Project Questions: Performance Targets

Use the below project question descriptions as guidance for indicating which targets may be influenced by a project. Please also keep in mind that the performance targets are not mutually exclusive. Many projects included in the TIP will have the potential to influence multiple targets.

Highway Safety

Highway safety performance will be measured by the number and rates of motorized and non-motorized fatalities or serious injuries. Many projects in the TIP contain scope elements that can influence these measures:

- If the overall Project Type is any of the following, select this checkbox: Safe Routes to Schools or Safety
- If the project is funded in whole or in part with any of the following, select this checkbox: Federal - Highway Safety Improvement Program (HSIP), Rail-Hwy Safety, or Safe Routes to School, or State - Grade Xing Protection or ICC – RR Safety
- If the project contains any of the below Work Types, select this checkbox:
  [A-BAR] – Safety – Barriers
  [A-BEA] – Safety – Beacons
  [A-FNC] – Safety – Fencing
  [A-GRD] – Safety – Guardrails
  [A-LTS] – Safety – Lighting
  [A-MED] – Safety – Median Projects
  [A-OPT] – Safety – Opticom equipment
  [A-OTH] – Safety – Other
  [A-PMRK] – Safety – Pavement Marking
  [A-RRXING] – Safety – Railroad Crossing Improvement
  [A-SHDR] – Safety – Shoulder Improvements
  [A-SKIDT] – Safety – Skid Treatments
  [E-SRTS] – Safe Routes to School
  [H-ALIGN] – Highway/Road – Vertical/Horizontal Alignment (e.g. Clearance)
  [H-RRGS] – Highway/Road – Railroad Grade Separation
- Projects with other work types, such as intersection improvements, highway or bridge reconstruction, maintenance, or expansion, bicycle and pedestrian projects, traffic signals, etc. may also influence safety targets based on specific design details that may add or provide improved vehicle, bicycle, or pedestrian safety. Until supplemental questions are developed, programmers should use

their judgement, based on availability and understanding of specific project details, when determining if a project has the potential to reduce traffic fatalities and serious injuries.

Transit Safety

Transit safety performance targets remain under development, but will be related to fatalities and injuries, safety events (collisions, fire, derailment, security, etc.), and system reliability (breakdowns). Any transit project type with the following work types may influence the targets:

- [C-MAINT] Rail Stations – Maintain, Rehabilitate, Replace
- [C-MOD] Rail Stations – Modernize, Replace
- [F-SPTV] Facility – Signal Priority for Transit
- [J-REP] Rolling Stock - Replace Existing Vehicles
- [R-IMP] Rail Line – Improve Line
- [R-MAINT] Rail Line – Maintain, Rehabilitate, Replace
- [J-REHAB] Rolling Stock – Rehabilitate Vehicles
- [J-REP] Rolling Stock – Replace Existing Vehicles
- [O-OPS] Operations – Transit Operating Assistance
- [U-CPSIMP] CPS – Improvement
- [U-CPSMAINT] CPS - Maintenance
- [X-MOD] Transfer Facility – Modernize, Repair

While the majority of influence will be from transit projects, highway projects that improve bus safety or those that are at or near rail crossings may also address transit safety targets.

Project Types	Work Types
Intersection/Interchange Improvements	[H-INTIMP] Highway/Road – Intersection Improvement
Rail-Highway Grade Separation	[H-RRGS] Highway/Road – Railroad Grade Separation
Intelligent Transportation Systems	[A-BEA] Safety – Beacons
Signal Systems	[A-LTS] Safety – Lighting
Road Operations	[A-OTH] Safety – Other
Safety	[A-RRXING] Safety – Railroad Crossing Improvements
	[S-MOD] Signals - Modernization

Transit Asset Condition

Transit condition performance measures are related to both the useful life benchmark (ULB) for vehicles (bus and rail) and miles of rail with track performance restrictions. Therefore, projects of the following types that include the listed work types should indicate they can influence transit asset condition targets by selecting the checkbox as outlined below.

Project Types	Work Types
Transit Vehicles (Bus/Rail) Other Transit	[J-EXP] Rolling Stock – Expand Fleet [J-REP] Rolling Stock - Replace Existing Vehicles
Transit Line/Route Expansion Systems Improvements Guideway Improvements Other Transit	[R-EXP] Rail Line – Extend Line [R-IMP] Rail Line - Improve Line [R-MAINT] Rail Line – Maintain, Rehabilitate, Replace [R-NEW] Rail Line – New Line

Pavement Condition

Pavement condition performance measures apply to the interstate system and the non-interstate NHS. Road maintenance, modernization, or expansion projects on either of these systems that include any of the following work types should indicate they can influence pavement condition targets by selecting the checkbox:

[B-OVR] Bridge Deck - Overlay
[B-PCHF] Bridge Deck - Full Depth Patching
[B-PCHP] Bridge Deck - Partial Depth Patching
[H-AL] Highway/Road – Add Lanes
[H-EXT] Highway/Road – Extend Road
[H-IRS] Highway/Road – Intermittent Resurfacing
[H-PATCH] Highway/Road – Pavement Patching
[H-RCINKND] Highway/Road - Reconstruct In Kind
[H-RCNST] Highway/Road – Reconst with Change in Use or Width of Lane
[H-RS] Highway/Road – Resurface (With No Lane Widening)
[H-WRS] Highway/Road – Widen Lanes and Resurface

Bridge Condition

Bridge condition performance measures apply to the percentage of bridge deck area of NHS bridges that are in "poor" condition. Projects on the NHS system that include any of the following work types may affect the bridge deck condition.   Programmers should use their judgement, based on availability and understanding of specific project

details, when determining if a project has the potential to improve bridge deck condition.

B-DECK] Bridge Deck - Repair/Rehab
[B-HYD] Bridge Deck - Hydro-Demolition
[B-NEW] Bridge/Structure - New
[B-OVR] Bridge Deck - Overlay
[B-PCHF] Bridge Deck - Full Depth Patching
[B-PCHP] Bridge Deck - Partial Depth Patching
[B-RECNFG] Bridge/Structure - Reconst/Rehab Chng in Lane Use/Widths
[B-Repair] Bridge/Structure - Reconst/Rehab No Chng in # Wdth of Lane
[B-REPLACE] Bridge/Structure – Replace

Travel Reliability/Congestion

Travel reliability and congestion measures include Travel time reliability and peak hour excessive on the interstate system and the non-interstate NHS. Many projects can influence these measures:

- If the overall Project Type is any of the following, select this checkbox: Intelligent Transportation Systems, Signal Systems, Road Operations
- If the project includes any of these work types and is located on the interstate system and the non-interstate NHS, select this checkbox:
  [E-MODE] Travel Demand Management
  [H-HOT3] Highway/Road - HOT 3-plus Lanes
  [H-HOV] Highway/Road - HOV Lanes
  [H-INFO] Highway/Road – Directional/Informational Signs
  [H-RRGS] Highway/Road - Railroad Grade Separation
  [S-MOD] Signals - Modernization
  [S-TIM] Signals – Interconnects and Timing
- Projects with other work types, such as highway expansion, corridor improvements, and improvements to transit transfer facilities may also influence travel reliability/congestion targets based on specific design details or project locations. Until supplemental questions are developed, programmers should use their judgement, based on availability and understanding of specific project details, when determining if a project has the potential to influence targets.

Non-SOV Travel

The Non-SOV travel measure represents the share of non-SOV trips on the NHS. Data is derived from the Census American Community Survey (ACS) data. This measure is largely related to personal choice, not completion of projects, but many projects could

influence commuter choices and contribute to shifting SOV work trips to non-SOV or alternate modes.

- Based on programmers judgement and understanding of specific project details, selecting this checkbox may be appropriate for projects including any of these work types:

  [E-BIKEIMP] Improve Bicycle Facility
  [E-BIKENEW] New Bicycle Facility
  [E-PEDIMP] Improve Pedestrian Facility
  [E-PEDNEW] New Pedestrian Facility
  [E-SharedModern] Improve Shared Path Facility
  [E-SharedNew] New Shared Use Path
  [R-EXP] Rail Line – Extend Line
  [R-IMP] Rail Line - Improve Line
  [R-NEW] Rail Line – New Line
  [T-EXP] Bus Routes - Major Expansion
  [T-IMP] Bus Routes – Major Service Improvement
  [T-NEWSVC] Bus Routes – New Service

Emissions Reduction

The emissions reduction measure is related only to projects funded with CMAQ. If a project has any CMAQ funding, select this checkbox.