

Transportation for America

Boston Region MPO Meeting
January 23, 2020

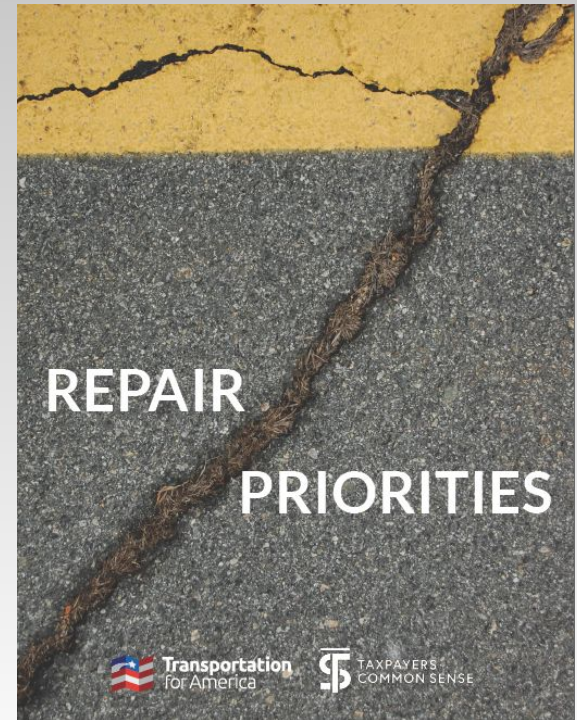
Beth Osborne, Transportation for America

www.T4america.org

@t4america

About Transportation for America

Transportation for America, a program of Smart Growth America, is an advocacy organization made up of local, regional and state leaders who envision a transportation system that safely, affordably and conveniently connects people of all means and ability to jobs, services, and opportunity through multiple modes of travel.



Why consider costs in project prioritization?

Cost-effectiveness: Receiving a good value/benefit for the amount spent on transportation.

Goal: Use your limited funds as well as possible to meet your stated goals for as much of the region as possible.

Virginia's approach

Virginia.gov Agencies | Governor



Home

[Home](#) [About](#) [Resources](#) [Projects](#) [FAQs](#) [Provide Feedback](#)

[SMART Portal Sign In](#)



SMART SCALE is about investing limited tax dollars in the right projects that meet the most critical transportation needs in Virginia.



15.4

SMART SCALE SCORE

#23

OF 433 STATEWIDE

#2

OF 42 DISTRICTWIDE

SMART SCALE Requested Funds..... **\$2,009,265**
 Total Project Cost..... **\$12,689,020**
 Project Benefit..... **3.1**
 Project Benefit / Total Cost..... **2.4**

SMART SCALE Area Type B

Factor	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use	
Measure	Increase in Peak Period Person Throughput	Reduction in Peak Period Delay	Reduction in Fatal and Injury Crashes	Reduction in Fatal and Injury Crash Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Increase in Access to Multimodal Travel Choices	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Other Factor Values Scaled by Potential Acreage Impacted	Transportation Efficient Land Use	Increase in Transportation Efficient Land Use
Measure Value	8.8 <small>persons</small>	0.0 <small>person hrs.</small>	1.5 <small>EPDO</small>	54.8 <small>EPDO / 100M VMT</small>	12.3 <small>jobs per resident</small>	13.8 <small>jobs per resident</small>	44.0 <small>adjusted users</small>	3,936,762.4 <small>thousand adj sq. ft.</small>	0.0 <small>thousand adj daily tons</small>	3,286,088.9 <small>adj. buffer time index</small>	0.0 <small>adjusted points</small>	2.2 <small>scaled points</small>	36,682.5 <small>access * pop/emp density.h</small>	7,612.7 <small>access * pop/emp density change.</small>
Normalized Measure Value (0-100)	0.0	0.0	0.4	0.1	0.2	0.2	0.2	20.0	0.0	0.1	0.0	6.6	2.8	2.2
Measure Weight (% of Factor)	50%	50%	50%	50%	60%	20%	20%	60%	20%	20%	50%	50%	70%	30%
Factor Value	0.0		0.3		0.2			12.0			3.3		2.6	
Factor Weight (% of Project Score)	15%		20%		25%			20%			10%		10%	
Weighted Factor Value	0.0		0.1		0.1			2.4			0.3		0.3	
Project Benefit	3.1													
SMART SCALE Cost	\$2,009,265													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	15.4													

FY20 VDOT Results (total funding: \$870M)

Actual Outcome (Benefit/Cost)

134 projects funded

- 36 bike/ped
- 7 bus transit
- 86 highway
- 1 rail transit
- 4 TDM

87 localities got a project

Benefit Only

17 projects funded

- 0 bike/ped
- 5 bus transit
- 11 highway
- 1 rail transit
- 0 TDM

10 localities get a project

Benefit/Cost Results (top 20 scores)

District	Organization	Description	Type	SMART SCALE		Score
				Cost	Benefit	
Hampton Road	Williamsburg City	Lafayette Street Signal & Pedestrian Improvements	Highway	\$91,000	0.598	65.74
Hampton Road	Chesapeake City	Battlefield Blvd/Volvo Pkwy Intersection Improvements	Highway	\$1,447,129	9.092	62.83
Hampton Road	Williamsburg City	Richmond Road Signal Coordination & Pedestrian Improvements	Highway	\$203,500	1.166	57.28
Hampton Road	Norfolk City	Ballentine Blvd Lane Improvements	Highway	\$1,067,388	5.524	51.75
Northern Virginia	DASH Alexandria Transit	Citywide TSP on Major Corridors	Bus Transit	\$2,110,000	10.354	49.07
Hampton Road	Portsmouth City	Portsmouth Railroad Crossing Message Signs	TDM	\$570,000	2.718	47.68
Staunton	Bath County	Hot Springs - US 220 & VA 615 Intersection Improvements	Bike/Pedestrian	\$560,769	2.401	42.82
Staunton	Warren County	Rte. 340/522 SB/I-66 WB On-Ramp Extension	Highway	\$518,664	1.654	31.88
Richmond	Prince George County	Lower Appomattox River Trail	Bike/Pedestrian	\$44,000	0.139	31.64
Lynchburg	Lynchburg City	Rivermont Ave. and Bedford Ave. Intersection improvement	Highway	\$485,000	1.357	27.97
Richmond	Nottoway County	Roundabout for Darvills Rd. (VA 40) at Military Rd.	Highway	\$7,267,500	19.564	26.92
Staunton	Warren County	John Marshall Hwy./Rte. 55 East Safety Improvement Project	Highway	\$1,633,637	4.114	25.18
Richmond	Henrico County	Parham Rd Traffic Signal & Sidewalk Project	Bike/Pedestrian	\$1,335,000	3.276	24.54
Richmond	Greater Richmond Transit	A Scott's Addition BRT Station Pedestrian Safety/Streetscape	Bike/Pedestrian	\$1,612,000	3.659	22.70
Northern Virginia	Falls Church City	S Washington Multimodal Improvements	Bike/Pedestrian	\$2,827,010	6.291	22.25
Hampton Road	Williamsburg Area Transit	WATA Bus Stop Pull Offs	Bus Transit	\$255,000	0.565	22.17
Staunton	Shenandoah County	I-81 Exit 291 Northbound Ramp Widening	Highway	\$781,701	1.672	21.38
Hampton Road	Norfolk City	Terminal Blvd/Diven St Intersection Improvements	Highway	\$1,732,600	3.325	19.19
Northern Virginia	Alexandria City	Safety & Capacity Enhancements at Duke/Taylor Run/Telegraph	Highway	\$5,745,460	9.717	16.91
Staunton	Warren County	Rte. 340/522 Lighting Project	Highway	\$3,149,948	5.191	16.48

Benefit-only results

District	Organization Name	Project Title	Type	SMART SCALE Cost	Project Benefit Score
Hampton Roads	Hampton Roads Transportation Planning Organization	Hampton Roads Bridge-Tunnel Widening/I-64 Expansion	Highway	\$ 200,000,000	74.159
Northern Virginia	Alexandria City	West End Transitway Corridor Investments	Bus Transit	\$ 57,200,000	29.196
Northern Virginia	Arlington Transit	Crystal City Metro East Entrance	Rail Transit	\$ 52,900,000	29.032
Lynchburg	Danville Metropolitan Planning Organization	Southern Virginia Mega Site at Berry Hill Connector Road	Highway	\$ 30,931,704	24.000
Richmond	Nottoway County	Roundabout for Darvills Rd. (VA 40) at Military Rd.	Highway	\$ 7,267,500	19.564
Northern Virginia	Arlington Transit	Crystal City Potomac Yard Transitway Southern Extension	Bus Transit	\$ 6,611,694	19.510
Northern Virginia	Fairfax County	Richmond Highway-Bus Rapid Transit	Bus Transit	\$ 50,000,000	14.957
Northern Virginia	Fairfax County	Braddock Road Multimodal Improvements Phase I	Highway	\$ 79,977,838	11.828
Bristol	Wythe County	Progress Park Connector	Highway	\$ 12,857,000	11.648
Richmond	Chesterfield County	ITS Signal Upgrades	Highway	\$ 10,440,000	11.351
Richmond	Chesterfield County	RT 60 at Courthouse Road/Huguenot Road Quadrant Intersection	Highway	\$ 31,060,000	11.034
Northern Virginia	DASH Alexandria Transit Company	DASH Zero Emission Fleet Expansion	Bus Transit	\$ 23,129,839	10.675
Northern Virginia	DASH Alexandria Transit Company	Citywide TSP on Major Corridors	Bus Transit	\$ 2,110,000	10.354
Richmond	Chesterfield County	Superstreet - Route 60 at Woolridge Road/Old Buckingham Road	Highway	\$ 13,239,000	10.026
Culpeper	Culpeper Town	Roundabout - Route 3 and McDevitt Dr. Intersection	Highway	\$ 6,200,000	9.866
Northern Virginia	Fairfax County	Seven Corners Ring Road (Phase 1A Segment 1A)	Highway	\$ 82,800,335	9.841
Northern Virginia	Alexandria City	Safety & Capacity Enhancements at Duke/Taylor Run/Telegraph	Highway	\$ 5,745,460	9.717

Transform66 Outside the Beltway

Project Description

Phase I of multimodal project that improves I-66 corridor between I-495 and Gainesville, providing 2 express lanes and 3 general purpose lanes in each direction and additional improvements, including provisions for transit.

Cost:
\$600
million

PROJECT SCORECARD

HB2 Funding the Right Transportation Projects

Transform66 Outside the Beltway

App Id: 628

Phase I of multimodal project that improves I-66 corridor between I-495 and Gainesville, providing 2 express lanes and 3 general purpose lanes in each direction and additional improvements, including provisions for transit.

Request:
\$300
million
(50%)

Project Location	Multiple
HB2 Area Type	A
Submitting Entity	Northern Virginia Transportation Authority
Total Project Cost	\$800,000,000
HB2 Request	\$300,000,000
Preliminary Engineering	Underway
Right of Way	Not Started
Construction	Not Started
Expenditures to Date	\$35,700,008
Key Fund Sources	Fed/State Disc.
Administered By	VDOT
Eligible Funding Program(s)	High Priority



I-64 Widening

Project Description

Widen I-64 corridor from 1.55 miles west of Jefferson Ave (Exit 255) to Route 199 west of Williamsburg (Exit 234) with addition of travel lane and shoulder in each direction within median to widen roadway from 4 to 6 lanes.

Cost:
\$647 million

PROJECT SCORECARD

HB2 Funding the Right Transportation Projects

I-64 Peninsula Widening

App Id: 550

Widen I-64 corridor from 1.55 miles west of Jefferson Ave (Exit 255) to Route 199 west of Williamsburg (Exit 234) with addition of travel lane and shoulder in each direction within median to widen roadway from 4 to 6 lanes.

Request:
\$145 million (22.4%)

Project Location	Multiple
HB2 Area Type	A
Submitting Entity	Hampton Roads Transportation Planning Organization
Total Project Cost	\$647,448,358
HB2 Request	\$144,927,753
Preliminary Engineering	Underway
Right of Way	Underway
Construction	Underway
Expenditures to Date	\$15,831,291
Key Fund Sources	Bond/Fed/State Disc./Local
Administered By	VDOT
Eligible Funding Program(s)	High Priority



I-95 Deceleration Lane

CI-95/I-64 Overlap: NB Deceleration Lane to Hermitage

Project Description

Construct northbound I-95 deceleration lane to Hermitage Road at Exit I-78. Create an emergency pull-off area in conjunction with the construction of the deceleration lane.

Cost:
\$2.7 million

PROJECT SCORECARD

HB2 Funding the Right Transportation Projects

CI-95/I-64 Overlap: NB I-95 Deceleration Lane to Hermitage

App Id: 445

Construct northbound I-95 deceleration lane to Hermitage Road at Exit 78. Create an emergency pull-off area in conjunction with the construction of the deceleration lane.

Request:
\$2.2 million (79.7%)

Project Location	Richmond
HB2 Area Type	B
Submitting Entity	Richmond City
Total Project Cost	\$2,720,000
HB2 Request	\$2,170,000
Preliminary Engineering	Underway
Right of Way	Not Started
Construction	Not Started
Expenditures to Date	\$10,120
Key Fund Sources	Safety
Administered By	VDOT
Eligible Funding Program(s)	Both



ART Service Restructuring and Expansion

ART Service Restructuring and Expansion

Project Description

Project replaces existing Metrobus Route 22A/B/C with new ART route extending to Marymount University and with higher frequency.

Cost:
\$4.5 million

PROJECT SCORECARD

HB2 Funding the Right Transportation Projects

ART Service Restructuring and Expansion

App Id: 722

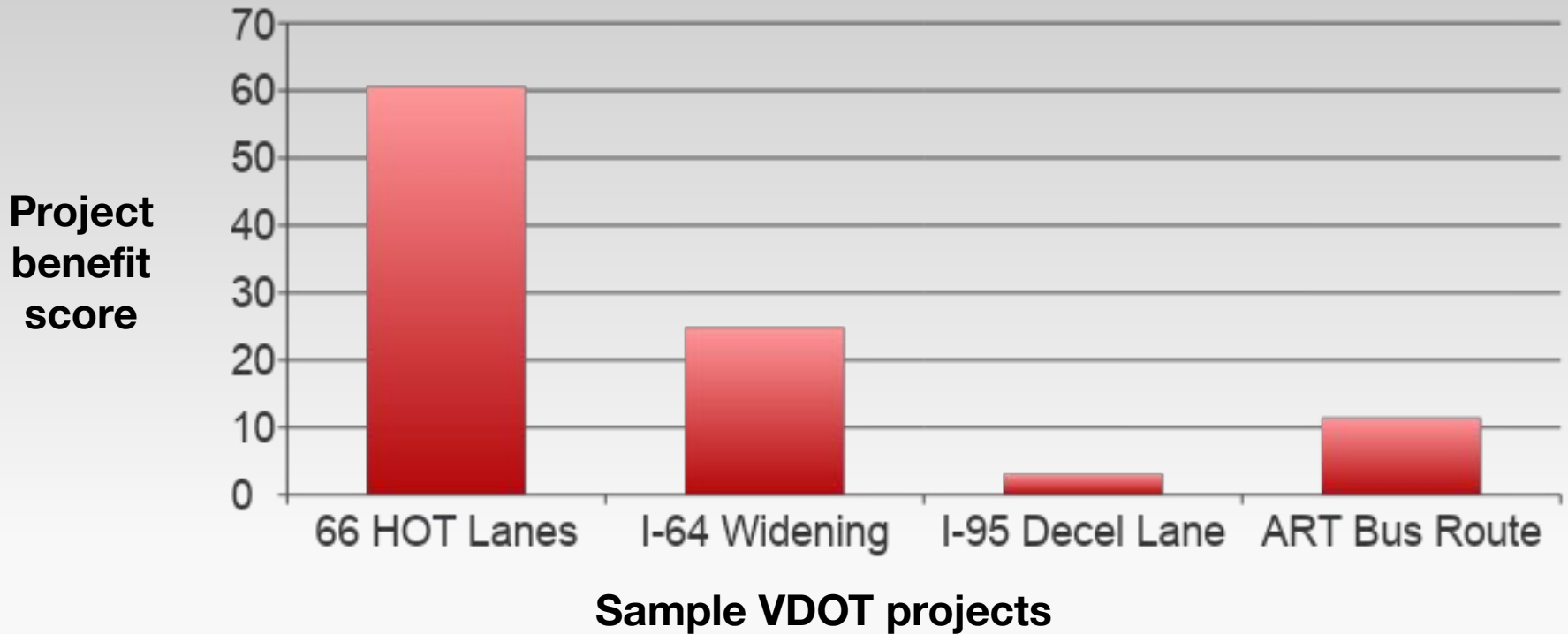
Project replaces existing Metrobus Route 22A/B/C with new ART route extending to Marymount University and with higher frequency.

Request:
\$4.5 million (100%)

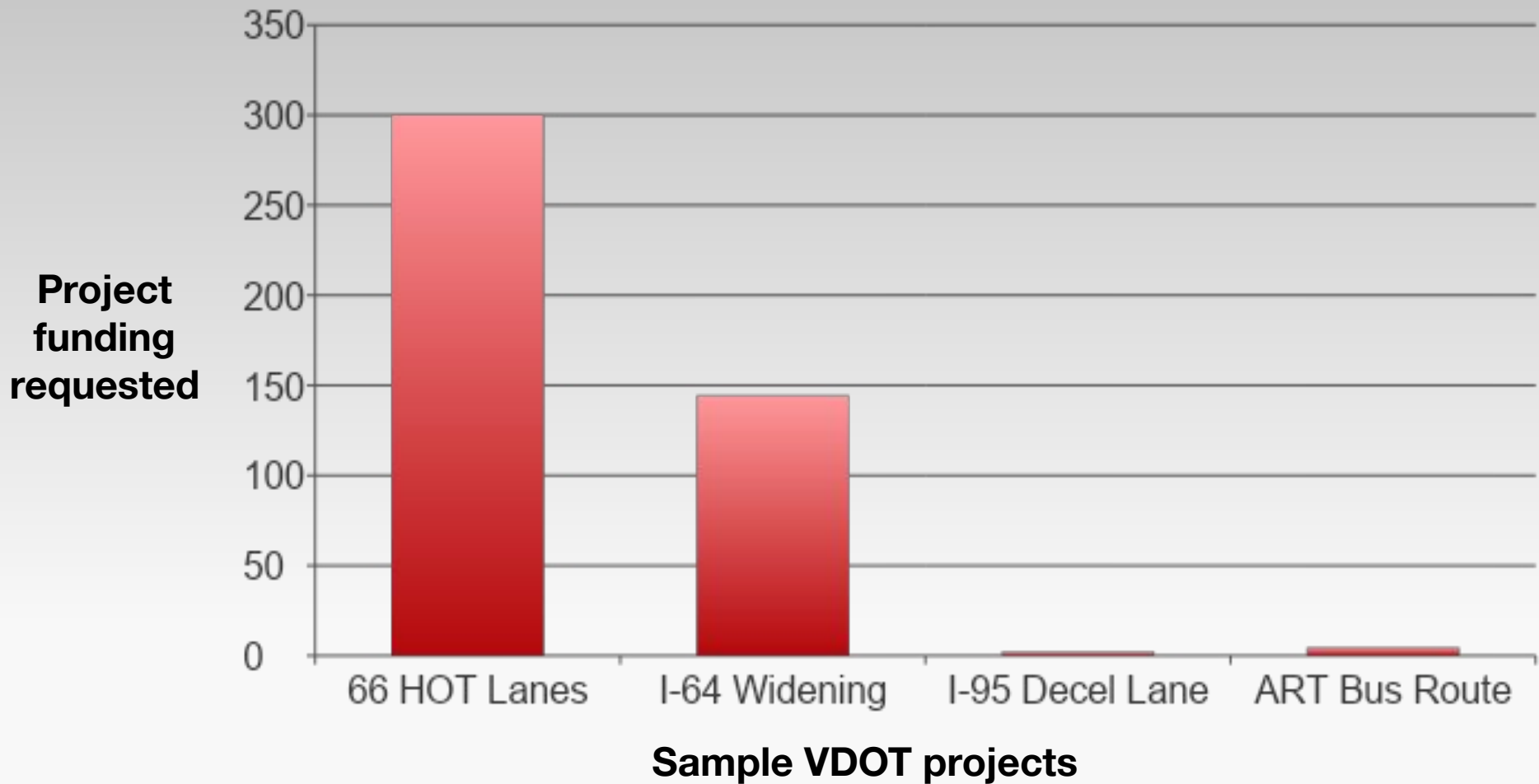
Project Location	Multiple
HB2 Area Type	A
Submitting Entity	Arlington County
Total Project Cost	\$4,500,000
HB2 Request	\$4,500,000
Preliminary Engineering	Not Needed
Right of Way	Not Needed
Construction	Not Started
Expenditures to Date	N/A
Key Fund Sources	N/A
Administered By	Locality
Eligible Funding Program(s)	District Grant



Benefits

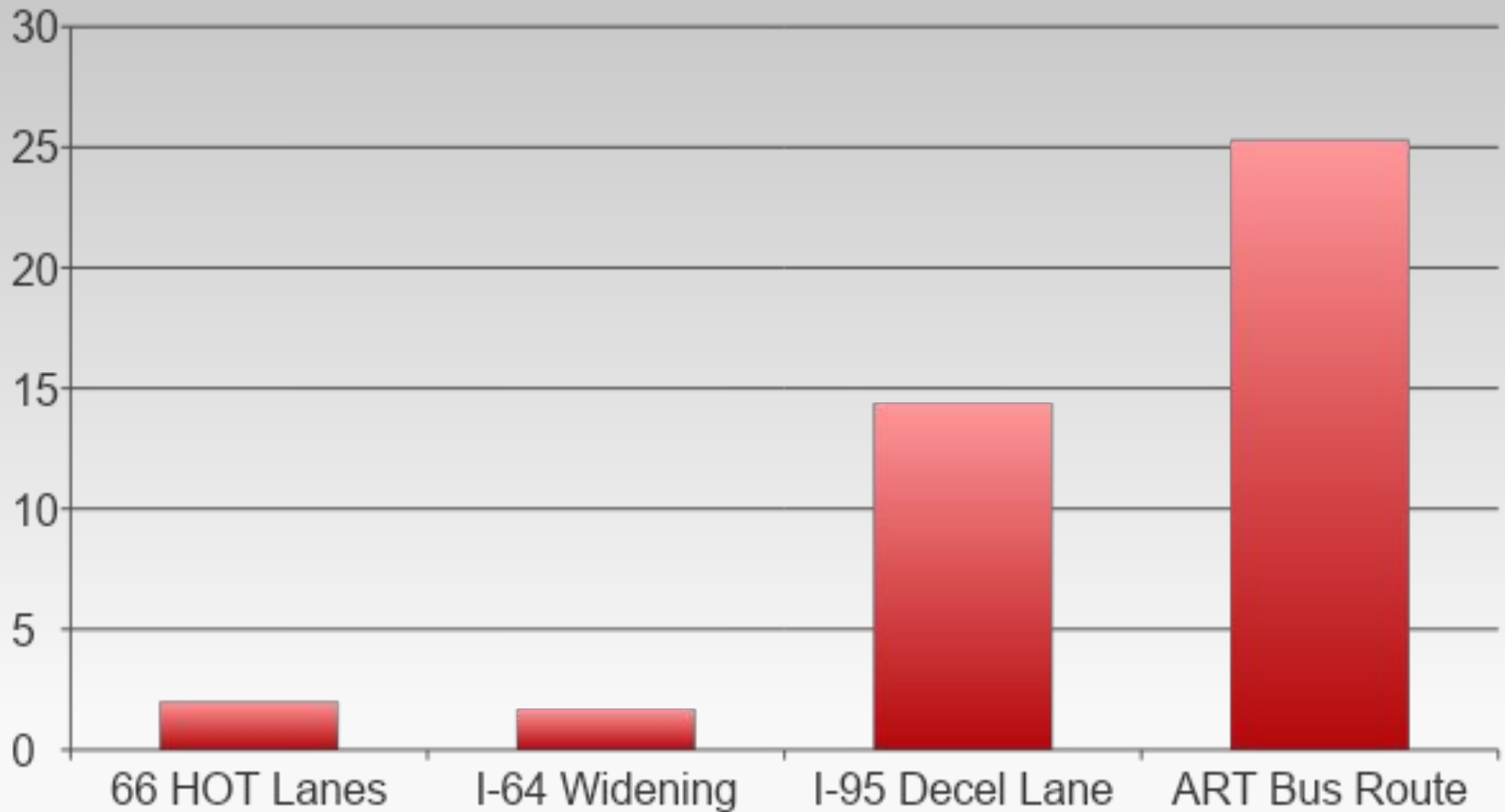


Costs



Benefits and Costs

**Benefit
score
divided
by cost**



Sample VDOT projects

Common Sense Engineering

I-64 Widening from I-295 to Bottoms Bridge



Original design



Revised design

Original design - \$79M | Revised design - \$60M
Both projects provide the same benefits

I-87 Exit 17 Interchange



Original design



Revised design

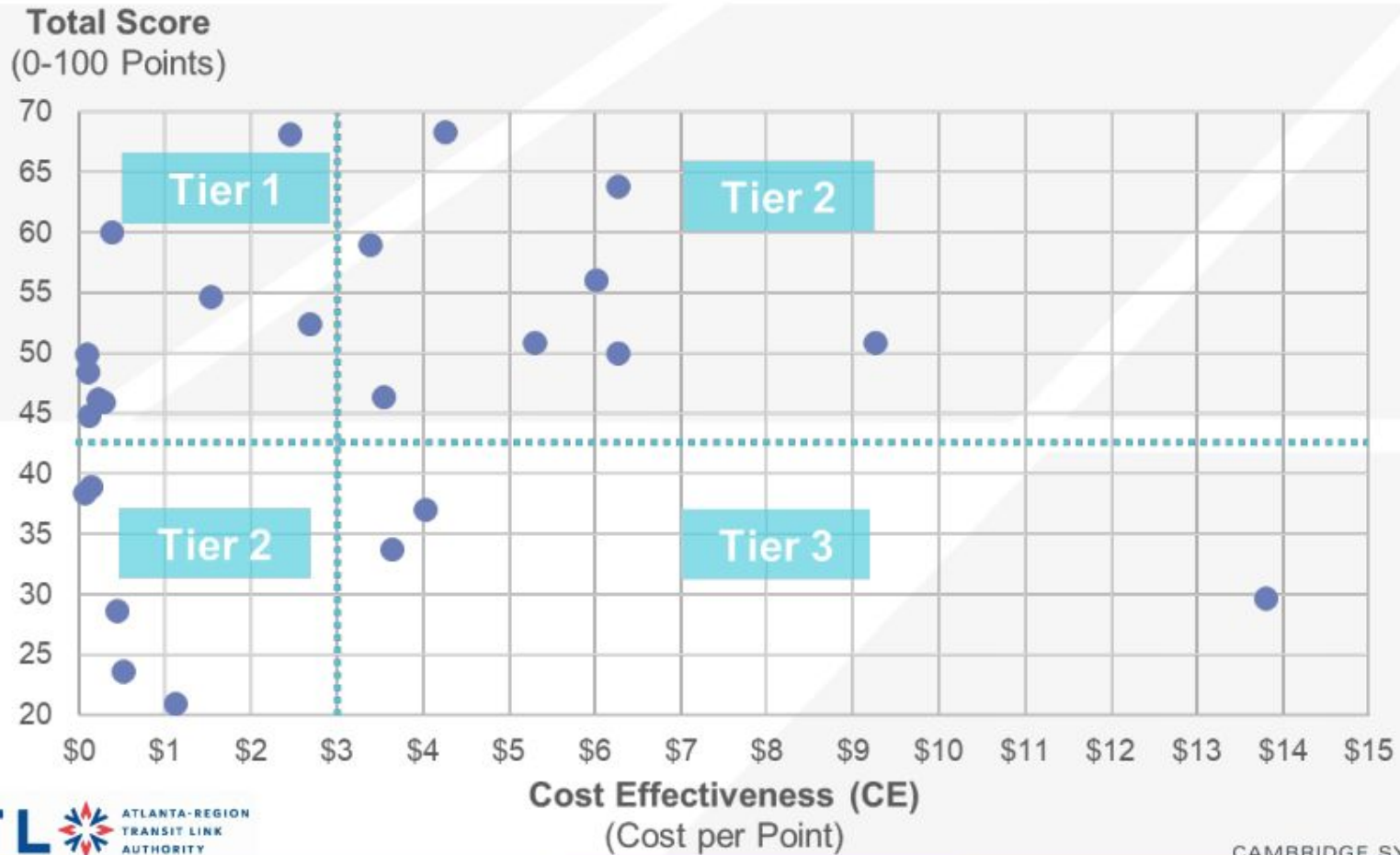
Original design - \$157M | Revised design - \$21M
Revised design provided nearly the same benefits

ATL Transit Project Prioritization Process

Performance Measure Category	Project-Level Performance Measures	Expansion	Enhancement	SGR
Market		42	27	15
	Existing, Projected Population Density	6	4	3
	Existing Population - Communities of Interest	8	6	6
	Existing Employment Density	5	3	2
	Existing Low Wage Employment Density	7	5	4
	Land Use Mix - Existing, Planned (+/- Community Impacts)	8	4	0
	(Re) Development Potential	8	5	0
Performance		30	50	70
	Transit Trips	10	10	15
	Transit Reliability	15	20	25
	Increased Useful Life	0	10	25
	Elements to Improve Safety/Security/Environment	5	10	5
Deliverability		28	23	15
	Financial Plan	15	10	10
	Documented Project Support	4	4	0
	Project Readiness - Schedule, Environmental Impacts	4	4	0
	Regional Integration / Connectivity	5	5	5

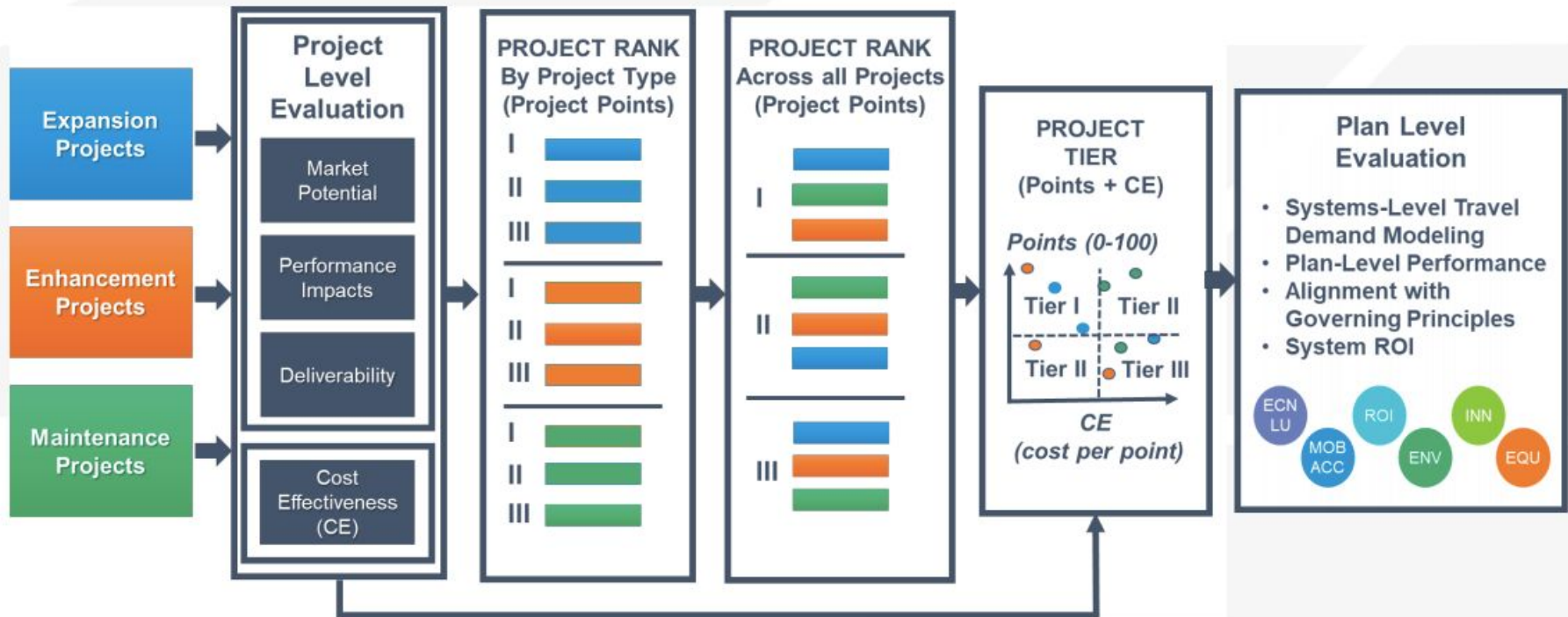
Cost Effectiveness tiers

Four-Quadrant Matrix Model



ATL Prioritization

ARTP PROJECT EVALUATION AND PRIORITIZATION PROCESS



76 projects included in the plan

Quadrant 1 Projects: *Higher Impact/Lower Cost*

Project Name	Project Sponsor	Total Cost	Quadrant
Aerotropolis Corporate Crescent Circulator – Phase I	Aerotropolis CID	\$ 10,000,000	Q1: HI/LC
Northwest Regional High Capacity Transit Corridor	Atlanta	\$ 59,500,000	Q1: HI/LC
New Service / New Technology Town Center Autonomous Shuttle	Chamblee	\$ 22,020,000	Q1: HI/LC
Transit Signal Priority	CobbLinc	\$ 800,000	Q1: HI/LC
Cumberland Transfer Center	CobbLinc	\$ 51,000,000	Q1: HI/LC
Marietta Transfer Center	CobbLinc	\$ 51,000,000	Q1: HI/LC
Marietta Maintenance Facility	CobbLinc	\$ 18,000,000	Q1: HI/LC
LRT-1b - Clifton Corridor LRT (Segment 1b)	DeKalb County	\$ 142,500,000	Q1: HI/LC
Capitol Ave /Summerhill BRT	MARTA	\$ 176,000,000	Q1: HI/LC
Elevators & Escalators - Elevator Rehabilitation	MARTA	\$ 160,000,000	Q1: HI/LC
Northside Drive BRT	MARTA	\$ 172,100,000	Q1: HI/LC
Track Renovation Phase IV	MARTA	\$ 205,000,000	Q1: HI/LC
Renovate Pedestrian Bridges	MARTA	\$ 6,300,000	Q1: HI/LC
Town Center/Big Shanty Park and Ride Expansion	SRTA	\$ 12,440,787	Q1: HI/LC
Sugarloaf Park and Ride	SRTA	\$ 14,833,539	Q1: HI/LC
State Route 316 Park-and-Rides and Commuter Express Service	GCT	\$ 51,824,400	Q1: HI/LC
Short-Range Direct Connect Package	GCT	\$ 48,004,300	Q1: HI/LC
Mid-Range Express Commuter Bus Expansion Package	GCT	\$ 17,317,350	Q1: HI/LC
Local Bus Expansion: Route 21 Steve Reynolds Blvd	GCT	\$ 32,658,200	Q1: HI/LC
Long-Range Express Commuter Bus Expansion Package	GCT	\$ 21,935,100	Q1: HI/LC
Direct Connect Expansion: Route 403 Peachtree Corners to Perimeter	GCT	\$ 32,741,350	Q1: HI/LC
Long-Range Direct Connect Service Enhancements	GCT	\$ 67,330,500	Q1: HI/LC
Rapid Bus Expansion: Route 201 Steve Reynolds Blvd	GCT	\$ 82,629,750	Q1: HI/LC
BRT Route 700: Long Range Service Changes	GCT	\$ 76,705,900	Q1: HI/LC
Indian Trail In-Line Stop and Park-and-Ride	GCT	\$ 143,500,000	Q1: HI/LC
BeltLine West LRT	MARTA	\$ 126,400,000	Q1: HI/LC

Quadrant 2 Projects: *Higher Impact/Higher Cost*

Project Name	Project Sponsor	Total Cost	Quadrant
MARTA West Line High Capacity Transit	Atlanta	\$ 283,600,000	Q2: HI/HC
BRT-15 Buford Highway High Capacity Transit	Brookhaven	\$ 280,000,000	Q2: HI/HC
I-285 Top End Transit in Express Lanes	Fulton County	\$ 247,500,000	Q2: HI/HC
South Fulton Parkway Rapid Transit in Dedicated Lanes	Fulton County	\$ 275,000,000	Q2: HI/HC
Beltline Northeast LRT	MARTA	\$ 298,800,000	Q2: HI/HC
BeltLine Southeast LRT	MARTA	\$ 400,140,000	Q2: HI/HC
Beltline SouthWest LRT	MARTA	\$ 324,000,000	Q2: HI/HC
Campbellton Rd HCT	MARTA	\$ 538,400,000	Q2: HI/HC
Clifton Corridor (Phase 1)	MARTA	\$ 1,875,099,246	Q2: HI/HC
Elevators & Escalators - Escalator Rehabilitation	MARTA	\$ 240,000,000	Q2: HI/HC
IT & Software	MARTA	\$ 400,000,000	Q2: HI/HC
Auxiliary Power Switch Gear	MARTA	\$ 240,000,000	Q2: HI/HC
Clayton County Transit Initiative - BRT	MARTA	\$ 375,000,000	Q2: HI/HC
Clayton County Transit Initiative - CRT	MARTA	\$ 900,000,000	Q2: HI/HC
GA 400 Transit Initiative BRT	MARTA / Fulton County	\$ 300,000,000	Q2: HI/HC
Roofing and Skylights - Roofing Rehabilitation Program	MARTA	\$ 562,500,000	Q2: HI/HC
Station Rehabilitation - Program Schedule	MARTA	\$ 685,000,000	Q2: HI/HC
Mid-Range BRT Route 700: Doraville to Sugarloaf Mills	GCT	\$ 438,299,733	Q2: HI/HC
Long-Range Express Commuter Bus Service Enhancement Package	GCT	\$ 215,870,900	Q2: HI/HC
Rapid Bus Expansion: Route 200 Peachtree Industrial Blvd	GCT	\$ 267,935,400	Q2: HI/HC
BRT Route 701: Lawrenceville to Peachtree Corners	GCT	\$ 543,527,500	Q2: HI/HC
BRT Route 702: Snellville to Indian Creek Rail Station	GCT	\$ 332,908,050	Q2: HI/HC
Gold Line HRT Extension to Jimmy Carter Multimodal Hub	GCT	\$ 1,413,299,300	Q2: HI/HC
I-20 East Heavy Rail to Stonecrest	RTP	\$ 1,471,802,476	Q2: HI/HC

Quadrant 2 Projects: *Lower Impact/Lower Cost*

Project Name	Project Sponsor	Total Cost	Quadrant
Aerotropolis Intermodal Transportation Center	Aerotropolis CID	\$ 50,000,000	Q2: LI/LC
ATL RIDES (Atlanta-Region Rider Information and Data Evaluation System) App	ATL	\$ 738,000	Q2: LI/LC
ADA Compliant Sidewalks	CobbLinc	\$ 6,250,000	Q2: LI/LC
South Cobb Transfer Center	CobbLinc	\$ 8,500,000	Q2: LI/LC
Fixed Route Operating Assistance	Douglas County	\$ 4,000,000	Q2: LI/LC
Connector Reliever Park & Ride Deck	MARTA	\$ 7,500,000	Q2: LI/LC
Hickory Grove Park and Ride	SRTA	\$ 13,011,560	Q2: LI/LC
Mt. Carmel Park and Ride	SRTA	\$ 14,928,400	Q2: LI/LC
Short-Range Paratransit Service	GCT	\$ 41,573,000	Q2: LI/LC
Gwinnett Place Transit Center Improvements	GCT	\$ 20,500,000	Q2: LI/LC
Georgia Gwinnett College Transit Center	GCT	\$ 10,250,000	Q2: LI/LC
Peachtree Corners Park-and-Ride	GCT	\$ 20,500,000	Q2: LI/LC
Braselton Park-and-Ride and Express Commuter Service	GCT	\$ 18,323,450	Q2: LI/LC
Loganville Park-and-Ride and Express Commuter Service	GCT	\$ 18,290,350	Q2: LI/LC
Infinite Energy Transit Center	GCT	\$ 10,250,000	Q2: LI/LC
Lawrenceville Transit Center	GCT	\$ 30,750,000	Q2: LI/LC
Lawrenceville Maintenance Facility	GCT	\$ 39,266,725	Q2: LI/LC
Rapid Bus Expansion: Route 205 Jimmy Carter Blvd/Holcomb Bridge Road	GCT	\$ 48,120,600	Q2: LI/LC
Short-Range Local Bus Expansion: Route 15	GCT	\$ 15,722,000	Q2: LI/LC
Short-Range Local Bus Expansion: Route 25	GCT	\$ 7,780,300	Q2: LI/LC
Short-Range Local Bus Expansion: Route 50	GCT	\$ 35,500,900	Q2: LI/LC
Short-Range Local Bus Expansion: Route 60	GCT	\$ 15,606,100	Q2: LI/LC
Short-Range Local Bus Expansion: Route 70	GCT	\$ 13,674,800	Q2: LI/LC
Short-Range Flex Bus Expansion: Route 500	GCT	\$ 14,955,900	Q2: LI/LC
Short-Range Flex Bus Expansion: Route 503	GCT	\$ 24,266,800	Q2: LI/LC

MTC approach for Plan Bay Area 2040

Plan Bay Area 2040

Plan Bay Area 2040
PROJECT PERFORMANCE ASSESSMENT
FINAL RESULTS

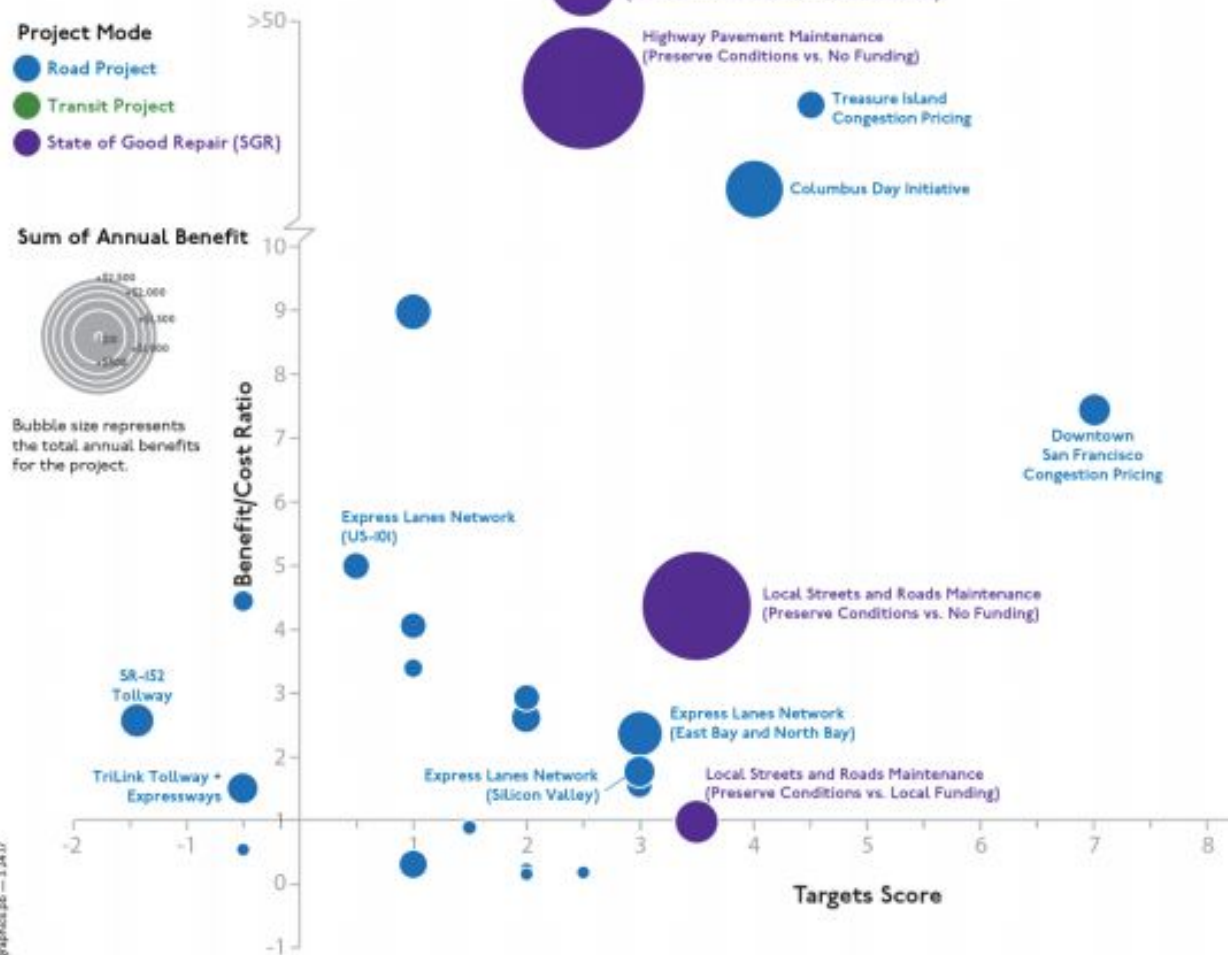


ROW ID	PROJECT NAME	LOCATION (COUNTY)	PROJECT TYPE	ANNUAL BENEFIT	ANNUAL COST	B/C RATIO	TARGETS SCORE
39 1302	Express Lane Network (East and North Bay)	Multi-County	Express Lanes	\$214	\$91	2	3.0
40 206	AC Transit Service Frequency Improvements	Multi-County	Bus Frequency Improvements	\$248	\$120	2	6.5
41 513	North Bayshore LRT (NASA/Bayshore to Google)	Santa Clara	Rail Expansion	\$42	\$22	2	4.0
42 502	Express Lane Network (Silicon Valley)	Santa Clara	Express Lanes	\$69	\$38	2	3.0
43 604	Solano County Express Bus Network	Multi-County	Express Bus Network	\$21	\$12	2	2.5
44 522	VTA Service Frequency Improvements (10-Minute Frequencies)	Santa Clara	Bus Frequency Improvements	\$177	\$99	2	7.0
45 412	Antioch-Martinez-Hercules-San Francisco Privately-Operated Ferry	Multi-County	Ferry	\$9	\$5	2	1.5
46 403	I-680 Express Bus Frequency Improvements	Multi-County	Express Bus Network	\$12	\$7	2	2.5
47 402	eBART – Phase 2 (Antioch to Brentwood)	Contra Costa	Rail Expansion	\$21	\$12	2	4.0
48 311	Muni Forward Program	San Francisco	Bus Frequency Improvements	\$60	\$36	2	6.5
49 901	US-101 Marin-Sonoma Narrows HOV Lanes – Phase 2	Multi-County	Intraregional Road Expansion	\$31	\$19	2	3.0
50 409	I-680/SR-4 Interchange Improvements + HOV Direct Connector	Contra Costa	Intraregional Road Expansion	\$42	\$27	2	3.0
51 103	El Camino Real Rapid Bus (Daly City to Palo Alto)	San Mateo	Bus Frequency Improvements	\$54	\$36	2	2.0
52 401	TriLink Tollway + Expressways (Brentwood to Tracy/Altamont Pass)	Multi-County	Interregional Road Expansion	\$75	\$51	1	-0.5
53 312	19th Avenue Subway (West Portal to Parkmerced)	San Francisco	Rail Efficiency	\$39	\$27	1	7.5
54 801	Golden Gate Transit Frequency Improvements	Multi-County	Express Bus Network	\$11	\$8	1	4.5
55 313	Muni Service Frequency Improvements	San Francisco	Bus Frequency Improvements	\$89	\$79	1	6.0
56 1413	Local Streets and Roads Maintenance (Preserve Conditions vs. Local Funding)	Multi-County	Local Streets Maintenance	\$194	\$198	1	3.5
57 516	VTA Express Bus Frequency Improvements	Santa Clara	Express Bus Network	\$18	\$19	0.9	4.5

MTC's "compelling case" process for cost-ineffective projects

Plan Bay Area 2040

Project Performance Assessment: Results for Road Projects



Option to:

- Revise b/c info
- Reduce scope
- Make a case based on shortcomings in b/c methodology and federal priorities

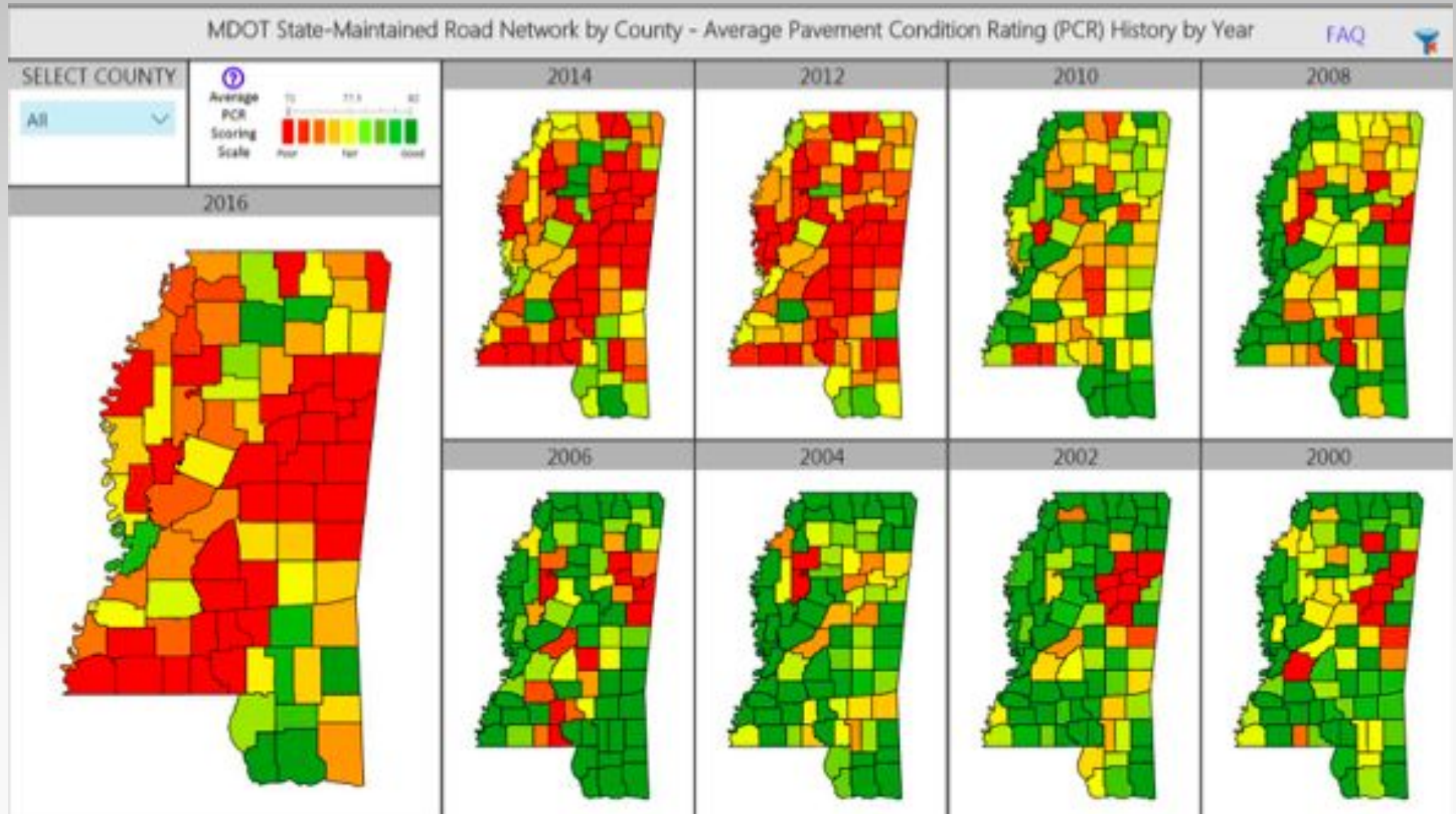
MTC results

Of the 18 projects with B/C less than 1.0:

- 4 converted to environmental studies
- 3 reduced scope to achieve $b/c > 1.0$
- 2 provided updated b/c data to achieve ratio > 1.0
- 5 successfully made a “compelling case” to be upgraded without $b/c > 1.0$
- 4 dropped altogether

Process removed billions of dollars of low performing projects.

Why have a formal process to address cost increases?

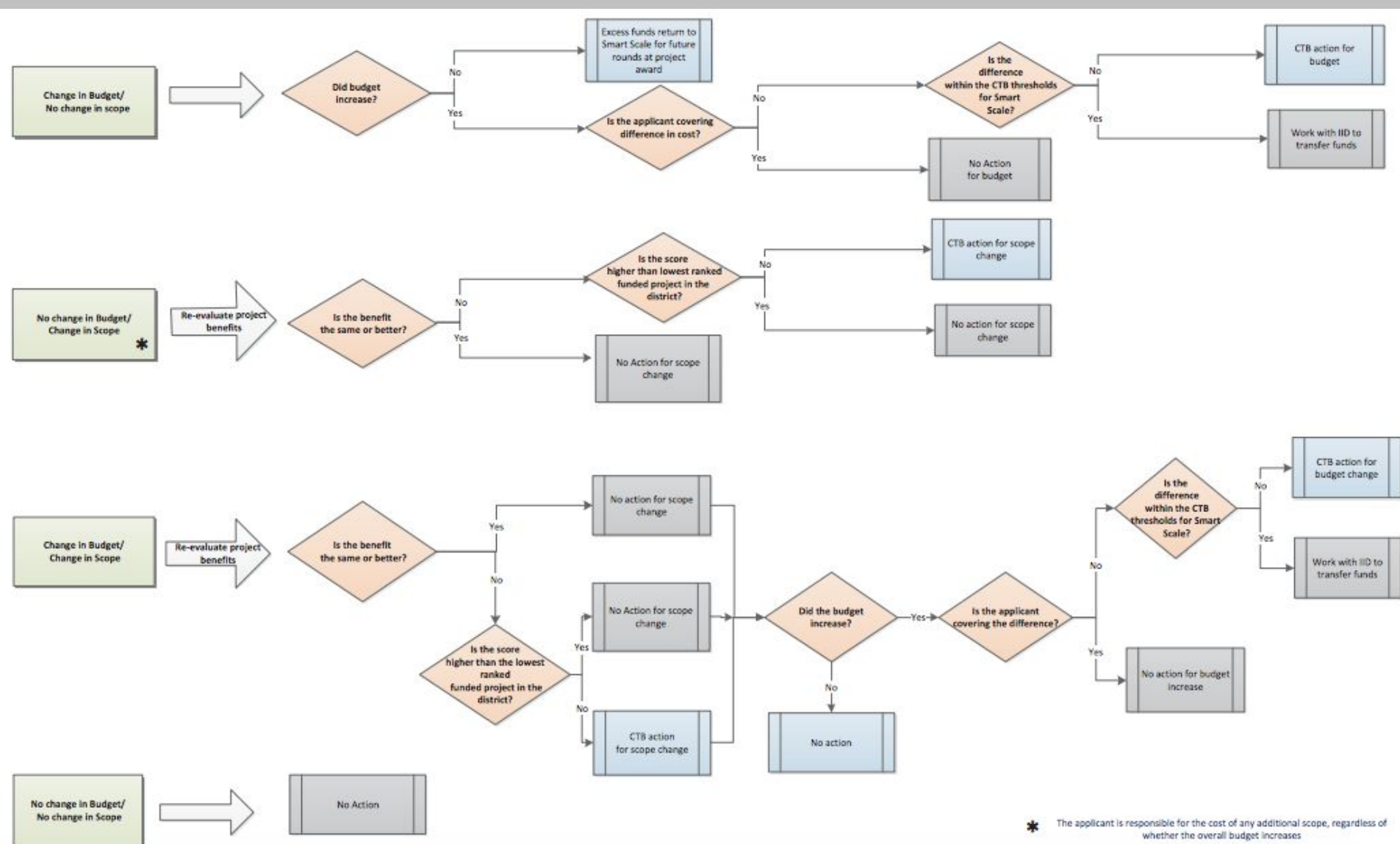


How Virginia handles cost increases

- Rescored for significant changes to cost OR scope (benefits)
- Board must approve scope/cost change if project falls below funded threshold for its district (vs. static b/c ratio)
- Could revoke funding
- **Project proponents usually *overestimate* costs upfront for fear of losing funds**

Total project budget	Cost threshold for rescoring
Less than \$5M	Funding request increased 20%
\$5M-\$10M	Funding request increased more than \$1M
Greater than \$10M	Funding request increased 10% (max \$5M)

Determining whether to re-score



* The applicant is responsible for the cost of any additional scope, regardless of whether the overall budget increases

Making the process more transparent

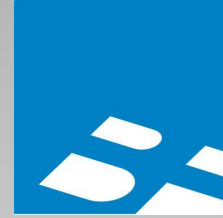
- Have a scoring process everyone can understand
- Have results presented in a clear way
- Ensure criteria are closely connected to regional goals
- Update your process every round
- Help applicants with your process
- Score once and fund fully

Discussion

- What elements of these approaches would be helpful to you in making project selection decisions?
- What elements concern you?
- Are you interested in pursuing an approach that considers cost increases and/or includes rescoring of projects after programming decisions have been made?
- What are the biggest barriers to implementing a cost-effectiveness approach in project decision-making?
- What questions or issues do you want staff to explore further on this topic?



Transportation
for America



Barr
Foundation

beth.osborne@t4america.org



[@t4america](https://twitter.com/t4america)



[@transportationforamerica](https://www.facebook.com/transportationforamerica)



www.t4america.org