

Management Committee Work Group Meeting

May 27, 2020



Today's Focus

- RTP Call for Projects Update
 - Summary of submissions
 - Updated sketch estimates
- Performance-Based Evaluation Framework
 - Draft Vision, Goals
 - Draft Regionally Significant Definitions
- Next Steps

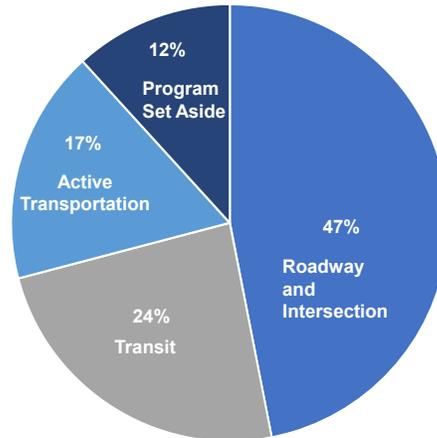
RTP Call for Projects Update: Summary of Submissions

Recap: Existing Prop 400-era Programs

- Freeway Life Cycle Program
- Transit Life Cycle Program
- Arterial Life Cycle Program
- Seniors and Persons with Disabilities Transportation (Enhanced Mobility, §5310)
- Active Transportation
 - Infrastructure
 - Design Assistance
- Safety
 - Safe Routes to Schools
 - Regional Roadway Safety Assessments
 - Regional Safety Program
- Systems Management & Operations
- Air Quality
 - Regional Ride Share
 - Trip Reduction Program
 - Streetsweepers
 - Paving of Unpaved Roads
- Don't Trash Arizona, litter and landscape
- Pinal County Arterial and Bridge Program

Member Agency Call for Projects

- Closed April 17, 2020 (extended due to COVID-19)
- Nearly 1,300 individual project and program submissions received



Member Agency Call for Projects

46.92%		23.97%		17.35%	
Bridge Repair/Rehab	2	Improve Circulator Service	5	Amenities (Shade, Benches, etc.)	2
Bridge Replacement	5	Improve Enhanced Bus Route	3	Bicycle Lane	12
Interchange Modifications	38	Improve Express/Rapid Bus Route	8	Bicycle Priority Signalization	1
Intersection Improvements	133	Improve Local Bus Route	81	Equestrian Path	3
New Bridge	22	Improve Park and Ride	4	HAWK Signal	1
New DHOV Connection	4	Improve Rail Route	4	Marked Crosswalk	3
New Interchange	34	New BRT Route	10	New Sidewalks	9
New Lane (GPL, HOV, transit, etc.)	13	New Circulator Service	24	Pedestrian Signalization	2
New Roadway	39	New Enhanced Bus Route	9	Shared Use Path	100
Rail Grade Separation	2	New Express/Rapid Bus Route	17	Sidewalk Repair	1
Roadway Extension	21	New Local Bus Route	30	Signage/Wayfinding	1
Roadway Maintenance/Repair	7	New Park and Ride	20	System-Wide Improvement	25
Roadway Realignment/Configuration	6	New Rail Route/Extension	20	Other	60
Roadway Reconstruction	40	System-Wide Improvement	26		
Roadway Widening	191	Other	43		
System-Wide Improvement	13				
Truck Route Improvements	1				
Turn Lane	3				
Other	21				

“Buckets” of Submissions

- | | |
|---------------------------------|--|
| 1. Freeway, Highway and Parkway | 9. Other Transit |
| 2. Arterial Roadway | 10. Active Transportation |
| 3. Arterial Intersection | 11. Safety |
| 4. Roadway Other | 12. Intelligent Transportation Systems |
| 5. Pavement Preservation | 13. Transportation Demand Management |
| 6. Commuter Rail | 14. Planning, Support |
| 7. High Capacity Transit | 15. Other Infrastructure |
| 8. Regional Bus Service | |

1. Freeway, Highway and Parkway (capital)

- New facilities
- Capacity improvements, system interchanges, traffic interchanges
- Reconstruction, modernization



Source: ADOT

2. Arterial Roadway (capital)

- New facilities
- Capacity improvements
- Reconstruction, modernization
- Freight plan implementation



3. Arterial Intersections (capital)

- Major arterial intersections
- Minor arterial intersections
- ITS improvements
- Safety improvements*



4. Roadway Other (capital)

- Local collector
- Bridges
 - New river crossings
 - Railroad crossings
 - Reconstructions
 - Preservation
 - Maintenance
- Roundabouts
- Complete Streets
- ADOT roadway turnbacks
- Safety improvements*



Source: MCDOT

5. Pavement Preservation

- Arterial, et al



Source: City of Phoenix

6. Commuter Rail

- Capital
- Operations



Illustrative commuter rail

7. High Capacity Transit (capital and operations)

- Light rail extensions, overlay service
- Streetcars
- Bus Rapid Transit



Source: Valley Metro

8. Regional Bus Service (capital and operations)

- Regional grid service
- Express/commuter bus
- Fleet/asset management
- Park and rides
- Operations and maintenance centers
- Transit centers/mobility hubs



Source: Valley Metro

9. Other Transit (capital and operations)

- Circulators
- Microtransit
- First/last mile solutions
- Localized transit (flexible, on-demand)
- Transit accessibility
- Transit stops
- ADA
- Seniors and Persons with Disabilities Transportation (\$5310, etc.)



10. Active Transportation

- Active Transportation Plan implementation
- Separated/protected bike lanes, bike boulevards
- Multiuse paths
- Bridges and connections (freeway, arterial, waterway/canal, railroad crossings)
- Trail, path, and sidewalk lighting
- Sidewalks
- ADA
- Design assistance



11. Safety*

- Safe Routes to Schools
- Roadway Safety Assessments (multimodal)
- Educational programming
- Traffic calming
- Incident response, analysis, REACT
- Infrastructure improvements
 - Spot safety
 - Left turn lanes
 - Intersection improvements
 - Variable messages signs



Source: ADOT

12. Intelligent Transportation Systems

- Transportation systems management and operations
- Integrated Corridor Management (ICM)
- Fiber
- Traffic Management Centers (capital, operations)
- Signal infrastructure, programming, optimization (priority, transit pre-emption)
- Emerging technology
- Equipment (radios, traffic cameras, etc.)
- Emergency support, connectivity



13. Transportation Demand Management

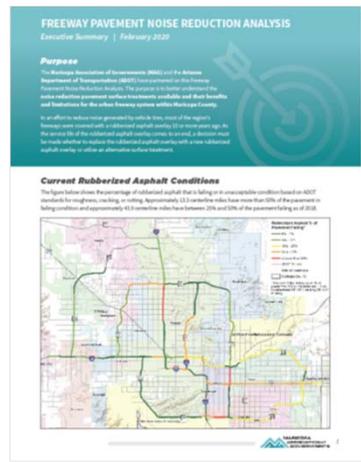
- Capital
- Operations
- Programmatic and policy support



Source: Valley Metro

14. Planning, Support

- Transportation studies
- Pilot programs
- Traffic counts
- Inventory, asset management
- Administration support (federal grant management)



15. Other infrastructure

- Street sign replacement
- Traffic signals, replacements
- Streetlights, LED conversions
- Electric vehicle charging stations
- Utility relocations
- Public art maintenance
- Landscape, beautification, tree replacement program



What Wasn't Submitted?

- Air quality programs
 - Streetsweepers
 - Paving of unpaved roads*
 - Rideshare
- Freeway management system (FMS), large-scale technology



Updated Sketch Estimates

Sketch System Costs - Review

- Last fall, as part of activities related to enabling legislation, preliminary, high-level estimates ("sketch")
- The information was intended to provide order-of-magnitude context
 - Included known and studied projects
 - Did not include several other categories (arterial, safety, technology)
 - Did not include any direct member agency submissions

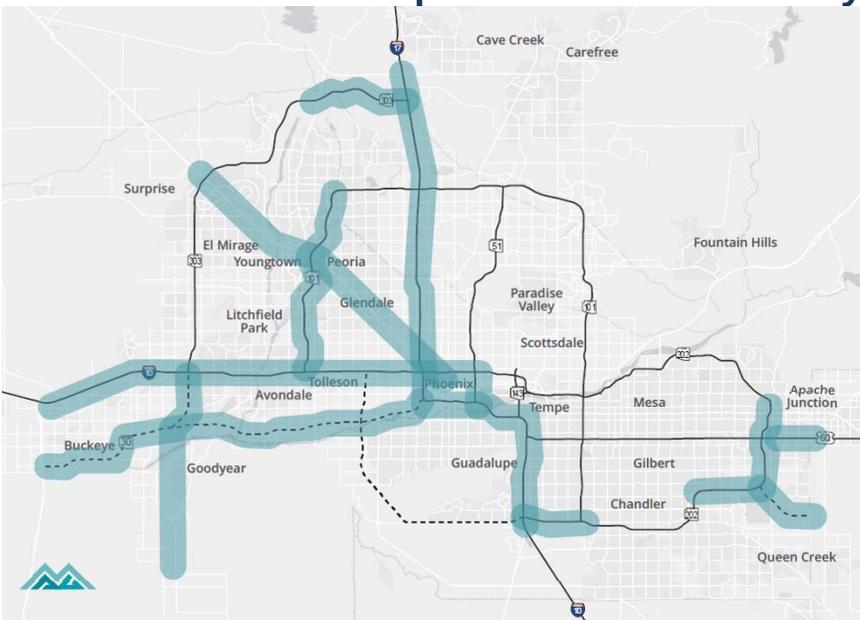


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Fall 2019 Sketch Capital Costs – Freeways/Highways



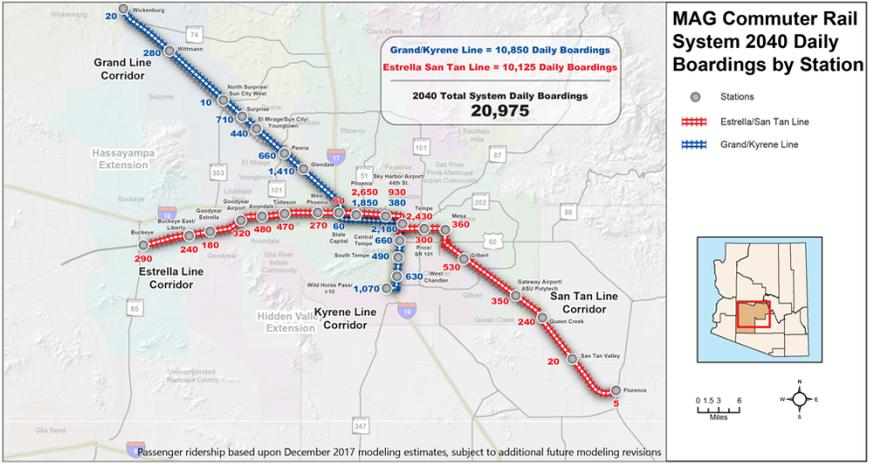
Total Studied Freeway Needs

\$14.40 b

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Fall 2019 Sketch Capital Costs – Commuter Rail



Capital Costs: \$2.65 b
 Operating costs: \$0.7 b
Total: \$3.34 b



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Fall 2019 Sketch Capital Costs – Active Transportation

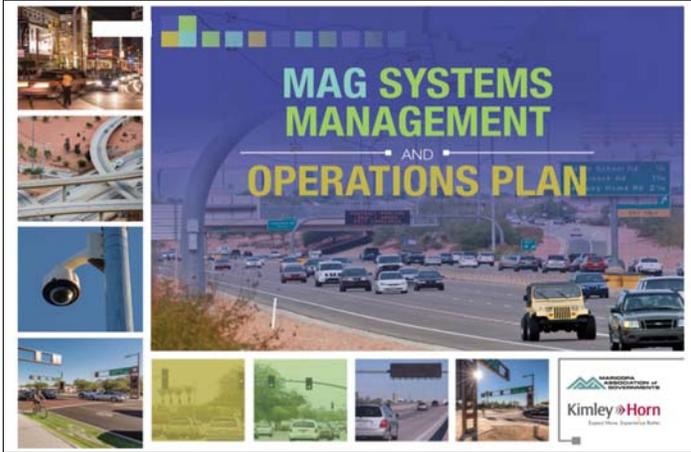


Projected costs: \$0.50 b



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Fall 2019 Sketch Capital Costs – SM&O (ITS)



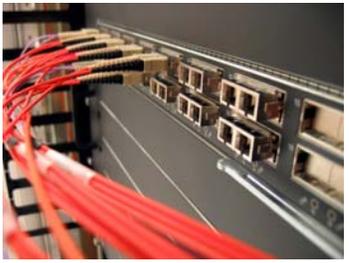
Projected costs: \$0.63 b



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Fall 2019 Sketch Capital Costs



Technology \$?



Arterials Capital Improvements \$?



Safety \$?



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Fall 2019 Summary: Sketch System Costs, Revenues

Sketch Costs (2026-2050)

Studied Freeway Capital	\$14.40 b
Commuter Rail	\$3.34 b
Active Transportation	\$0.50 b
System Mgmt & Operations	\$0.63 b
Arterial O&M	\$2.84 b
Freeway O&M	\$7.00 b
Bus Transit	\$13.45 b - \$17.86 b
High Capacity Transit	\$7.07 b - \$11.66 b

Sketch Revenue Estimates (2026-2050)

Sales tax (half-cent)	\$14.94 b
ADOT funds	\$8.89 b
MAG federal funds	\$3.17 b
Transit funds*	\$2.06 b

Total **\$49.23 b - \$58.23 b**

Total **\$29.08 b**

Transit federal discretionary funds* **\$1.82 b - \$4.28 b

Total with discretionary **\$30.88 b - \$33.34 b**



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Sketch Estimate Updates - Methodology

- Updated the sketch estimates based on a high-level analysis of the RTP Call for Projects submissions.
- Intended to demonstrate relative amounts for project categories, not actual submission data.
 - Approximately half of submissions did not include cost estimates
 - Inconsistency across submission estimates
 - Extrapolation of submission concepts

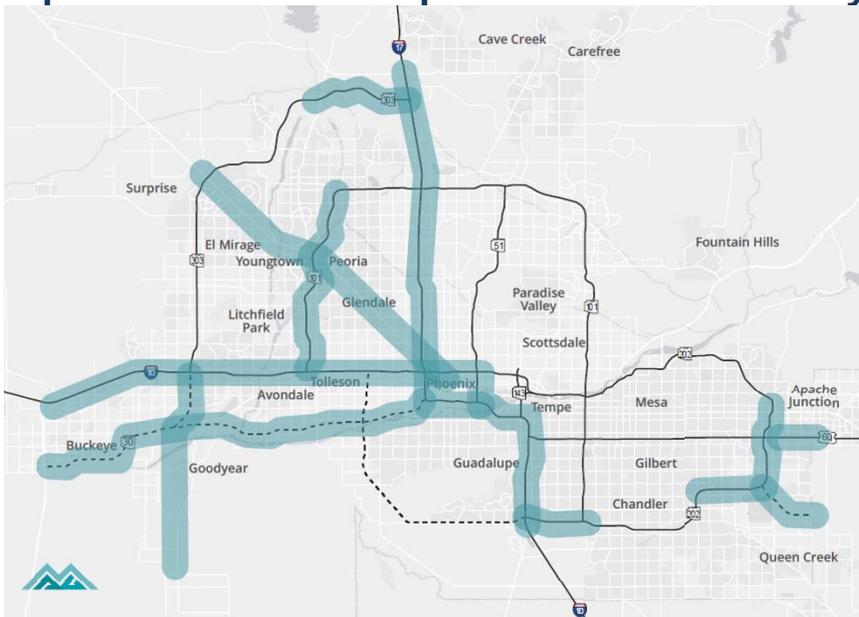


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Updated Sketch Capital Costs – Freeways/Highways



Fall 2019 freeway corridor needs; does not reflect new projects

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Freeway Needs

~~\$14.40 b~~
\$17.0 b - \$20.0 b

Example projects:

- Interstate 11
- SR-85 Widening
- SR-51 Widening
- TI improvements
- New interchanges

Updated Sketch Capital Costs – Active Transportation



Projected costs: ~~\$0.50 b~~
\$0.68 b - \$2.75 b



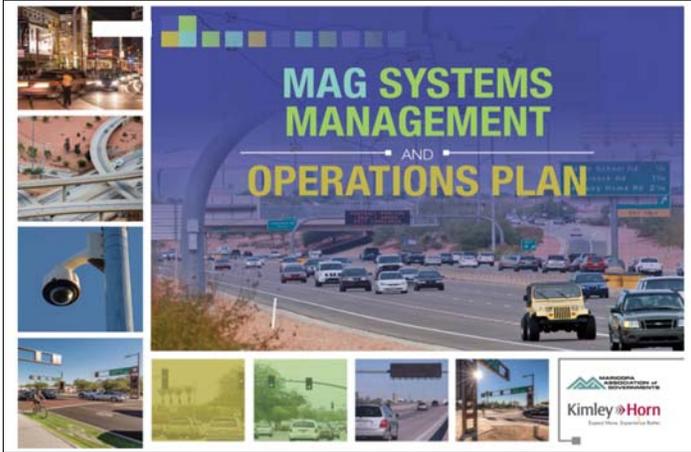
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Updated Sketch Capital Costs – SM&O, Technology



Projected costs: ~~\$0.63 b~~
\$1 b - \$2 b

- Example projects:
- Traffic data
 - Fiber
 - ITS center upgrades



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Updated Sketch Capital Costs – Arterial O&M



Projected costs: ~~\$2.84 b~~
\$4.0 b - \$8.0 b



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Updated Sketch Capital Costs – High Capacity Transit



Projected costs: ~~\$7.07 b – \$11.66 b~~
\$10.0 b - \$16.0 b



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Updated Sketch Capital Costs – Arterials



Projected costs: ~~unknown~~
\$6.0 b - \$12.0 b

- Inclusive of:
- Bridges
 - Corridor improvements
 - Intersection improvements
 - New roadways
 - Parkways
 - Roadway widenings



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Updated Sketch Capital Costs – Safety



Projected costs: ~~unknown~~
\$0.5 b - \$1.75 b

Notes:

- Represents safety specific capital improvements
- Major capital improvements with safety elements reflected in other programs



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Updated Summary: Sketch System Costs, Revenues

Sketch Costs (2026-2050)

Freeway Capital	\$17.00 b - \$20.00 b
Commuter Rail	\$3.34 b
Active Transportation	\$0.68 b - \$2.75 b
SM&O, Technology	\$1.00 b - \$2.00 b
Arterial O&M	\$4.00 b - \$8.00 b
Freeway O&M	\$7.00 b
Bus Transit*	\$13.45 b - \$17.86 b
High Capacity Transit	\$10.00 b - \$16.00 b
Arterials	\$6.00 b - \$12.00 b
Safety	\$0.50 b - \$1.75 b

Total **\$62.97 b - \$90.70 b**

Sketch Revenue Estimates (2026-2050)

Sales tax (half-cent)	\$14.94 b
ADOT funds	\$8.89 b
MAG federal funds	\$3.17 b
Transit funds*	\$2.06 b

Total **\$29.06 b**

*Transit federal discretionary funds **\$2.00 b - \$6.50 b**

Total with discretionary **\$31.06 b - \$35.56 b**



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Draft RTP Vision & Goals

Draft RTP Vision & Goals

The transportation system plays a critical role in ensuring a high quality of life for residents of the MAG region. The purpose of the Regional Transportation Plan is to establish a sustainable, resilient, multimodal transportation investment program that connects people with opportunities to prosper and thrive. Residents deserve a world-class transportation system that reflects the following mission-critical goals:

- **Economic Vitality** – support economic competitiveness and prosperity through strategic transportation investments.
- **Resiliency** – invest in a transportation system that expand travel choices, accommodates future growth, and is flexible to adapt to changing needs and innovations.
- **Quality of Life** – invest in a transportation system that supports health and well-being, and sustains the environment.
- **Safety** – provide for the safety and security of the traveling public.
- **System Preservation** – maintain our region’s transportation infrastructure to protect existing investments and ensure continued mobility.
- **Mobility** – develop a multimodal transportation system that provides ease of movement for people and goods throughout the region and provides equitable access to essential services and destinations.



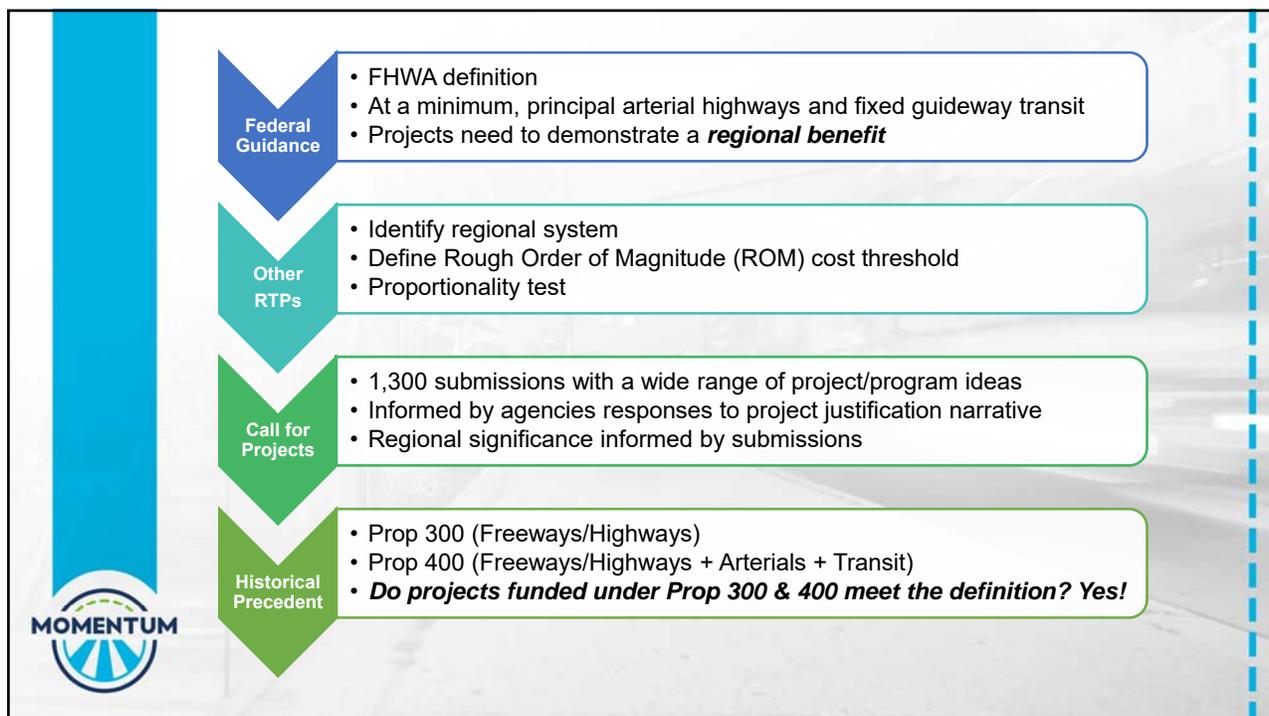
Alignment of MAG Draft Goals to FHWA Planning Factors

FAST Act Planning Factors	Draft MAG Goal Areas					
	Economic Vitality	Resiliency	Quality of Life	Safety	System Preservation	Mobility
1. Support Economic Vitality	Direct	Support	Support	Support	Support	Direct
2. Increase Safety	Support	Support	Direct	Direct	Support	Support
3. Increase Security	Support	Support	Direct	Direct	Support	Support
4. Increase Accessibility	Direct	Support	Direct	Support	Support	Direct
5. Protect & Enhance Environment	Support	Direct	Direct	Support	Support	Direct
6. Enhance Integration and Connectivity	Direct	Direct	Direct	Support	Support	Direct
7. Promote System Efficiency	Support	Direct	Direct	Support	Support	Direct
8. Emphasize System Preservation	Support	Direct	Direct	Support	Direct	Support
9. Resiliency and Reliability	Support	Direct	Support	Support	Direct	Direct
10. Enhance Travel & Tourism	Direct	Support	Support	Support	Support	Support

FHWA's Metropolitan Transportation Planning Factors



Draft Regional Significance Definitions



Regional Significance – FHWA Definition

Regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA's transportation conformity regulations (40 CFR part 93, subpart A)) that is on a facility that serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network.

At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.



Draft Regional Significance Definition

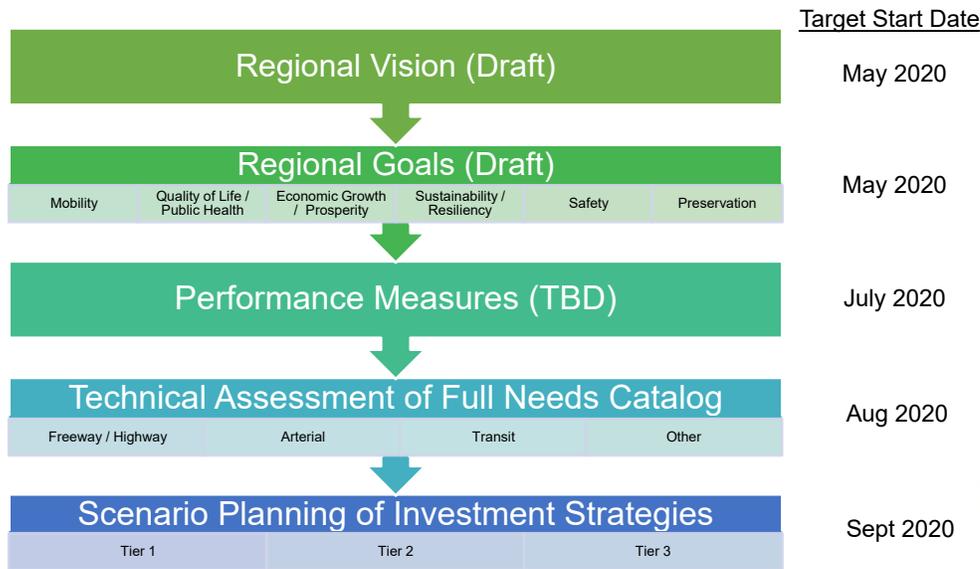
A **regionally significant project** is one that substantially contributes to the regional transportation system, benefitting the movement of people and goods across jurisdictions and connecting communities, activity centers, and destinations. The benefits of a regionally significant project should be as high for users outside the jurisdiction for which it is located as it is for those that reside within that jurisdiction. Projects are often high capacity (e.g., freeway, highway, rail, BRT) or contribute to a system network (e.g., regional bus network, grid arterial network, bridge/connect a gap).

A **regionally significant program** is one that is consistent with the regions values/vision and achieves unique or distinct priorities shared across the region.



Where do we go from here?

Project Assessment Activities



Sample Project Assessment Framework

Goal	Target*
Climate Protection	1 Reduce per-capita CO ₂ emissions
Adequate Housing	2 House the region's population
Healthy and Safe Communities	3 Reduce adverse health impacts
Open Space and Agricultural Preservation	4 Direct development within urban footprint
Equitable Access	5 Decrease share of lower-income households' budgets spent on housing and transportation
	6 Increase share of affordable housing
	7 Do not increase share of households at risk of displacement
Economic Vitality	8 Increase share of jobs accessible in congested conditions
	9 Increase jobs in middle-wage industries
	10 Reduce per-capita delay on freight network
Transportation System Effectiveness	11 Increase non-auto mode share
	12 Reduce vehicle operating and maintenance costs due to pavement conditions
	13 Reduce per-rider transit delay due to aged infrastructure

* Complete target language as adopted by the Commission and ABAG Executive Board can be found at: <http://planbayarea.org/the-plan/details/goals-and-targets>. Target language shown above is summarized for brevity.

Environment Equity Economy

Source: Final Plan Bay Area 2040 (MTC + ABAG)





**Next Work Group:
July 1, 2020**

The image is a dark blue rectangular graphic. In the top left corner is the 'MOMENTUM' logo, which consists of a white circle containing a stylized sunburst or fan shape with three rays. Below the logo, the text 'Next Work Group: July 1, 2020' is written in a light blue, sans-serif font. The bottom right portion of the graphic features several diagonal stripes in various shades of blue, creating a sense of motion or growth.