



**Massachusetts Bay
Transportation Authority**

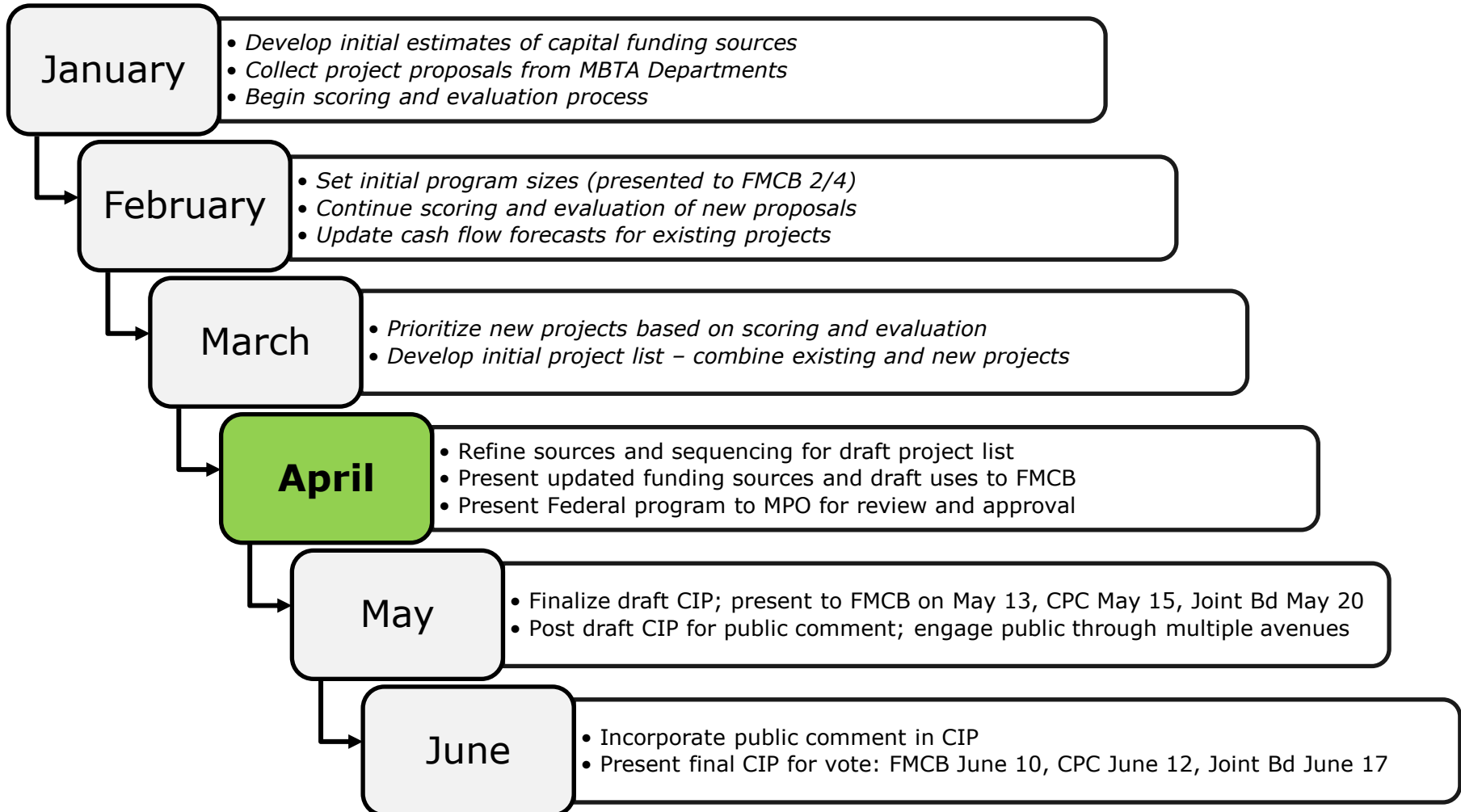
MBTA Capital Investment Plan

Overview for RTAC and MPO

4/10/2019



FY20-24 CIP Process Recap





Next evolution of the MBTA CIP: Continuous improvement

FY17-21 CIP

- Introduced a new strategic approach to produce a balanced portfolio of projects
- Represented the first fully integrated MassDOT-MBTA CIP
- After years of underinvestment, challenged the agency to spend \$6.6 billion over the five year window



FY18-22 CIP

- Continued the structure and process introduced the prior year
- Focused on fully funding prior commitments, project readiness, acceleration, and targeted updates
- Expanded ambitious capital spending goals to \$7.4 billion over five years



FY19-23 CIP

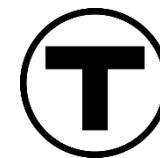
- Aligned priorities with strategic goals and plans
- Issued agency-wide call for projects to identify needs and build pipeline
- Incorporated Transit Asset Management (TAM) data
- Scored all project proposals using PSAC methodology
- Produced \$8 billion plan



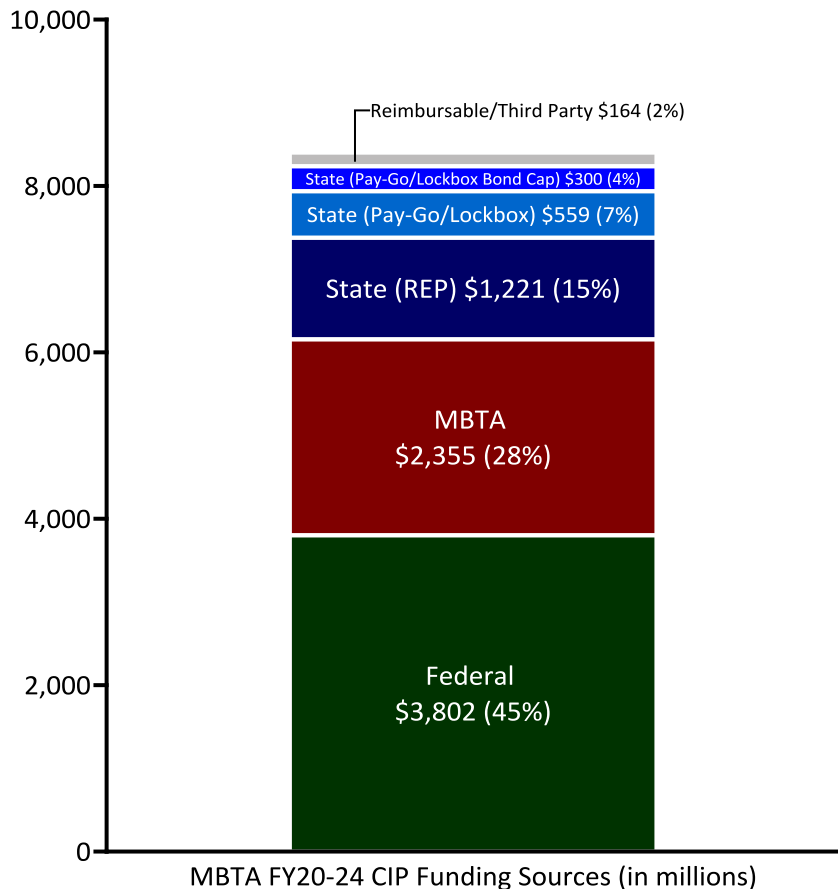
FY20-24 CIP

- Incorporate **Transit Asset Management (TAM)** Plan data and findings
- Use CIP process to implement first set of **Focus40** "next priorities"
- Leverage **PMIS** for project intake, eval, and prioritization
- Focus on **execution and optimization** of capital program



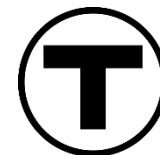


FY20-24 CIP Funding Sources: Estimated ~\$8B available for the next five year plan

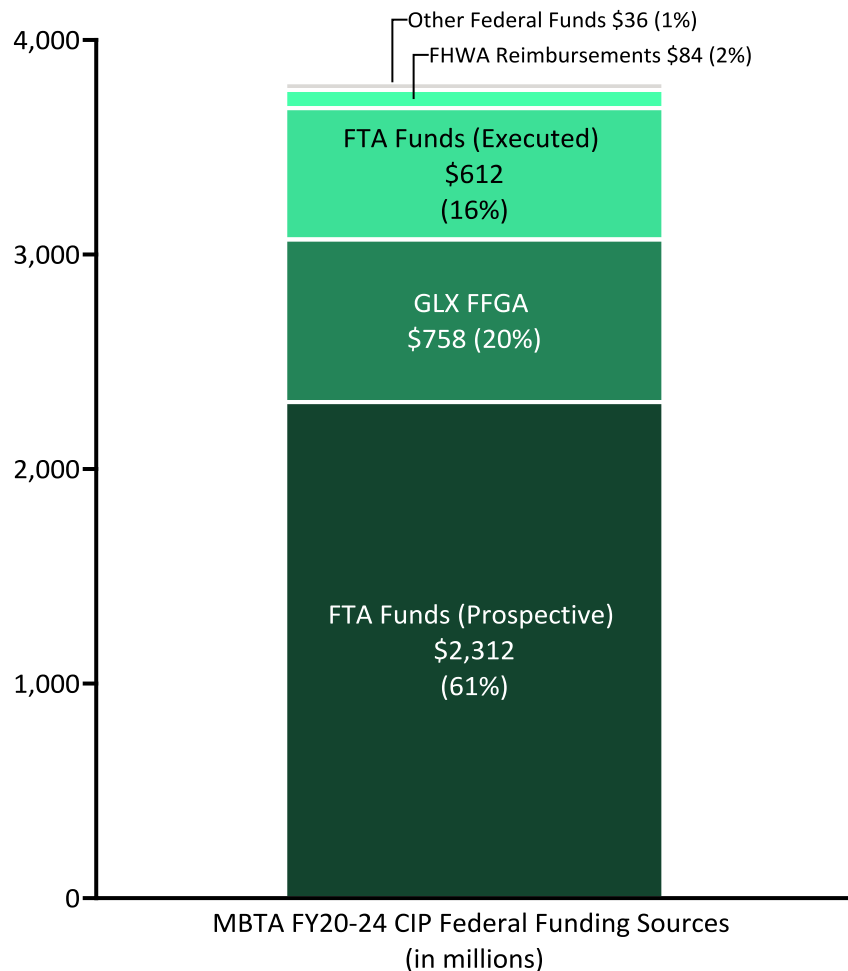


Sources highlights:

- **Federal** funds continue to be the single largest source of capital for the MBTA
 - GLX Full Funding Grant Agreement: \$996M overall; \$758M in FY20-24
 - FTA Funds: \$2.9B in FY20-24 assumes annual 1.7% increases in formula allotment plus discretionary grants
- **MBTA Bonds**, including Sustainability Bonds, support the 20% match for Federal projects, as well as MBTA-only funded projects
- **State** funds include \$2B in FY20-24:
 - Rail Enhancement Program (REP) special obligation bonds for GLX, Red Line/Orange Line improvements, and other projects
 - Pay-Go/Lockbox for customer-facing projects, including \$60M/year in bond cap and \$90M in appropriated state assistance
- **Other** funding sources include municipal contributions and other reimbursements



FY20-24 CIP Funding Sources: TIP represents 25-30% of MBTA capital program

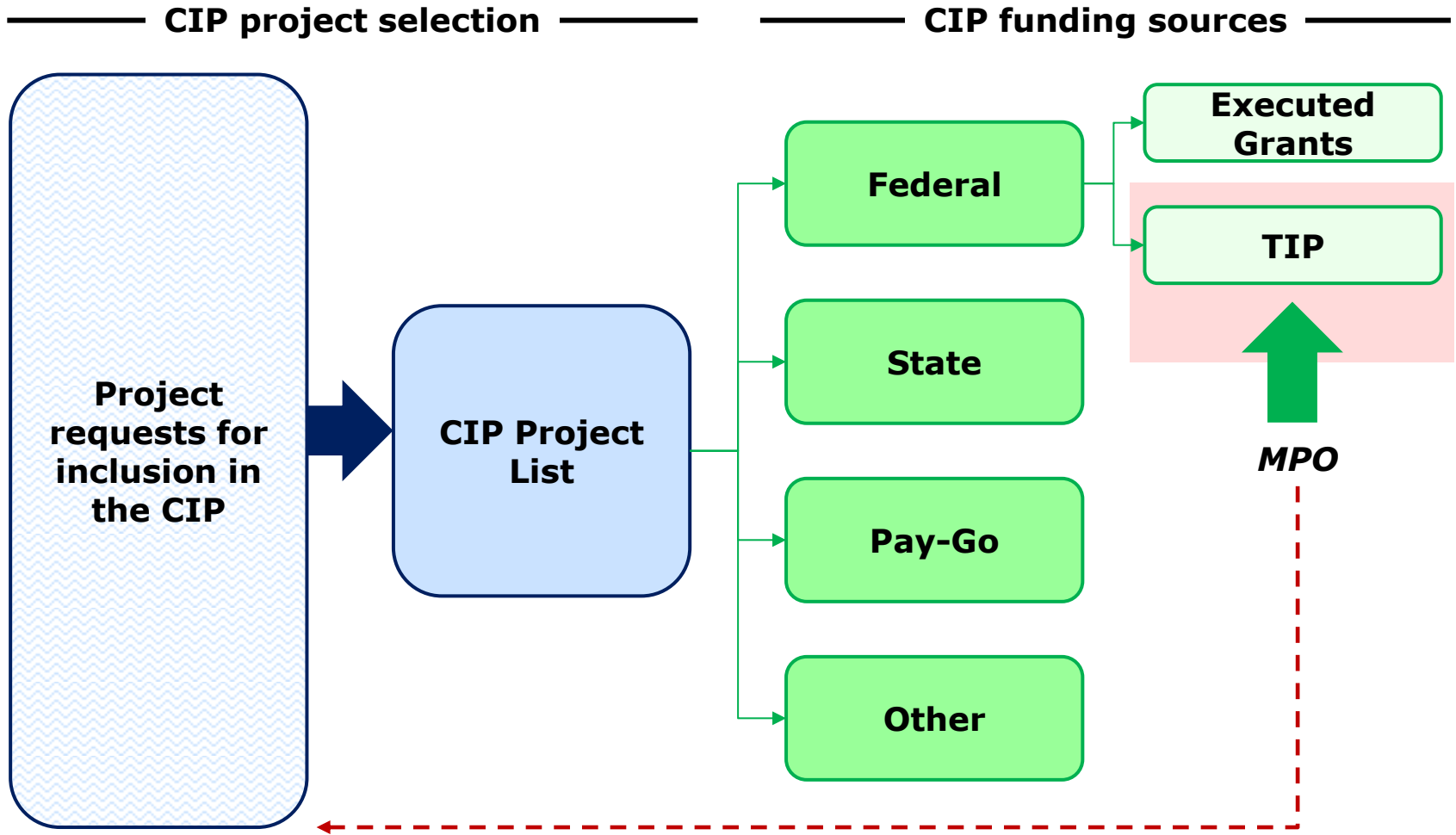


Federal Sources:

- The Federal program is a subset of the larger MBTA capital program and is determined after projects are prioritized
- Of \$3.8B in total federal funds, appx \$2.3B is available for programming in the TIP:
 - \$1,065M in Sec. 5307 urbanized area formula funds
 - \$1,163M in Sec. 5337 fixed guideway state of good repair funds
 - \$47M in Sec. 5339 bus and bus facilities funds
- Current TIP proposal reflects amendment to FFY19 and new program for FFY20-24.



The TIP is a subset of the broader MBTA capital program





Consistent with the overall MassDOT Capital Plan, the MBTA CIP is structured around *priorities and programs*

- 1. Reliability:** Maintain and improve the overall condition and reliability of the transportation system
- 2. Modernization:** Modernize the transportation system to make it safer and more accessible and to accommodate growth
- 3. Expansion:** Expand diverse transportation options for communities throughout the Commonwealth



Reliability
<ul style="list-style-type: none"> • Bridges and Tunnels • Facilities • Revenue Vehicles • Stations • System Upgrades • Track, Signals, and Power

Modernization
<ul style="list-style-type: none"> • Accessibility • AFC 2.0 • Commuter Rail Safety and Resiliency • Customer Experience and Technology Improvements • Process Improvements and Innovation • Red / Orange Line Improvements • Risk Management and Mitigation • Green Line Transformation

Expansion
<ul style="list-style-type: none"> • Green Line Extension • Expansion Projects • Expansion Project Development



Within each program, new project proposals are scored and ranked using a consistent set of PSAC Criteria

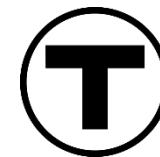
Legislatively-mandated Project Selection Advisory Council (PSAC) established uniform project selection criteria to be used across MassDOT divisions in preparing the CIP

System Preservation	<ul style="list-style-type: none">• Projects should contribute to a state of good repair on the transportation system.
Mobility	<ul style="list-style-type: none">• Projects should provide modal options efficiently and effectively.
Cost Effectiveness	<ul style="list-style-type: none">• Projects should result in benefits commensurate with costs and should be aimed at maximizing the return on the public's investment.
Economic Impact	<ul style="list-style-type: none">• Projects should support strategic economic growth in the Commonwealth.
Safety	<ul style="list-style-type: none">• Projects should contribute to the safety and security of people and goods in transit.
Social Equity & Fairness	<ul style="list-style-type: none">• Projects should equitably distribute both benefits and burdens of investments among all communities.
Environmental & Health Effects	<ul style="list-style-type: none">• Projects should maximize the potential positive health and environmental aspects of the transportation system.
Policy Support	<ul style="list-style-type: none">• Projects should get credit if they support local or regional policies or plans; or state policies not addressed through the other criteria.



FY20-24 MBTA CIP Project Selection Criteria reflect multiple priorities (1 of 2)

Criteria	Description	Factors
System Preservation	The extent to which the project contributes to a state of good repair on the transportation system and aligns with asset management goals and strategies.	Asset Condition
		Impact to Other Assets
		Operations Criticality (Service Disruption)
		Climate Change and Severe Weather Resiliency
Mobility	The extent to which the project is intended to provide modal options efficiently and effectively for all users through benefits to reliability, accessibility, and other measures of service quality.	Impact on Reliability
		Impact on Accessibility
		Impact on Customer Experience
		Impact on Riders
Cost Effectiveness	The extent to which the project impacts operating costs and revenues and maximizes the return on the public's investment	Impact on Operating Costs
		Impact on Operating Revenues
Safety	The extent to which the project addresses safety issues and hazards and security vulnerabilities and risks.	Impact on System Safety
		Impact on System Security
Environmental and Health Effects	The extent to which the project: 1) meets State goals of improving Air Quality and reducing Greenhouse Gases and 2) results in a reduction of pollution and/or consumption of natural resources	Air Quality and GHG Reduction
		Reduce Pollution and/or Consumption of Natural Resources



FY20-24 MBTA CIP Project Selection Criteria (1 of 2)

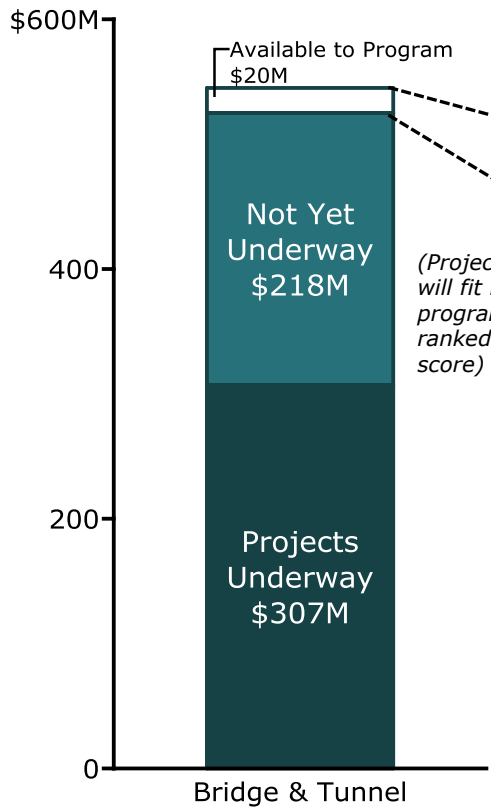
Criteria	Description	Factors
Policy Support	The extent to which the project is aligned with the MBTA Strategic Playbook and utilizes an innovative strategy	Alignment with Focus40 Utilizes an Innovative Strategy
Economic Impact <i>(Only required for modernization/expansion projects)</i>	The extent to which the project is intended to provide modal options efficiently and effectively for all users through benefits to reliability, accessibility, and other measures of service quality.	Impact on Connectivity to Employment Centers, Destination Districts, Priority Places identified in Focus40 Impact on Corridors at or Near Capacity Impact on Communities with Transit-Supportive Land Use Impact on Commuting Costs
Social Equity <i>(Only required for modernization/expansion projects)</i>	The extent to which the project equitably distributes economic, social, and health benefits to residents and local businesses.	Benefits to Environmental Justice (EJ) and Title VI Communities Additional Equity Benefits to Protected Populations

MBTA leadership also consider project readiness, resource impacts, modal and geographic equity, and sequencing/scheduling when prioritizing projects for the FY20-24 CIP



Using scores as a starting point, proposals for new projects or additional funding for existing projects are prioritized within each investment program

Total Program Size: \$545M



(Projects that will fit into program, ranked by score)

Project Requests (by ranking)			
Rank (by Score)	Project Name	FY19-FY23 (\$M)	Project Score
1	New project 1	\$6.0M	75
2	Expansion of existing project B*	24.5	69
3	New project 2	17.5	69
4	Increase for existing project F*	28.0	61
5	New project 3	8.8	54
TOTAL		\$84.8M	

* Denotes additional funding for existing project or program



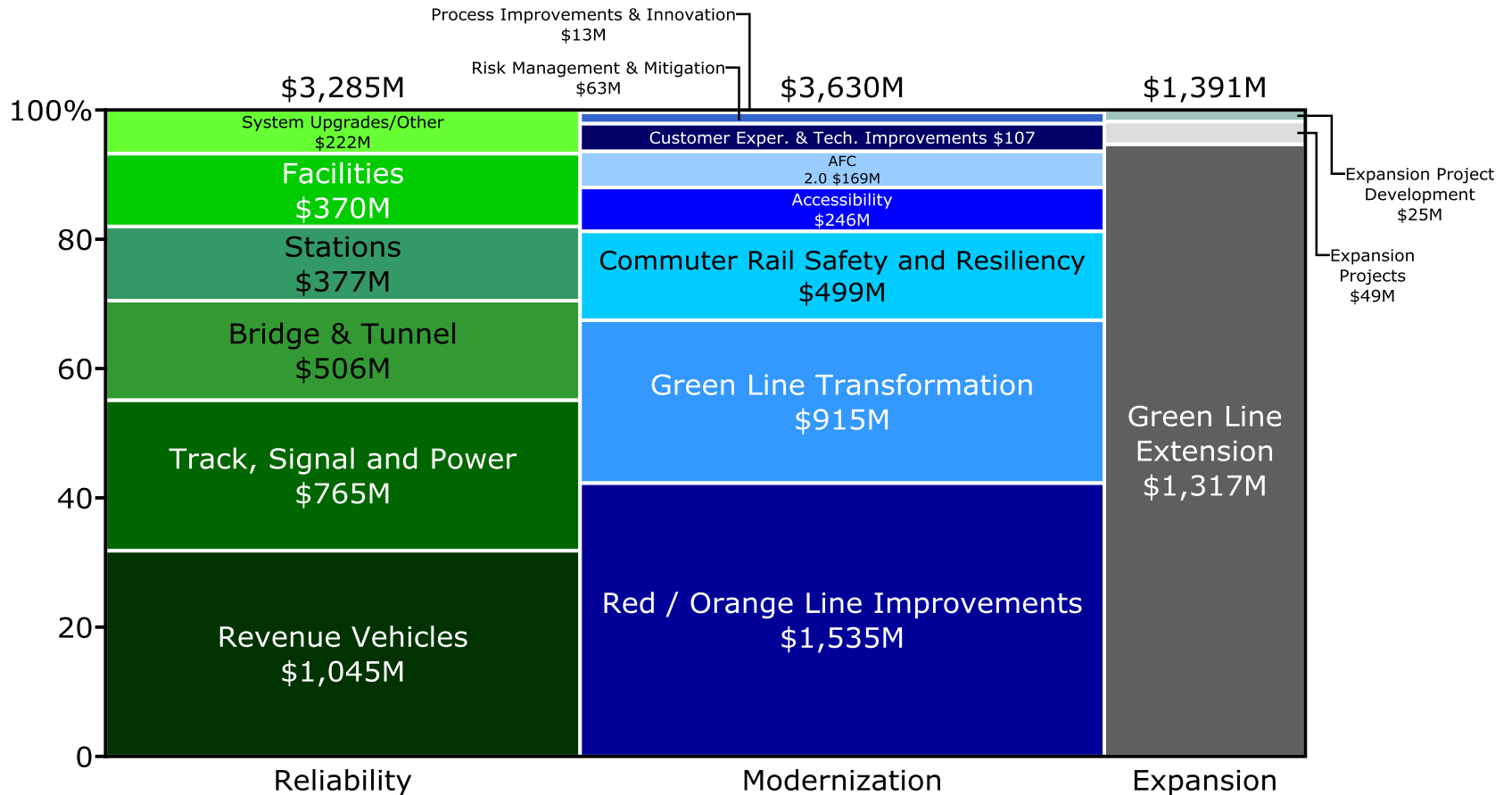
Once the prioritization process produces a draft project list, staff assign or update funding sources to optimize available funds

Handout: Draft FFY20-24 TIP



The resulting draft CIP is a balanced set of investments that optimize available funds to address system needs and strategic priorities

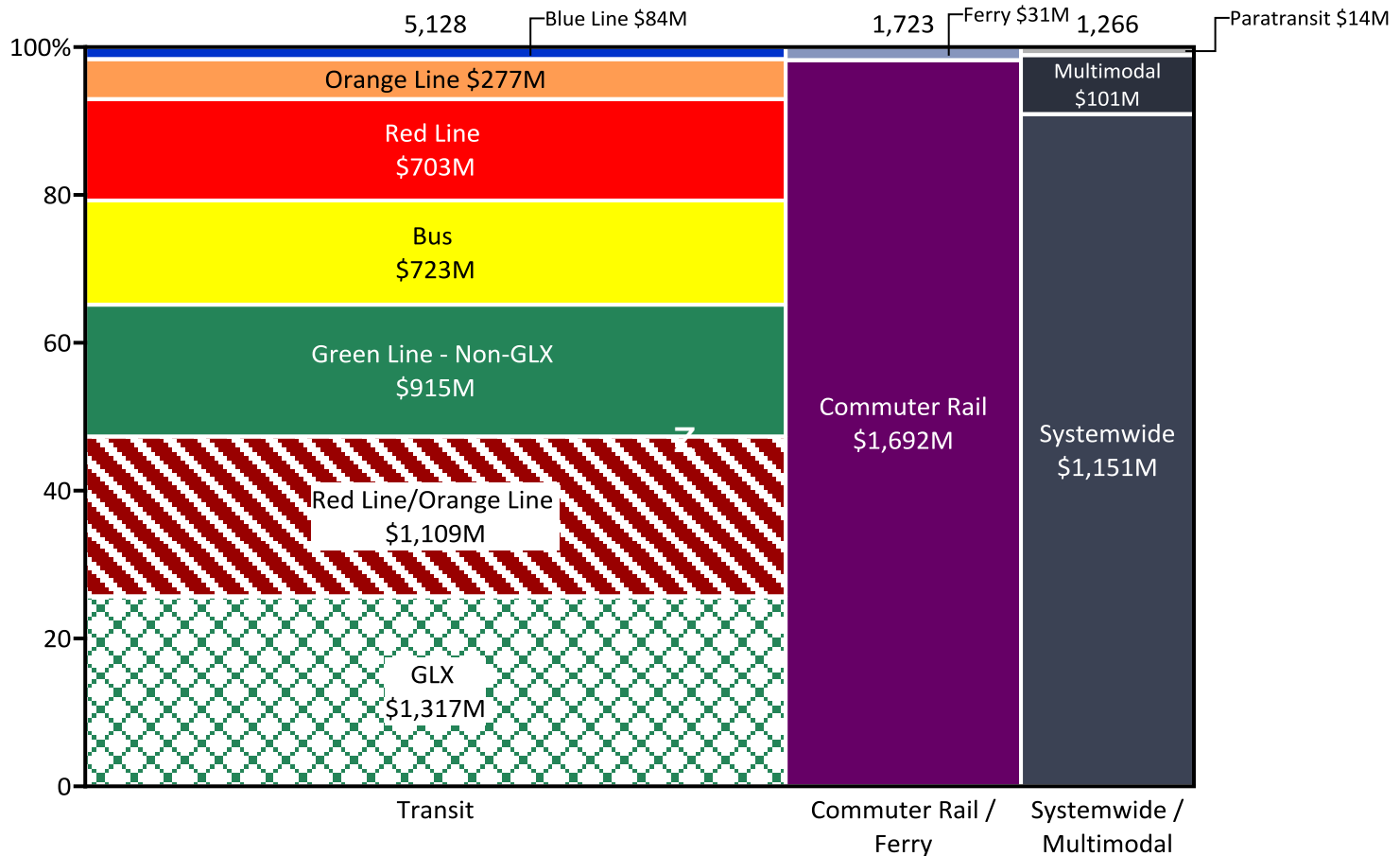
FY20-24 CIP Spending by Priority and Program (\$M)





The resulting draft CIP is a balanced set of investments that optimize available funds to address system needs and strategic priorities

FY20-24 CIP Spending by Mode/Line (\$M)





Questions?

- Where do project proposals originate?
- How can I (or my boss) express support for a particular project?
- When will the draft CIP be released for public review?
- How do you choose projects for the federal program?
- Why did you include project X (or exclude project Y)?