

## TIP/STIP Policy Guidance and Instructions For the Update Period Beginning October 2016

September 10, 2015

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#### I. Introduction

#### a. Overview

To ensure that New York State's transportation system can support future commerce, personal travel demands and address emergencies and unforeseen circumstances, this metropolitan and statewide Transportation Improvement Program (TIP/STIP) update process will continue to encourage strong asset management practices. These asset management practices focus investments in current infrastructure on preventive, corrective and demand maintenance to preserve the functionality of the existing transportation system. This approach is necessitated by the lack of certainty with regard to additional resources from federal sources. Funding for core federal-aid highway programs is assumed to remain at or near current levels during the update period. Accordingly, the planning targets herein also remain essentially unchanged. Based on availability of funding, it is also anticipated the TIP/STIP updates will reflect incremental changes needed to build upon and extend the TIP/STIP period. The following guidance is intended to assist Metropolitan Planning Organizations (MPO) and NYSDOT Regions in developing federally-required fiscally constrained TIP/STIP.

#### II. Planning Targets

The planning targets provided for the 2016-21 TIP/STIP update process remain essentially unchanged from the previous update. While the program levels remain essentially unchanged, changes were made to address funding for statewide bridge inspection and implementation of the Accelerated Harsh Winter Paving program. Should additional resources become available during this update period, supplemental guidance will be issued to implement changes.

Information will be distributed for each region detailing specific planning targets and associated fund sources necessary to address core needs/preventive/corrective maintenance targets. Regions may expect some adjustments to address federal fund source availability; however overall, the level should remain the same as the current program.

Consistent with past TIP/STIP updates, NYSDOT is providing these targets for planning purposes only. The planning targets do not represent a commitment of funding on behalf of the Federal Highway Administration (FHWA) or the State.

#### III. Preventive/Corrective Maintenance Targets

Regions will receive a combined preventive/corrective maintenance investment target that applies to all assets. Appendix A provides the definition of qualifying maintenance activities for this purpose, including structures, pavements and safety and system optimization. Projects and project components to address the target date for the Americans with Disabilities Act (ADA) transition plan are included in the targets provided. As has been the case in recent years, this preventive/corrective maintenance target is not a separate allocation, but rather a mandated use of the overall Planning Target. Qualifying costs shall include all project costs (Preliminary Engineering, Right of Way, Construction and Construction Inspection) and both on-system and off-system projects. The major use of planning target funds will continue to be the programming

of preventive/corrective maintenance projects. Regional preventive/corrective maintenance targets were developed so that they would either:

- meet at least 60% of their preventive/corrective maintenance needs, or,
- spend 80% of the total planning target on preventive/corrective maintenance activities, whichever is lower.

#### IV. Program Adequacy Assessment/Development of Statewide Funding Priorities

Main Office asset teams will be reviewing Regions' program for the STIP in PSS before draft TIPs go out for public review. In general, their review will focus on:

- Compliance with fiscal constraint
- Adherence to maintenance targets
- Balance of asset needs addressed

The Regions' program should include all projects that are expected to be advanced with a region's planning targets.

As part of the TIP/STIP update process, priorities will be developed for our FFY 2019 and 2020 statewide funding sources. Regions and MPOs should begin developing a prioritized set of preventive/corrective maintenance, system renewal and/or enhancement projects that are not achievable under current planning targets. Decisions on the use of statewide funds will be made by the Comprehensive Program Team (CPT) and Capital Program Delivery Committee (CPDC) and will be based on criteria that reflect not only improvements to asset conditions but the proposal's importance to local, regional and statewide economic vitality and quality of life. Additional guidance and forms for describing the proposals will be forthcoming.

#### V. MAP 21 Performance Measurement

DOT recognizes that FHWA is currently developing final rules to implement MAP-21 performance requirements. It remains unclear what the schedule will be for issuing final rules. As such, the ongoing rulemaking process does not necessitate changes for this update period.

#### VI. Fiscally Constrained Programs

Programs should conform to both the appropriate planning targets as well as the preventive/corrective maintenance target for each region.

A critical outcome of the TIP/STIP update process is the delivery of approved, fiscally constrained TIPs as detailed in the schedule below. These will be combined with the federal-aid programs in non-metropolitan areas to comprise each Region's portion of the STIP. The RPPM is responsible for the fiscal constraint of the entire Region's portion of the STIP. **Regional portions of the STIP** <u>must</u> be constrained in order for the statewide roll-up of the STIP to meet federal fiscal constraint requirements. TIP/STIP project costs should incorporate inflation and be

reflected in Year of Expenditure (YOE) dollars. Inflation assumptions used by PSS are included as Appendix B.

NYSDOT will be providing follow-up technical TIP/STIP guidance to Regions and MPOs in November to address regulatory and process requirements for adoption of TIPs and the STIP.

#### VII. TIP/STIP Update Period

- a. Planning Targets are being distributed for April 1, 2015 September 30, 2021. Targets will include State Dedicated Funds and categorical federal-aid highway program fund sources.
- b. The STIP update covers October 1, 2016 September 30, 2020 (4 Years).

c. TIP updates cover October 1, 2016 – September 30, 2021 (5 Years).

#### VIII. Schedule See Appendix C.

#### IX. Questions

Questions or comments on any of the materials in this document can be directed to the following e-mail address: <a href="mailto:stip.update.2015@dot.ny.gov">stip.update.2015@dot.ny.gov</a>

#### X. Required Deliverables

- a. Updated PSS listing of projects that will be included in the proposed TIP/STIP—Due November 24, 2015. These listings are to be considered draft, "first cut" submissions that will be subject to revision during the MPO process.
- b. Asset Team Specific materials--- Due November 24, 2015.
  - i. Structures -
    - Regions are responsible for generating projected end conditions at year
       5.
    - 2. Supplemental reporting forms will be provided to regions by the Statewide Structures Management Team (SSMT) to encourage consistency of reporting.
  - ii. Pavements -
    - 1. Regions shall provide a very brief (one page or less) narrative describing only exceptions to program guidance.
    - Regions shall complete and submit the following charts and tables (Instructions for running the model and generating the reports will be provided by Statewide Pavement Management Team (SPMT)).
      - 5-Year System Condition Measures

- Proposed Annual Pavement Program by Treatment Category
- Copy of final Model file from which the submitted reports were created.
- iii. Safety and System Optimization -
  - 1. Enter data into the Safety tab of PSS; including estimated crash reductions for all substantive safety projects.
  - 2. Regions shall provide a brief narrative discussing the general approach for addressing the following:
    - Nominal and substantive safety needs,
    - SAFETAP program elements,
    - Rustic Rail
    - Strategies employed to ensure timely delivery of Regional and Statewide Highway Safety Improvement Program (HSIP) projects to meet the HSIP obligation goal of 100%.
    - Discuss major enhancements or significant maintenance/life cycle replacement of equipment including any necessary investments in the TMC facility or systems as per the Regional ITS Strategic Plan.
- iv. Sustainability ---
  - 1. Regions shall complete input tables that account for ADA improvements. (Input tables will be distributed by the statewide sustainability team)
  - 2. Regions shall provide a very brief (one page or less) narrative discussing the general approach for addressing sustainability within the Region's program mix.
- c. Statewide Funding Priorities --- Due March 15, 2016. Guidance and forms will be forthcoming.

#### XI. <u>Asset Category Specific Requirements</u>

#### STRUCTURES

This TIP/STIP update is largely intended to follow the same basic strategies detailed in the 2011 Capital Program Update and the 2012 TIP/STIP update. Key elements of these strategies include:

#### **Strategy Elements - Structures**

- 1. The concepts of Forward Four and Hierarchy of Priorities remain in effect.
- 2. The regional component of the overall program strategy should still focus on making the low cost, preventive and corrective maintenance actions within the window of opportunity to help get the greatest useful life from our structures infrastructure.
- Regions will receive a combined preventive/corrective maintenance investment target for all assets. Appendix A repeats the definition of qualifying maintenance activities for this purpose. As has been the case in recent years, this preventive/corrective maintenance target is not a separate allocation, but rather a mandated use of the overall Planning Target.

#### Program Evaluation Criteria – Structures

TIP/STIP update submissions will be reviewed and recommended for approval based on the following evaluations criteria:

- 1. Programs will be evaluated by the SSMT for consistency with stated targets and strategies.
- 2. The regionally submitted structures programs will be evaluated by how well they are meeting needs, as determined by MO asset teams. The CPT will provide each region with a summary of these needs. Regional programs will be evaluated for balance between asset classes. This does not mean that the investment mix must perfectly reflect the balance of needs, but regions should have a rational justification for significant variations from that mix. A good Regional structures program will include an appropriate mix of preventive/corrective maintenance and system renewal projects.
- 3. Structures Program Performance Indicators will be:
  - a. Percent of identified needs that are being addressed.
  - b. Projected end conditions at year five [stacked bar charts, change in poor, fair corrective, fair protective and good].

#### **Deliverables - Structures**

- 1. Regions are responsible for generating projected end conditions at year 5.
- 2. Supplemental reporting forms will provided to regions by the SSMT to encourage consistency of reporting.

#### PAVEMENTS

#### Precepts – Pavements

# To the extent possible, this TIP/STIP update changes little from our established program. Planning targets will remain at their current level and update strategies and procedures are also unchanged.

The following precepts related to pavement should be considered as part of the TIP/STIP update effort:

- 1. Program strategy is maintenance focused and safety sensitive.
- Region pavement programs should continue to focus on \$/VMT and a general hierarchy of Preventive Maintenance, Corrective Maintenance and Renewal treatments. Further, the balance of work between these categories and the overall efficiency of the Region's program will be reviewed as part of the program approval process.
- 3. The program of work should include the right treatment at the right time. Available funding can be optimized and the life of expiring treatments maximized by timing work within, but near the end of a given treatment window. Within this framework for optimizing treatments and funding, it is critical that a given treatment not be deferred beyond the effective window of opportunity or treatment life and effectiveness may be significantly reduced.
- 4. Specific work activities considered to be preventive and corrective maintenance work are defined in Appendix A– Pavement Work Type Categories.
- 5. Regions are required to use the Pavement Model for developing the state system pavement program. The TIP/STIP update requirements are designed to be easily obtained from the Model output.
- 6. The Pavement Model will be used as the benchmark to evaluate Regional Programming strategies. Trends and possible bias in treatment selections identified through a review of past program data will be discussed with each Region.
- 7. Consider the "cost/benefit" when making project selection decisions. Benefit can be defined as lane miles addressed, life extension or customers served (Vehicle Miles Traveled, VMT).

#### Program Strategy – Pavements

The following Program Strategy guidance should be followed as part of the TIP/STIP Update effort:

 Sustain critical pavements currently in a state of good repair (Surface Rating ≥ 7, 'Good') by performing the appropriate preventive maintenance activities before the distress exceeds the window of opportunity for preventive maintenance.

Crack seal as many appropriate candidates as possible.

- a. In general, pavements are crack sealed 2-3 years after construction (rated 8), and once again after another 4-6 years of service (rated 7).
- b. Pavements rated 6 or lower usually have too much cracking to be effectively crack sealed. Other sealing or maintenance treatments should be considered.
- c. Performing a comprehensive crack seal program is inherent in the treatment performance models and should be implemented as standard practice.
- 2. Maintain the system by preventing pavements from falling to Fair (Rating 6).
  - a. Use thin overlays, single course HMA, mill & fill, Concrete Pavement Restoration (CPR) Light and other corrective maintenance treatments as appropriate to the project conditions.
- 3. With consideration of available funding, improve pavements deteriorated beyond the preventive maintenance window with appropriate treatments that are prioritized according to the cost of the treatment and vehicle travel served (lowest \$/VMT) as an initial candidate priority list. Exercise site specific judgment when selecting projects from the initial priority list to incorporate in the Program.
- 4. Select treatments that appropriately resolve the types and levels of distresses observed in the pavement. Application of treatments to conditions well beyond the recommended criteria significantly reduces treatment life, is not cost effective and is discouraged. Local knowledge should be used to determine the appropriate treatment for the conditions and to ensure the treatment will perform adequately.
- 5. Once a lower volume pavement deteriorates to very poor condition (Surface Rating of 4 or less), it likely will need substantial work to be restored to a state of good repair. These pavements should be allowed to deteriorate (with only limited demand maintenance to keep the pavement reasonably safe) to the end of their functional life. These restorative treatments would be considered "Demand Recovery" candidates. Additional guidance regarding Demand Recovery projects will be provided separately.
- 6. When programming a paving project, be sure to address ADA deficiencies within the project area as required by law. In addition, consider ways to leverage various funding sources for low cost treatments to address identified needs related to sidewalk gaps, better access for transit and improved bicycle access.

#### Program Evaluation Criteria – Pavements

The updated PSS listing of projects will be reviewed and recommended for approval based on the following evaluation criteria:

1. Provide a very brief (one page or less) narrative describing the program and explaining any deviations from the program guidance.

- Complete and submit the following charts and tables that will be distributed separately by SPMT. Instructions for running the model and generating the reports will also be provided separately.
  - a. 5-Yr System Condition Measures
  - b. Proposed Annual Pavement Program by Treatment Category
  - c. Copy of final Model file from which the submitted reports were created
- 3. The SPMT will evaluate Programs for consistency with the stated goals, strategy and criteria.
- 4. Programs will be measured based on the following performance criteria:
  - a. Annual lane miles of maintenance paving accomplished
  - b. System conditions measured by tier (Interstate, NHS, Non-NHS) including:
    - i. Average Surface Rating, % Lane Miles Rated Poor, Fair, Good, and Excellent,
    - ii. % VMT on Good or Better (from Summary Report),
    - iii. % LM by IRI (Rough, Fair, Smooth from Summary Report) and
    - iv. Backlog (from Summary Report)
- 5. Regions with high and consistently increasing backlog and increasing percent Poor pavement through the 5-Yr Program evaluation period (indicating extreme underfunding of the pavement program) must develop and describe a strategy for system recovery.
  - a. Once approved, Region Programs will be monitored by the SPMT to ensure the "built" Program is consistent with the "approved" Program.

#### Safety and System Optimization

To the extent possible, this TIP/STIP update changes little from our established program. Overall strategies and procedures continue those established in previous STIP/TIP update and the most recent Comprehensive Program Update. Additional materials and guidance may be distributed directly to regions by the Safety and System Optimization SSO Team.

#### Goals:

#### Safety Program - Goals and Objectives

- Address priorities identified in the Strategic Highway Safety Plan (SHSP) including Lane Departure, Pedestrian and Intersection crashes.
- Reduce fatalities and serious injuries by implementing substantive safety projects at High Accident Locations (HALs) and using approved systemic treatments.
- Maintain and preserve the condition of nominal safety assets and safety appurtenances.
- Complete new and backlogged SAFETAP items.
- Obligate 100% of the regionally allocated and centrally administered HSIP funds.
- Replace all rustic rail within 10 years.

#### **System Optimization - Goals and Objectives**

- Maintain the ITS and traffic signal system.
- Maintain full TMC operational capabilities in accordance with Regional and statewide goals.
- Provide for 24/7 Transportation Management Center Operations (where applicable).
- Provide for 24/7 response to maintain critical traffic signals within the network.

- Collect and distribute critical information on system status and operations during emergencies.
- Support agency and transportation system partners through coordination and deployment of ITS and signal systems.
- Support and actively engage in Integrated Corridor Management strategies.
- Plan for and manage system operations during Special events.
- Actively engage and promote a Traffic Incident Management program within the Region.
- Maintain a well-prepared ICS structure with trained staff.
- Provide HELP coverage for the key corridors within the regional network, where appropriate.
- Support Travel Demand Management programs and strategies, including Transit initiatives.
- Support Driver's First initiatives.

#### Strategies:

#### **Safety Program - Strategies**

- Nominal Safety Regions should include projects related to preventive and corrective maintenance of existing nominal safety assets as indicated in Appendix A. Projects should include pavement markings, signs, rustic rail and guiderail as well as projects to address any SAFETAP backlogs.
- Substantive Safety Programs shall include projects that will result in full (100%) obligation
  of Regional and statewide administered HSIP funding. Formula based Regional HSIP
  allocations will account for approximately 50% of the available HSIP funds. The remaining
  50% will be administered centrally. Centrally administered funds will be used to finance
  statewide safety project solicitations, pedestrian safety corridors and initiatives defined
  during the development of 3 action plans to address pedestrian, intersection and lane
  departure crashes.
- There will be a solicitation for centrally administered HSIP funds during the fall of 2015 to
  program remaining FFY 15-17 funds. Projects selected from this solicitation will be
  amended into <u>current</u> TIPs and the STIP. The Office of Traffic Safety and Mobility (OTSM)
  will administer the solicitation and provide Regions/MPOS with a schedule and guidance for
  this solicitation.
- Goals related to systemic measures such as CARDs and Pedestrian Countdown timers remain in place.

#### **System Optimization - Program Strategies**

- Identify projects that support a State of Healthy Operations (SOHO) including:
  - o ITS systems and supporting equipment
  - Active TDM and TSM programs
- Identify projects to maintain TMC operations, including:
  - Facility operations /staffing for 24/7 operations (where applicable)

- Equipment operating costs (communications, electric, etc)
- Identify projects to operate and maintain ITS and traffic signal field assets including:
  - o Replace obsolete equipment (in-kind) over the course of the program
  - Traffic signal system replacements
  - Effective asset management, including accurate inventory of major components
  - o Signal Optimization

#### Safety and System Optimization Program Evaluation Criteria

Project Data:

- PSS data will be used to assess Regional programs and how they meet the goals established.
- For all substantive safety projects, Regions shall ensure that all elements for the Safety Tab in PSS are completed including crash reduction estimates.
- Some project codes in PSS do not have a direct correlation to SSO preventive/corrective maintenance work types (for example TMC operations, SAFETAP, overhead signs, HELP, etc.). Please clearly indicate this work type in the project description for this type of work.

Narrative:

- Regions should provide a brief narrative discussing the general approach for addressing nominal and substantive safety needs, SAFETAP program elements and Rustic Rail.
- Include a discussion of strategies employed by the Region to ensure timely delivery of HSIP projects to meet the HSIP obligation goal of 100%.
- Per Regional ITS Strategic Plan, discuss major enhancements or significant maintenance/life cycle replacement of equipment including any necessary investments in the TMC facility or systems.

#### SUSTAINABILITY

The capital programming goal for sustainability is to ensure sustainability is an integral element of how projects are developed and where project investments are made. Regions should also consider economic, social and environmental benefits in making decisions on projects and overall program selections. This includes considering the project's context in the transportation system and local geography. A roadway's function reaches beyond its functional class and serves people and society in many ways including supporting economic vitality, employment and livability. Transportation infrastructure that supports these society functions should be evaluated along with the roadways importance when making transportation investment decisions. For this TIP/STIP update, the following goals, consistent with the Department's sustainability mission and vision, apply:

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• Use sustainability principles in programming all projects.

- Improve the transportation system for all users through investments that address safety, mobility, accessibility, resiliency, and environmental stewardship.
- Address pedestrian user needs by reducing non-compliant ADA pedestrian locations. When practical, choose corrective/preventive maintenance projects that will reduce the backlog of ADA needs.
- Consider all transportation system users (e.g. pedestrians, transit users, bicyclists) and how they use all transportation modes when planning and selecting projects.
- Include low cost treatments that improve modal access, and address complete streets and smart growth principles as appropriate.
- Consider resiliency and at-risk flood locations when selecting and developing projects.

Regions should provide a brief (one page) narrative discussing the general approach for addressing sustainability within the Region's program mix.

Regions must submit a list of projects that will reduce the backlog of ADA deficient locations. The Statewide Sustainability Team (SSUT) will provide regions with a reporting form for this list to encourage consistency.

#### APPENDIX A PREVENTIVE/CORRECTIVE MAINTENANCE QUALIFYING WORK TYPES

#### **Miscellaneous**

Inspection

- Culvert inspection costs

Demand Response

- Where and when contracts
- JOC maintenance contracts
- Stream stabilization work

SDF used to augment NPS Expenditures in areas including:

- Pavement (PM), Bridge (BM), Signs (SS), Signals Contracts (SL), Roadside Env. (EN), Drainage (DR), Guiderail (GR), Markings (MK)

Structure Work Types			
		Clean Superstructure	
	Cyclical	Clean Substructure	
		Lube Bearings	
		Seal Deck	
		Paint	
e		Treat Deck	
anc		Vertical down repairs	
ten		Deck replacement/repairs where deck is rated 4 or less.	
aint		Prestressed beam superstructure replacement when the	
Σ		Primary Member Rating ≤ 4 and the Substructure	
tive	pairs/ pairs	Recommendation is $\geq$ 5 (pier(s) and/or abutments.	
rect		Rehab primary/secondary members	
Cori	Re Re	Rehab curbs/sidewalks	
Bridge Preventive/Corrective Maintenance	ific	Wearing surface replacement	
ntiv	ect	Joint replacement	
ver	t Sj	Bearing replacement	
Pre	b/C	Rehab cap beams	
e	eha len	Rehab pier stems	
rid	Minor Rehab/Corrective Repairs, Single Element Specific Repairs	Rehab columns	
В		Rehab backwall	
		Rehab stems (abutment)	
		Rehab wingwalls	
		Rehab seats	
		Replace members	
		Rehab stems (pier)	
f	or age ≤ 50 Major Rehab	Combination of work types such as those described above	
ed i 50		under preservation which collectively exceed 50% of the bridge	
uire		replacement cost	
newal on req or age		Superstructure replacement where project cost exceeds 50% of	
on I or		the bridge replacement cost	
Bridge Renewal Justification required if CR≥ 4.4 or age ≤ 50	Replace bridges/New bridges	Full bridge replacement/new bridge	
Large Culvert Maintenance	Preservation	Replacements where: Primary Member ≤ 4 and Construction Cost ≤ \$0.6 million.	

Pavement Work Type Categories			
	Work Type Description	Category	
	Crack Seal	PREV	
	Pavement Preservation Thin Overlay	PREV	Pre
	Microsurfacing	PREV	vent
	Paver Placed Surface Treatment	PREV	tive
	6.3 mm Overlay	PREV	and
	Single Course HMA	PREV	Corr
	Single Course w/ T&L	COR	recti
	CPR Light	COR	Preventive and Corrective Maintenance
	Mill and Fill	COR	/la in
	Hot in Place	COR	tena
	Mill and Fill w/ Joint Repair	COR	ance
	Cold Recycling w/ wearing surface	COR	
	Mill and Fill w/ Overlay	REHAB	
	Multi Mill and Fill w/ Joint Repair	REHAB	
	2 Course HMA	REHAB	
	Multi Course Saw and Seal	REHAB	Ş
	Cold Rec. w/ multiple course OL	REHAB	yste
	CPR Heavy	REHAB	mR
	Crack and Seat	REHAB	System Renewal
	Rubblize	RECON	val
	3 Course HMA	RECON	
	Recon/Remove and Replace w/Asphalt	RECON	
	Recon/Remove and Replace w/Concrete	RECON	
PREV	Preventive Maintenance slows deterioration by sealing the pavement surface; does not add significant structure.		
COR	Corrective Maintenance repairs minor deficiencies in the top of the		Def
REHAB	pavement structure; may add nominal structural capacity. Rehabilitation restores the pavement above the subbase to like- new condition; adds moderate structure to the pavement.		Definitions
RECON	Reconstruction creates or restores a new pavement structure.		

Note: Two-course Hot Mix Asphalt (HMA) overlays on Interstates in Region 11 only
will be considered a maintenance treatment and count toward the maintenance
target.

Safe	ety & System Optimization	(SSO) Work Types
Preventive/Corrective	SOGR Needs	Signal Replacements
Maintenance Actions		Pavement Markings
		Overhead Sign Panel
		Replacement
		Ground Mounted Sign
		Replacement
		Guiderail
		Grade Crossing Replacements
		Closed Drainage Repairs
		CARDS (replacement of existing)
		SAFETAP
		SAFETAP Backlog
		Lighting Maintenance (R 8+10)
		ITS Maintenance Contracts
	SOHO Needs	Signal Maintenance Contracts
		TMC Ops + System Support
		HELP
		E-Screening
		Signal Re-Timing
		Misc. Lighting (e.g. Utility Bills Rs
		8+10)
		TMCs
System Renewal or	Enhancements	CARDs
Modernization Actions		Pedestrian Countdown Timers
		SHARDS
		Regional PILs
		Statewide PILs (state)
		Statewide PILs (local)
		Safety Emphasis Areas
		New Grade Crossing
		Improvements
		Signal Electrical Disconnects
		TMC, ITS Enhancements
		Signal Timing + Coordination
		Initiative
		E-Screening

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#### **APPENDIX B**

#### Official Inflation Rates for PSS Base Year 2015

#### Inflation Assumptions Provided by Lou Adams and Approved by Ron Epstein, CFO January 26, 2015

The following simple rates of inflation by State Fiscal Year (SFY) (April to March) are the best available estimates of overall price trends for the transport public works sector in New York State for the programming period:

Annual Period	Simple Year Over Year Inflation
SFY 15-16	0.00%
SFY 16-17	2.00%
SFY 17-18	4.00%
SFY 18-19	6.00%
SFY 19-20	8.00%
SFY 20-21	10.00%
SFY 21-22	12.00%
SFY 22-23 thru 29-30	14.00%

The following multiplication factors reflect the simple rates of inflation stated above. They are used to convert SFY 2015 un-inflated cost estimates (in the Program Support System, Bridge Model, or Pavement Model) to be year of expenditure (YOE) inflated cost estimates (for the TIP, STIP and Governor's Program), or vice versa:

Year of Expenditure	2015 \$ to YOE \$	YOE \$ to 2015\$
SFY 15-16	1.0000	1.0000
SFY 16-17	1.0200	0.9804
SFY 17-18	1.0400	0.9615
SFY 18-19	1.0600	0.9434
SFY 19-20	1.0800	0.9259
SFY 20-21	1.1000	0.9091
SFY 21-22	1.1200	0.8929
SFY 22-23+	1.1400	0.8772

#### **APPENDIX C**

#### TIP-STIP UPDATE SCHEDULE

### October 1, 2016 – September 30, 2020 STIP October 1, 2016 – September 30, 2021 TIPs

#### September 10, 2015

TIP/STIP Policy Guidance and Planning Targets are distributed to Regions

September 2015 - November 24, 2015

Regions work on putting draft program in PSS

#### November 24, 2015

Regions provide a preliminary estimate of the draft STIP in PSS that conforms to planning targets for review

#### November 24 – January 15, 2016

Asset teams will review Regions' core programs for compliance with guidance

#### January – March 2016

MPOs/Regions conduct Statewide Capital Project solicitation for FFY 2018 – FFY 2020 Changes/updates to Regions' core programs are in PSS for entire STIP based on Asset Team comments and further input from MPO process Asset teams re-evaluate Regions programs in PSS for:

- Compliance with fiscal constraint,
- Adherence to maintenance targets
- Balance of asset needs addressed

#### <u> March – May 2016</u>

CPT approval of Regions' programs in PSS prior to draft TIPs going our for public review Draft TIPs go out for public review Regions submit Statewide Capital projects to Main Office

<u>June 30, 2016</u>

Final approval of all MPO TIPs

June – September, 2016

CPT/CPDC review and ranking of Statewide Capital project submissions Regions/MPOs notified of Statewide Capital decisions in September

October 1, 2016

Federal approval of the new STIP

Post October 2016

Statewide Capital projects are amended into the STIP