements
- Summarize VII history
- Create planning process

SPC Meeting Activities

- Roll-out process and obtain process buy-in
- Evaluate current mission and vision statement
- Articulate what makes MDOT unique

Phase 2:

• *Group work:*

- MDOT capabilities assessment
- SWOT
- Customer/Competitor/market analysis

• *SPC Meeting Activities:*

- Reporting/discussion on environmental analysis
- Outline/evaluate past & current strategies
- Evaluate effectiveness of current programs
- Determine critical strategic priorities

Phase 3:

• *Group Work:*

- Select top priorities
- Propose approaches

• *SPC Meeting*

- Discussion/consensus on top 3-4 priorities
- Discussion/consensus on approach
- Develop strategic work plan

Phase 4:

- Write Strategic Plan
- Circulate for review & feedback

Phase 5:

- Write operating plan

Phase 6:

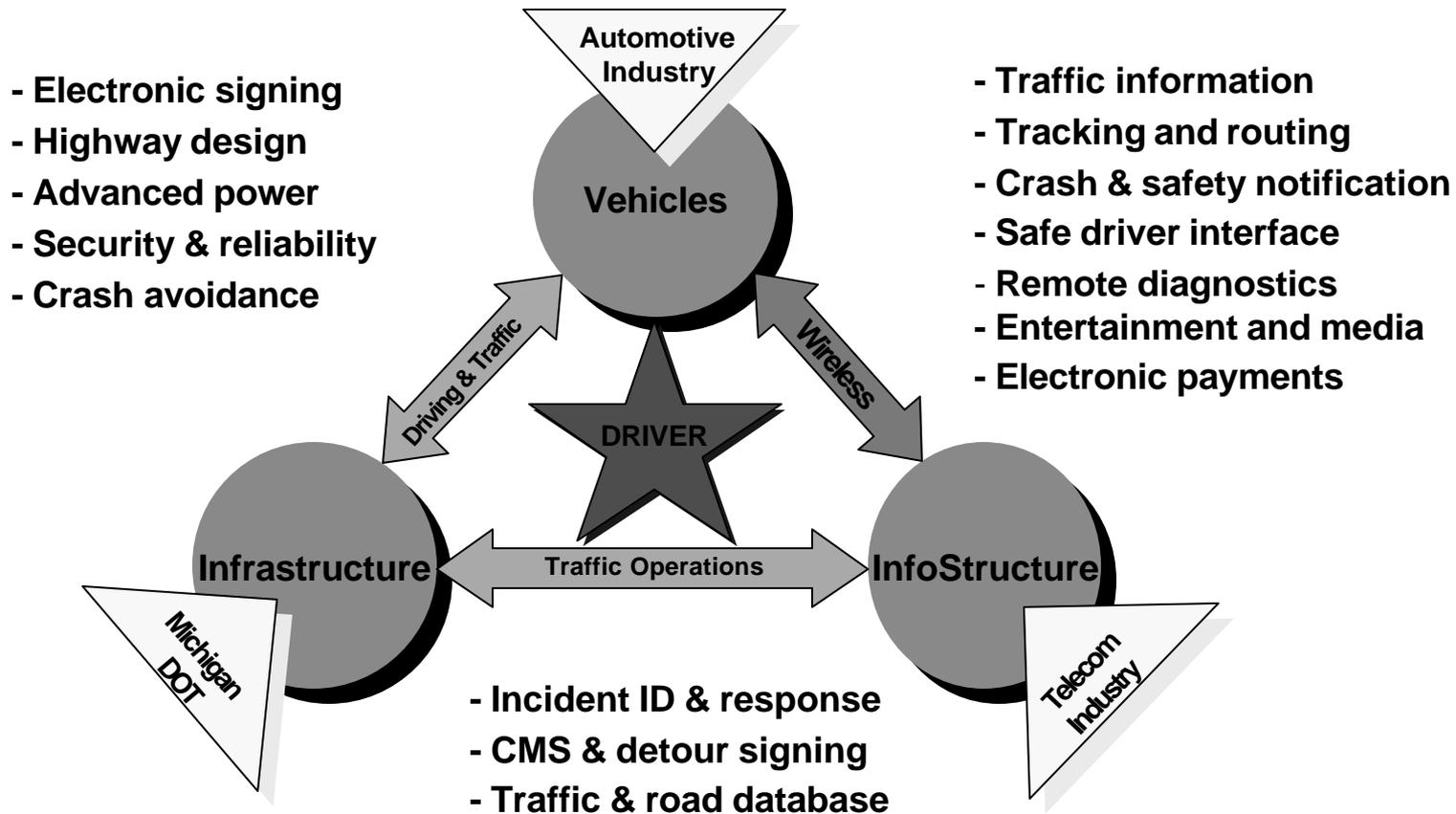
- Evaluate planning process
- Monitor and update strategic plan

Michigan VII Mission Statement

- Partner with public agencies, the automotive industry, and the telecommunications industry to lead the nation in VII research and sustained VII deployment by providing the public foundation for Michigan's new automotive information technology industry, and while also ensuring improvements in transportation systems safety and operational performance.

Whole System Approach

Vehicle sensor data and vehicle probes



Ubiquity of roadside right-of-way combined with wireless infrastructure

802.11, 3G, GPS, and maps

Safe & Efficient Mobility

Michigan VII Goals and Strategic Initiatives

- The Michigan VII Goals are the ultimate 5-year objective for Michigan in VII. If we accomplish these, we will have successfully accomplished, or come close to accomplishing, our Mission.
- The Strategic Initiatives are specific tasks required to meet the identified goals
- Four Components
 - Operational
 - Partnerships
 - Economic Impacts
 - Internal Issues

VII Operational Goals

- The VII Program in Michigan will have the following Operational Impacts:
 - The number and severity of automobile crashes will be significantly reduced due to connected vehicles
 - Traffic flow improvements will result from more traffic data and better distribution of that information to motorists
 - The safety and mobility improvements are measurable and accepted to the point where VII is part of MDOT's annual program

Michigan VII Strategy – Operations

- The Michigan VII Program will work to improve safety and mobility through the following:
 - Deploy VII Test Beds to permit partners to develop and evaluate VII technologies and applications
 - Evaluate systems, services and other components internally, with our partners, and through independent evaluation
 - Document and publish lessons-learned to improve the state-of-the-art and practice

VII Partnership Goals

- The VII Program in Michigan will successfully engage multiple partners with long-term, mutually beneficial objectives:
 - New dialog opens between MDOT and the automakers on multiple issues (not just VII)
 - The telecommunications industry actively participates in transportation activities
 - Statewide initiatives, such as the Michigan Broadband Initiative and the wireless county initiatives are incorporated into the VII program to both enhance VII services and provide the backhaul communications necessary
 - Multiple states work together in the development and testing of VII to ensure that systems function in all foreseen conditions and geographic locations

VII Economic Development Goals

- The VII Program in Michigan impacts the lives of Michigan citizens beyond transportation and will have economic development impacts:
 - New information technology industries form in Michigan as a result of the VII development effort and are implemented as a result of coordinated efforts with State of Michigan Economic Development Partners
 - Coordination between MDOT and the automakers on VII and other transportation related issues to improve mobility for automaker related activities
 - Improvements in safety, security and traffic flow provide a positive impact on quality of life, encourage private sector investment in Michigan, and improve tourism

Michigan VII Strategy – Internal Issues

- The success of the VII program in Michigan will require internal support from throughout MDOT. MDOT will be focusing these internal issues:
 - Identify and provide the necessary institutional support for VII within MDOT
 - Identify and secure appropriate funding to support the development of VII Test Bed facilities and the associated evaluation and publication of results
 - Provide management and internal coordination of activities within MDOT

Next Steps

- “Finalize” the Strategic Plan for publication
 - Convert from a PowerPoint presentation to a document
 - Assign people to tasks
- Develop warehouses for information sharing
 - Internal VII Web Pages for MDOT issues
 - External VII Web Page
 - Share information with partners
 - Public outreach efforts
 - www.michigan.gov/mdotvii
 - Developing a Michigan VII Listserv email group

Next Steps (cont.)

- Prioritize and publish applications and use cases for Michigan
- Develop a VII Michigan Working Group
 - Public & Private sector members
 - Develop technical program, evaluate results and provide overall direction and vision to the VII program
- Enhance partnerships with other states
 - AASHTO Executive Leadership Team for VII
 - SmartHighways partnership (FL, CA, MI)

Other ITS Projects

- ITS Expansion in Oakland, Macomb and St. Clair Counties (2006)
 - I-96 from Novi Rd. to the county line
 - I-94 from 8 Mile to 23 Mile
 - Blue Water Bridge Approaches
 - Traffic information along I-94 and I-69
 - Queue-end warning
- ITS Expansion in Grand Rapids

Other ITS Project (cont.)

- ❑ Statewide Software with a VII Module for VII data processing is being planned for 2008
- ❑ ITS Architectures and deployment plans are being developed for the entire state