HIGHPAY SAFETY IMPROVEMENT PROGRAM GUIDANCE

POLICY STATEMENT:

This policy is a revision to the February 2008 policy that established the Highway Safety Improvement Program (HSIP) within the Ohio Department of Transportation (ODOT). The Highway Safety Improvement Program is administered by ODOT and emphasizes safety in all phases of highway development by identifying and studying sites with potential for safety improvement, developing solutions, establishing priorities, implementing countermeasures and evaluating improvements on any public roadway.

This policy establishes the procedures for project evaluation and statewide prioritization and development of the Highway Safety Improvement Program based on uniform and objective criteria to improve safety by reducing the severity and frequency of crashes.

A scoring system is used to prioritize projects based on engineering countermeasures that reduce the long-term crash frequency. An emphasis will be placed on projects with a higher percentage of fatal and injury crashes. Traffic volume measures known to contribute to crashes will also be used as scoring criteria. An economic analysis shall be completed to ensure that the estimated safety benefits of the project will exceed the costs of the project. Final project selection will be based on recommendations from the Highway Safety Improvement Program Committee.

The HSIP Procedures Manual and Safety Study Guidelines (contains scoring criteria) will be posted on the Office of Systems Planning and Program Management Website. These documents will be maintained by the Office of Systems Planning and Program Management with input from the District Safety Review Teams.

AUTHORITY:

23 United States Code, section 148
23 United States Code, section 152
23 United States Code, section 402
23 United States Code, section 409
REFERENCES:

AASHTO, Highway Safety Manual
AASHTO, Policy on Geometric Design of Highways and Streets
ODOT Project Development Process Manual
ODOT Location and Design Manuals
ODOT Traffic Engineering Manual
Ohio Manual of Uniform Traffic Control Devices (OMUTCD)

SCOPE:

This policy is applicable to all ODOT Districts, Divisions, and Offices of the Department, MPOs and Local Public Agencies (LPAs) that are responsible for or otherwise involved in the analysis, selection, and development of countermeasures to reduce crashes on Ohio’s public roadways.

BACKGROUND:

ODOT has established the Highway Safety Improvement Program to create a process which emphasizes safety of the traveling public by analyzing the crash statistics on Ohio’s state and local highway system. The Department utilizes AASHTOWare Safety Analyst to identify intersections and highway sections with the potential for safety improvement. Each of the 12 District Safety Review Teams (DSRT) reviews these prioritized locations as part of a Safety Annual Work Plan (SAWP) and accepts the plan. In addition, the Districts perform safety studies to determine the causes of crashes at locations. The DSRT strives to identify crash patterns and recommend countermeasures to reduce the severity and long-term average frequency of crashes.

Safety projects are not limited to the state highway system. Proposed local projects on public roads are also evaluated and prioritized to improve safety as outlined in the application and selection process. These projects are reviewed and approved by the DSRT.

Upon recommendation from the District Safety Review Teams, eligible projects are submitted to ODOT Central Office for funding consideration, and evaluated and prioritized based on uniform and objective criteria. Projects which contribute most to improving safety and reducing the severity and long-term average frequency of crashes are considered for funding and further development. Twice a year, a listing of all newly approved safety projects is produced.

The Highway Safety Improvement Program historically receives approximately $100 million annually. The actual level of funding designated for the program is determined by the Funds Management Committee and the Director, and is contingent on available state and federal revenues. The funding is used to implement countermeasures at identified crash locations on Ohio’s roadways to ensure safety is the primary consideration in the design, development, and operation of this program.
DEFINITIONS:

Countermeasure
A roadway-based strategy intended to reduce the crash frequency or severity, or both at a site.

Crash
A set of events that results in injury or property damage due to the collision of at least one motorized vehicle and may involve collision with another motorized vehicle, bicyclist, a pedestrian or an object.

Crash frequency
The basic measure of crashes in the HSM, number of crashes occurring at a particular site, facility, or network per year (expressed for a location/site or per mile depending on the context)

District Safety Review Team (DSRT)
The District Safety Review Team (DSRT) develops and adopts a Safety Annual Work Plan, reviews safety studies for locations included in the work plan, and recommends countermeasures. The DSRT also reviews local safety studies and funding requests. The DSRT shall have a minimum of the following ODOT multi-disciplinary representatives or equivalents for the district, including:
- Capital Programs Administrator
- Highway Management Administrator
- Design Engineer
- Planning Manager
- Traffic Engineer
- Traffic Systems Management & Operations Coordinator

The DSRT should also consult with the District Real Estate Administrator and Environmental Coordinator to ensure that safety projects are properly scoped to address real estate and environmental issues that can significantly increase costs and cause delays.

The District Deputy Director shall appoint one ODOT DSRT member as chairperson to coordinate and steer the team’s efforts. Each District is also required to invite the Highway Safety Improvement Program Manager and a representative from Federal Highway Administration. The local Ohio State Highway Patrol, local law enforcement and Metropolitan Planning Organization may also be invited. LPA representatives shall be invited when the DSRT is reviewing an LPA safety study. Only ODOT representatives may be voting members.

Economic Analysis
This analysis will be used to determine a project’s benefits and costs for the purpose of assisting in determining the project’s eligibility for funding and for prioritizing multiple projects/alternatives.
Local Public Agency (LPA)
LPA’s can include any other state agency, local political subdivision, board, commission, or other governmental entity identified under paragraph C of Section 5501.03 of the Ohio Revised Code as being eligible for assuming administrative responsibilities for ODOT improvement projects.

Safety Annual Work Plan (SAWP)
Each year ODOT will study the designated number of priority locations produced by AASHTOWare Safety Analyst and reviewed and accepted by the districts. These locations shall consist of a combination of rural and urban locations as well as freeway, non-freeway and at-grade intersection locations. A priority location will be studied only once in a three-year period, even though it will likely continue to appear in the priority list. This will increase the number of safety locations reviewed across the state.

The Districts may also include other locations they deem appropriate to include in their review of the District’s highway safety needs. Local priority projects submitted by an LPA and approved by the DSRT must also be incorporated into the District Safety Annual Work Plan tracking system.

Sites with Potential for Safety Improvement
Intersections and corridors with the potential for safety improvements and identified as having the possibility of responding to a crash countermeasure installation.

Safety Study
A Safety Study involves analysis of roadway, traffic and crash-related data to determine the probable cause of an identified crash pattern at an intersection or highway section. The safety study also provides alternative countermeasures meant to mitigate predominate crash pattern(s).

Highway Safety Improvement Program Committee
A multi-disciplinary committee at ODOT Central Office representing the Highway Safety Improvement Program, Roadway Engineering, Office of Traffic, and other active safety participants. The committee reviews all safety project applications and documentation to select projects that will be funded through the Highway Safety Improvement Program.

Highway Safety Improvement Program Manager
The individual responsible for administering the statewide policies and program selection criteria for the purpose of developing a multi-year program of priority projects. The program manager ensures the project delivery adheres to the schedule and maintains a fiscally balanced program.
TRAINING:

The following training opportunities are helpful in implementing the policy.

A. Familiarity with the legal and procedural requirements relating to traffic engineering and highway safety.
B. Ability to utilize computer programs applicable to the analysis of the safety studies.
C. Ability to effectively use equipment and accepted procedures to conduct safety studies.

FISCAL ANALYSIS:

Implementation of this policy will have no additional fiscal impact to ODOT.