

Talking Points
Transportation Research Board
Future Interstate Study

Michigan's Interstate

- Michigan's Interstate routes:
 - The Interstate, at over 6,300 lane miles, comprises approximately 21% of the total trunkline lane miles in Michigan.
 - They carry over **40%** of the trunkline vehicle miles of travel and over **60%** of the trunkline commercial vehicle miles of travel.
- Michigan's Interstate is aging and many segments have already been reconstructed.
 - Michigan's first full freeway, the Willow Run Expressway, was built in 1942 and became a part of I-94 after passage of the Interstate Highway Program in 1956.
 - The last non-bypass segment of Interstate completed was I-69 just southwest of Lansing. It was completed in 1992 and is now 25 years old.
- While the Interstate in Michigan comprises only about one fifth of Michigan's trunkline:
 - Over one third of the department's preservation investments are on this system.
 - And over half of that preservation investment on Interstate system are the heaviest types of fixes: reconstruction and major rehabilitation.

MDOT Transportation Program Development Process

- MDOT takes an asset management approach to managing highway investments. We take a strategic approach to linking data, goals, investment strategies, programs, and projects.
- These are the steps MDOT follows in the asset management process:
 - Goals and objectives are established.
 - System inventory and condition data is collected.
 - The condition data is analyzed and rates of deterioration are computed.
 - Performance measures and standards are set or reaffirmed.
 - Gaps in performance and risk factors are evaluated
 - Life cycle network analysis is developed using forecasting tools.
 - MDOT uses a pavement condition forecasting model, the Road Quality Forecasting System (RQFS), to aid in the creation of the department's pavement preservation initiatives. Using RQFS, the department can make educated forecasts to the future condition of MDOT's trunkline network measured by remaining service life (RSL). This can be done using a variety of possible funding levels and pavement improvement strategies.
 - The Bridge Condition Forecasting System (BCFS) utilizes current bridge condition, deterioration rates, project costs, expected inflation rates and fix strategies to estimate future condition of the state trunkline bridge system.
 - Investment strategies are implemented through the development of programs, selection of projects, and institution of practices which fit into the investment strategies.
 - The process and system is monitored and adjusted based on the outcome of the projects and programs that were implemented.

- MDOT's highway program development process is a yearlong, multi-stage process.

Call for Projects

- Annually, MDOT issues an internal Call for Preservation Projects for the Highway Capital Program. This integrated call encompasses multiple programs including pavement preservation, bridge preservation, traffic and safety, CMAQ and Carpool Parking Lots.
- A letter and instructions are issued to all seven MDOT regions, which are responsible for proposing preservation projects. Key emphasis areas and strategic objectives are outlined and detailed technical instructions are issued.
- Target funding levels for each region are calculated from a formula based on weightings relating the conditions, usage, costs and eligible assets.

Stratification

- In the late 1990s the State Transportation Commission (STC) established pavement and bridge condition goals based on freeway and non-freeway routes that have provided the basis for our asset management approach. These condition goals are 95 percent good or fair condition on the Freeway and 85 percent on the Non-Freeway.
- We have recently modified our development process to stratify the trunkline into four tiers; Interstate, Non-Interstate Freeway, Non-Freeway NHS and Non-NHS.
- By stratifying the goals from two (freeway and non-freeway) to four, MDOT can concentrate its investments on the routes where the most traffic exist and distribute and most effectively utilize available funding.
- This stratification allows us to align with MAP21 and the Fast Act, which includes performance measures relating to the National Highway System (NHS).

CFP and Stratification

- MDOT's Call for Projects process has embraced this stratification by tier, providing emphasis on the Interstate and higher tiers.
- Strategic direction has been developed that guides the development of the program by stratified tier emphasizing the Interstate and higher level systems.
- Pavement preservation strategic direction is region specific and incorporates eligible lane miles, traffic volumes and cost. It results in investment level targets by stratified tier that guide the regions to higher investment on the Interstate.
- Funding targets also incorporate the stratified tiers into their allocation formulas. Added weight is given to the Interstate and upper level tiers allowing more resources to be directed to the Interstate.

Wrap up

- Stratifying MDOT's trunkline network in alignment with the Interstate and NHS allows the Department to meet federal requirements and develop an Asset Management Program in which the Highway Capital program emphasizes Michigan's most important corridors.
- S:\PLAN\3.2 STWD Systems Mgmt Section\5-yr plan\Five Year Transportation Program Development Process\Talking Points - 4-17-17 Asset Management and preservation Interstate May 2017.docx