

December 14, 2023



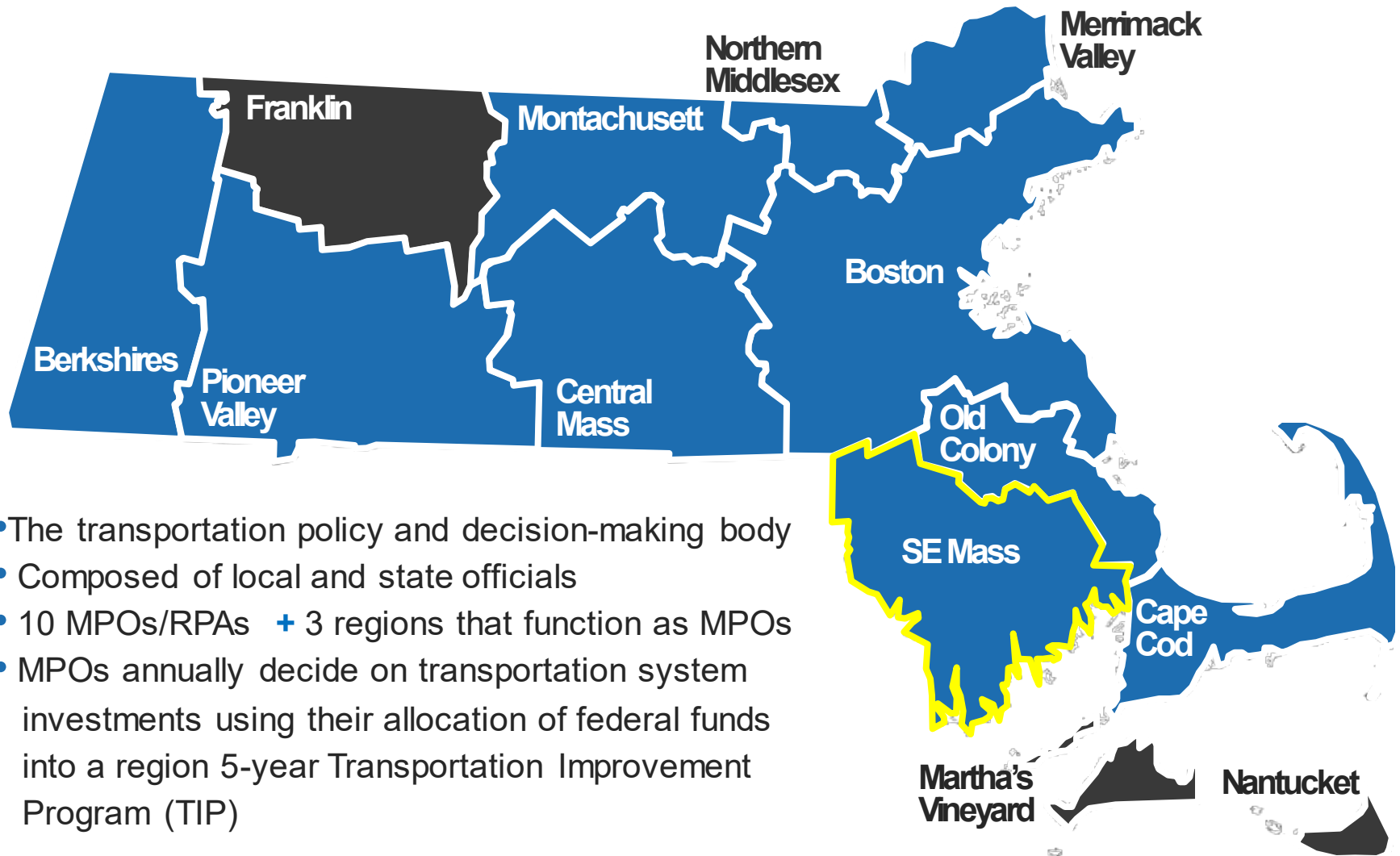
Transportation Planning: 3C's and State Transportation Improvement Program (STIP) Process

Derek 'Shooster', STIP Coordinator
MPO Activities Team
MassDOT Office of Transportation Planning

Overview

- MPO Org. Structure in Massachusetts
- 3C Planning – What is it?
- STIP 101 (Commonwealth Edition)
- STIP Development Process & Funding

MPO Structure



- The transportation policy and decision-making body
- Composed of local and state officials
- 10 MPOs/RPAs + 3 regions that function as MPOs
- MPOs annually decide on transportation system investments using their allocation of federal funds into a region 5-year Transportation Improvement Program (TIP)

3C Transportation Planning Process

Cooperative

- MPOs annually decide on transportation investments using their allocation of federal funds into a regional 5-year Transportation Improvement Program (TIP).
- [Public Participation Plans](#) identify steps MPOs take to engage the public and allow for input among stakeholders. **Every person has a role in transportation planning.**

Comprehensive

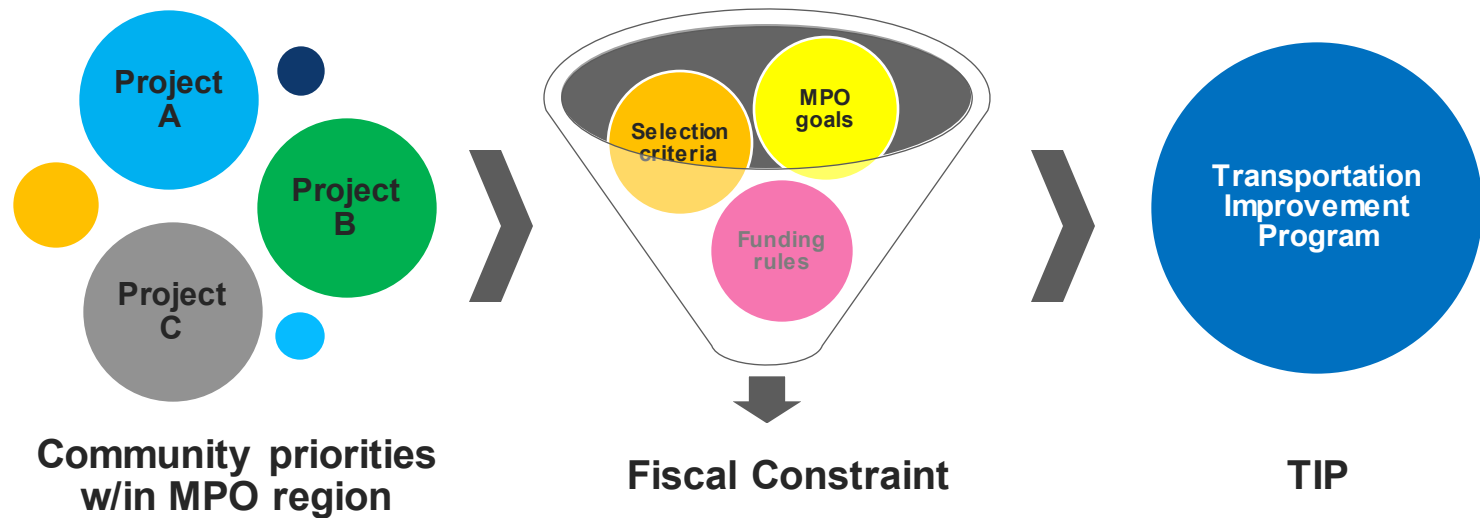
- Regional and statewide visions and goals for transportation are identified in a Long-Range Transportation Plan (or Regional Transportation Plan). MPOs develop these plans every 4 to 5 years. Learn more about [Beyond Mobility](#).
- The planning tasks MPO staff perform are identified in their Unified Planning Work Program (UPWP), including technical assistance and data analysis.
- The prioritized investments of 13 regions, and statewide priorities, make up the [State Transportation Improvement Program \(STIP\)](#).

Continuing

- Whether replacing a transit vehicle at the end of its useful life or identifying places for complete streets investments, all transportation work is ongoing.

STIP 101: TIPs in the Commonwealth

- Federally required investment program spanning 5-years and listing all federally funded projects within an MPO
- TIPs are multi-modal including roadway, bicycle, pedestrian, and transit projects
- Funding is limited; communities must advance projects for consideration
- Developed in each Spring (March – May generally)



STIP 101: Compilation

- STIP is the combination of all 13 MPO prioritized investment programs and MassDOT prioritized investments



STIP 101: Project Development



Project proponent

MPOs

District receives Project Need Form via MaPIT

District can provide guidance for project planning

District receives Project Scope (MaPIT) – Project Review Committee determines funding eligibility

Highway Division oversees project design and permitting

Pre-25% Project Scoping Meeting (if applicable)

MassDOT provides state match for federal funds approved by MPO

MassDOT advertises construction after design is completed and all permits and ROW is secured

project planning

design/permitting

construction

project need

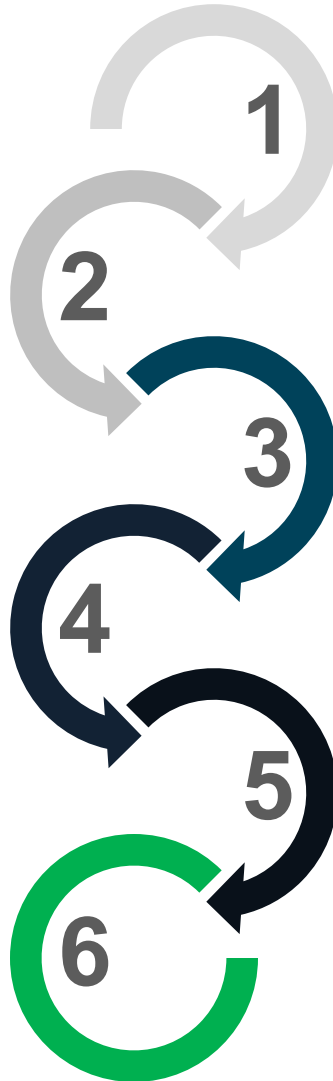
project scoping

funding

Could be identified from an MPO planning study in the Unified Planning Work Program

MPO could provide technical assistance through Unified Planning Work Program (road safety audits, traffic counts, etc.)

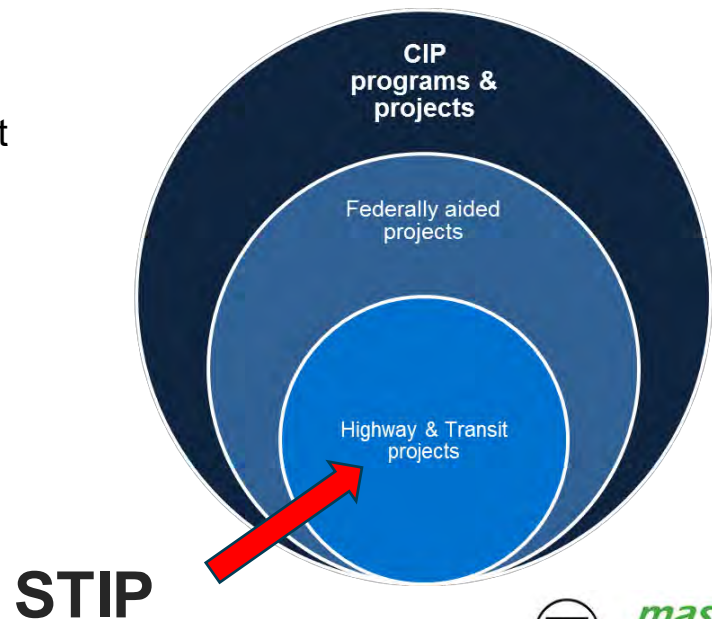
MPO decides project investment priorities in TIP in Steps 4-5



CIP/STIP Schedule

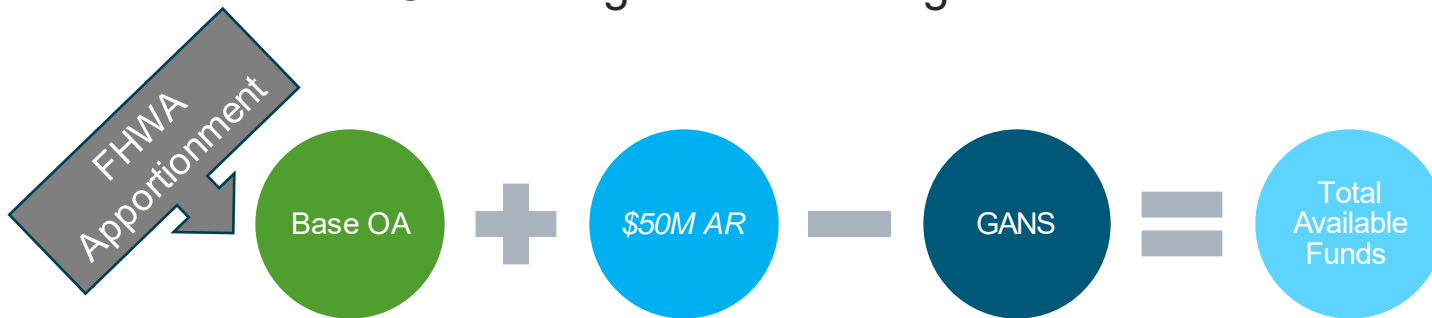


- Financial planning and cost estimation (sources)
- Capital Investment Plan (CIP) program sizing and scoring
- Financial guidance distributed to MPO & TPO partners
- **MassDOT Divisions and MBTA conduct "Readiness Days" (CRITICAL EVENT)**
- Stakeholder engagement (Phase 1)
- **MassDOT program manager draft project selection**
- Fiscal constraint
- **MPOs conduct TIP development meetings – preferred project list**
- Sources & uses QA/QC
- CIP and STIP document preparation
- MPOs release Draft TIPs for public comment
- Boards approve the Draft CIP and STIP
- Public engagement (Phase 2)
- MPOs endorse TIPs
- Final fiscal constraint analysis
- Boards approve the final CIP and STIP
- STIP sent to EPA, DEP, FHWA and FTA



How is the STIP built? FHWA 101

- **Apportionments**
 - Formula based, established by legislation (BIL)
 - BIL Apportionment in FFY 2024 is \$837.1M
- **Base Obligation Authority (OA)**
 - A % of the apportionment that the Commonwealth can obligate
 - Established by Congress each year (~89% on average)
- **“August” Redistribution**
 - Limitation above the base OA; must be requested by MassDOT
 - MassDOT includes \$50M in the STIP prior to obligation each year
 - **NOT** a new apportionment of funding. Uses existing apportionment dollars, but allows MassDOT to obligate more in a given FFY



(GANS is the federal aid debt payment for the accelerated bridge program)

How is the STIP built? FHWA 101

FFY 2023-2027 (Highway Estimates, Federal Aid Only)

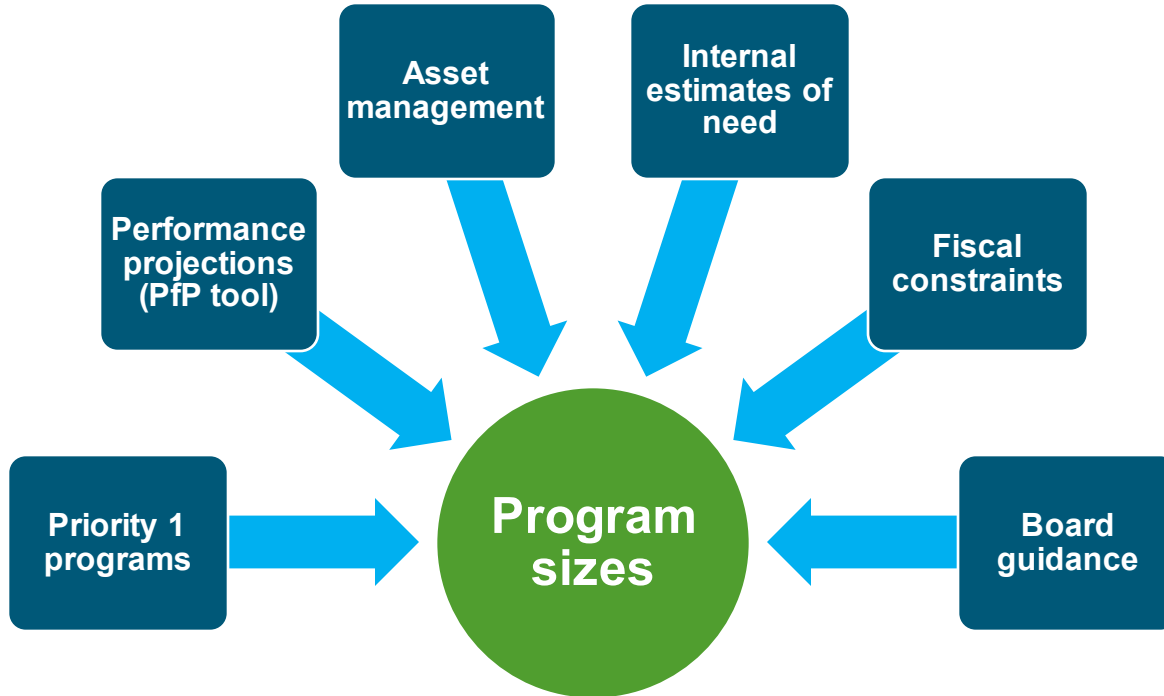
	FY2024 (Actual)	FY2025	FY2026	FY2027	FY2028
Apportionment	\$829,346,992	\$842,542,086	\$856,476,409	\$870,689,422	\$885,186,688
Apportionment Growth from Previous FY	2.0%	2.0%	2.0%	2.0%	2.0%
% OA to Apportionment	90%	90%	90%	90%	90%
Base Obligation Authority (OA)	\$746,412,293	\$758,287,877	\$770,828,768	\$783,620,480	\$797,118,019
Base OA + Redistribution	\$796,412,293	\$808,287,877	\$820,828,768	\$833,620,480	\$847,118,019
Southeastern Massachusetts Regional Program Target (with matching funds)	\$27,244,358	\$26,781,536	\$26,126,323	\$32,350,321	\$32,959,248

Avg. % OA to Apportionment (FY18-22) = 90%

SE Mass MPO TIP Project List (FFY 2024)

Year	MassDOT Project ID	MPO	Municipality	MassDOT Project Description	District	Adjusted TFPC	Total Programmed Funds	Federal Funds	Non-Federal Funds
2024	605311	Southeastern Mass	Multiple	MARION- WAREHAM- BRIDGE REPLACEMENT, M-05-001=W-06-013 & W-06-016, WAREHAM STREET (US 6) OVER WEWEANTIC RIVER	5	\$40,969,390	\$40,969,390	\$0	\$40,969,390
2024	606527	Southeastern Mass	New Bedford	NEW BEDFORD- SUPERSTRUCTURE REPLACEMENT, N-06-020, I-195 (EB & WB) RAMP C & F OVER ST 18, COUNTY STREET, STATE STREET, MASS COASTAL RAILROAD, PURCHASE STREET, WELD STREET, INCLUDES REPLACING N-06-046, I-195 (EB) RAMP F OVER WELD STREET	5	\$354,901,010	\$195,867,830	\$156,694,264	\$39,173,566
2024	608049	Southeastern Mass	Fall River	FALL RIVER- CORRIDOR IMPROVEMENTS ON ROUTE 79/DAVOL STREET	5	\$119,427,595	\$25,917,561	\$20,734,049	\$5,183,512
2024	608563	Southeastern Mass	Swansea	SWANSEA- IMPROVEMENTS ON ROUTE 6 (GRAND ARMY OF THE REPUBLIC HIGHWAY) AT GARDNERS NECK ROAD	5	\$4,667,256	\$4,005,090	\$3,604,581	\$400,509
2024	608753	Southeastern Mass	Taunton	TAUNTON- CORRIDOR IMPROVEMENTS AND RELATED WORK ON BROADWAY (ROUTE 138), FROM PURCHASE STREET TO JACKSON STREET (PHASE 2)	5	\$8,856,070	\$7,830,877	\$6,264,702	\$1,566,175
2024	609518	Southeastern Mass	Fairhaven	FAIRHAVEN- LEROY WOOD ELEMENTARY SCHOOL IMPROVEMENTS (SRFS)	5	\$1,516,087	\$1,516,087	\$1,212,870	\$303,217
2024	610647	Southeastern Mass	Wareham	WAREHAM- CORRIDOR IMPROVEMENTS ON ROUTE 6 AT SWIFTS BEACH ROAD	5	\$8,300,581	\$5,250,181	\$4,200,145	\$1,050,036
2024	611996	Southeastern Mass	New Bedford	NEW BEDFORD- PAVEMENT PRESERVATION AND RELATED WORK ON ROUTE 140	5	\$11,318,567	\$11,248,847	\$8,999,078	\$2,249,769
2024	613193	Southeastern Mass	Multiple	DARTMOUTH TO WAREHAM- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 195	5	\$7,926,205	\$7,669,250	\$6,902,325	\$766,925
2024	613194	Southeastern Mass	Multiple	WAREHAM TO RAYNHAM- GUIDE AND TRAFFIC SIGN REPLACEMENT ON A SECTION OF INTERSTATE 495	5	\$6,066,394	\$8,023,070	\$7,220,763	\$802,307
2024	613198	Southeastern Mass	Somerset	SOMERSET- BRIDGE PRESERVATION OF S-16-009 (3Y9), S-16-010 (3PD), S-16-011 (3YA) AND S-16-012 (3U6 & 3U7)	5	\$8,000,000	\$8,000,000	\$6,400,000	\$1,600,000

CIP/STIP Program Sizing



Program sizing December through January; AnF, FHWA, FTA are key partners

“Readiness Days” in February are a crucial step to STIP development



More on Funding Categories for Projects

STIP includes detailed explanation of highway and transit funding categories, as well as assumptions for available funding in out years that we plan for.

STIP must not only be fiscally constrained across program targets, but also by funding categories.

For example, MA received \$38.5M of HSIP apportionment in 2024, with no carryover balance from previous years. We cannot program more than \$38.5M toward projects using HSIP in 2024, and need to identify other funding opportunities if such project needs exist.

For more detail on the funds, check out the STIP:

<https://www.mass.gov/doc/stip-ffy-2024-2028-final-report/download> (p.25)

Thank you! Questions?

- **Massachusetts STIP available at [this link](#)**
(or Google 'MassDOT STIP')
- **Derek Shooster, MPO Activities - STIP Coordinator**
Derek.Shooster@state.ma.us
- **Raissah Kouame, MPO Liaison to SE Mass**
Raissah.Kouame@state.ma.us

Acronym List

- **STIP** - State Transportation Improvement Program
- **eSTIP** – Electronic State Transportation Improvement Program
- **FHWA** – Federal Highway Administration
- **FTA** – Federal Transit Administration
- **CAPE** – Contract Advertising and Planning Estimator
- **TIP** – Transportation Improvement Program
- **CIP** – Capital Investment Program
- **AnF** – Administration and Finance
- **MaPIT** – Massachusetts Project Intake Tool
- **MPO** – Metropolitan Planning Organization
- **TPO** – Transportation Planning Organization
- **RPA** – Regional Planning Agency
- **OTP** – Office of Transportation Planning
- **TFPC** – Total Federal Participating Construction Cost
- **DPH** – Design Public Hearing
- **PRC** – Project Review Committee
- **UPWP** – Unified Planning Work Program
- **OA** – Obligation Authority
- **OL** – Obligation Limit
- **GANs** – Grant Anticipation Notes
- **ROW** – Right of Way
- **F/S/FY** – Federal/State Fiscal Year
- **3C** - Continuing, Comprehensive, Collaborative Planning Process
- **BIL** - Bipartisan Infrastructure Law
- **IIJA** - Investment in Infrastructure and Jobs Act



STIP Development: The Future (2022+)

TIP readiness guidelines/ad program improvements (conceptual for discussion)

FFY	Readiness day design status	FFY	Readiness day design status	Design public hearing (DPH)	Right of way	Cost escalation
Year 1	100% Design	New Year 1	100% Design	DPH completed	Accepted Right-Of-Way Plans received by TIP Day	Programmed Project Cost matches TFPC
Year 2	75% Design	New Year 2	75% Design	75% DPH by TIP Day	Revised ROW Plans	Programmed Project Cost inflated by 4%
Year 3	25% Design	New Year 3	25% Design	25% DPH by TIP Day	Preliminary ROW Plans	Programmed Project Cost inflated by 8%
Year 4	PRC Approval	New Year 4	PRC Approval	N/A	N/A	Programmed Project Cost inflated by 12%
Year 5	PRC Approval	New Year 5	PRC Approval	N/A	N/A	Programmed Project Cost inflated by 16%