

## Appendix H

### General Program Accounts

#### Project Identification/Selection and Work Type Activities

#### **Trunkline Highway Capital Preventive Maintenance and Capital Scheduled Maintenance (Hwy. CPM/CSM)**

##### Project Identification/Selection

Candidate project identification is made by MDOT's Region offices using CPM guidelines, the Region's CPM budget and MDOT's pavement condition goals. Projects are reviewed by the CPM Program Manager then reviewed and approved by the Project Screening Committee as part of the annual Call For Projects process.

##### Work Type Activities

Generally low cost trunkline highway maintenance completed in one construction season to extend pavement life and prevent more costly repairs at a later date. All phases, from EPE through construction, are included. Work activities protect the pavement structure, slow the rate of pavement deterioration and/or correct pavement surface deficiencies and include the following:

- non-structural bituminous overlays
- surface milling with non-structural bit. overlays
- chip seals
- micro-surfacing, crack treatment
- overban crack filling
- bituminous shoulder ribbons
- ultra-thin overlays
- full depth concrete pavement repair
- concrete joint rescaling
- concrete spall repair
- concrete crack sealing
- diamond grinding
- dowel bar retrofit
- concrete pavement restoration
- bituminous shoulder ribbons

#### **Trunkline Bridge Capital Preventive Maintenance and Capital Scheduled Maintenance (Bridge CPM/CSM)**

##### Project Identification/Selection

Candidate project identification is made by MDOT's Region offices using criteria in the *Michigan Structure Inventory and Appraisal Coding Guide*, the *Michigan Bridge Analysis Guide*, bridge management systems and MDOT's capital outlay bridge preservation program goals. Projects are reviewed by MDOT's Bridge Systems Manager then reviewed and approved by the Project Screening Committee as part of the annual Call For Projects process.

### Work Type Activities

Generally low cost trunkline bridge maintenance completed in a construction season to extend bridge service life. All phases, from EPE through construction, are included. Work activities prevent good/fair condition structures from becoming poor condition structures and include:

- joint replacement
- superstructure wash
- vegetation control
- drain system clean/repair
- paint - complete or zone
- joint replacement
- joint repair
- concrete sealing
- crack sealing
- minor concrete patching
- approach pavement relief joints
- slope paving repair
- pin & hanger replacement
- overlay - epoxy
- deck patching
- scour protection
- substructure patching
- HMA cap (no membrane)
- HMA overlay (w/ waterproofing membrane)
- miscellaneous bridge CPM
- miscellaneous bridge CSM

## **Trunkline Transportation Enhancements**

### Project Identification/Selection

Eligible applicants submit projects year round to MDOT. There are five project approval stages before funds can be awarded: Project Eligibility/Application Completeness, Concept, Technical, Program Factors and Conditional Funding Commitment (CFC). Once a project has advanced through each stage of the approval process to the CFC stage, it becomes “one project among all projects awaiting completion of funding conditions.” A project advances to the funding award level once all CFC conditions are met and funding is available. Project elections/announcements are made more than once a year but are not made on a regular schedule.

### Work Type Activities

Projects are typically construction phase although any project phase may be funded. Projects are awarded reimbursement funding under five broad categories:

- non-motorized (facilities, safety, education, rail trails)
- aesthetics (scenic or historic site acquisition, programs, landscaping)
- historic preservation (historic restoration, preservation, operation)
- water quality (mitigation to address run-off)
- wildlife mortality (reduce mortality & maintain habitat connectivity)

## **Trunkline Highway Safety**

### Project Identification/Selection

All safety funds are allocated to each Region based on percentage of high crash locations, but no Region receives less than 5%. Candidate projects are identified by MDOT's Region offices "through the current High Crash List, 3R/4R Safety Reviews, customer concerns, and Pavement Friction Analyses...[and] must meet a Time-of-Return of 10 years or less." Projects are reviewed and approved as part of the annual Call for Projects process. All safety projects move MDOT towards achieving the statewide goal of 1.0 fatalities per 100 million vehicle miles of travel by 2008.

### Work Type Activities

Generally low cost trunkline traffic and safety projects completed within a construction season to reduce the rate or severity of crashes and improve traffic operations. All phases, from EPE to construction, are included. Work activities include:

- guardrail replacements
- pavement markings
- signal upgrades
- new signals
- new signal upgrades
- signing
- intersection safety improvements
- turn lanes
- minor interchange improvements
- cantilevers and trusses
- impact attenuators

## **Trunkline Highway Railroad Crossing**

### Project Identification/Selection

The crossing inventory serves as the potential project list and projects are selected based on condition rating and crash data, fixing the worst crossings first. Funds are allocated by percentage of historical expenditures (5 year average).

### Work Type Activities

Generally low cost trunkline highway/rail crossing improvements. All phases, from EPE to construction, are included. Work activities include:

- crossing upgrade
- signals
- gates

## **Trunkline Early Preliminary Engineering, Preliminary Engineering and Right-of-Way (EPE/PE/ROW)**

### Project Identification/Selection

Road preservation, bridge preservation and passing relief projects that are to have EPE, PE and ROW conducted during the current STIP period (listed by year). The projects are selected as part of the annual Call for Projects process.

### Work Type Activities

Engineering and right-of-way activities for trunkline preservation projects that are not listed by phase in the STIP for the location/environmental study phase (EPE), design phase (PE) or right-of-way (ROW) phase. Each project<sup>1</sup> must have a total cost under \$5 million, must be a categorical exclusion, must be air quality neutral and cannot add capacity (add a lane to road or bridge). ROW activities are limited to grading permits, mutual benefit permits and minor takes without relocation.

<sup>1</sup> For projects with multiple bridge locations under one job number, the total project cost can be divided by the total number of bridges to determine whether the total cost for each individual bridge is under \$5 million. For example, job number 59297 is for 12 bridges on I-75 for a total cost of \$13.8 million. \$13.8 divided by 12 bridges averages \$1.15 million per bridge. This particular project can be included in this GPA rather than be listed individually in SEMCOG's TIP.

## **Local Bridge**

### Project Identification/Selection

New legislation has established the way projects are selected. MDOT provides condition, sufficiency and rating point criteria to the Local Bridge Advisory Board (LBAB) and seven Regional Bridge Councils (RBC). The RBCs determine initial project priorities. The LBAB finalizes project priorities in a three year bridge plan. Funding is allocated on available funds and weighted ratios stipulated in the new legislation.

### Work Type Activities

Local bridge program for the improvement, reconstruction or replacement of existing bridges funded by the 15% set aside from federal BRRP program and the state critical bridge program.

## **Local Transportation Enhancements**

### Project Identification/Selection

Eligible applicants submit projects year round to MDOT. There are five project approval stages before funds can be awarded: Project Eligibility/Application Completeness, Concept, Technical, Program Factors and Conditional Funding Commitment (CFC). Once a project has advanced through each stage of the approval process to the CFC stage, it becomes "one project among all projects awaiting completion of funding conditions." A project advances to the funding award level once all CFC conditions are met and funding is available. Project elections/announcements are made more than once a year but are not made on a regular schedule.

### Work Type Activities

Projects are typically construction phase although any project phase may be funded. Projects are awarded reimbursement funding under five broad categories:

- non-motorized (facilities, safety, education, rail trails)
- aesthetics (scenic or historic site acquisition, programs, landscaping)
- historic preservation (historic restoration, preservation, operation)
- water quality (mitigation to address run-off)
- wildlife mortality (reduce mortality & maintain habitat connectivity)

## **Local Highway Safety**

### Project Identification/Selection

MDOT conducts a Call for Projects each Nov. for all ACT 51 agencies. A committee ranks projects based on crash data; cost/benefit; local support, coordination and over match; and other specific criteria. Projects are selected based on ranking, funding availability and geographic equity

### Work Type Activities

Generally low cost local traffic and safety projects completed within a construction season to reduce the rate or severity of crashes and improve traffic operations. All phases, from EPE to construction, are included, however, only the construction phase is eligible for federal-aid. Work activities include:

- guardrail replacement, installation or elimination
- traffic signal installation or upgrades
- curve corrections (horizontal and/or vertical)
- sight distance improvements
- drainage improvements
- bridge railing replacement or retrofit
- approach guardrail
- intersection safety improvements

## **Local Highway Railroad Crossings**

### Project Identification/Selection

Local crossing inventory serves as project list and projects are selected based on type of equipment, condition rating, road and rail traffic volumes and crash data, fixing the worst crossings first. Funds are allocated by percentage of crossings.

### Work Type Activities

Generally low cost local road/rail crossing improvements. All phases, from EPE to construction, are included. Work activities include:

- crossing upgrade
- signals
- gates