

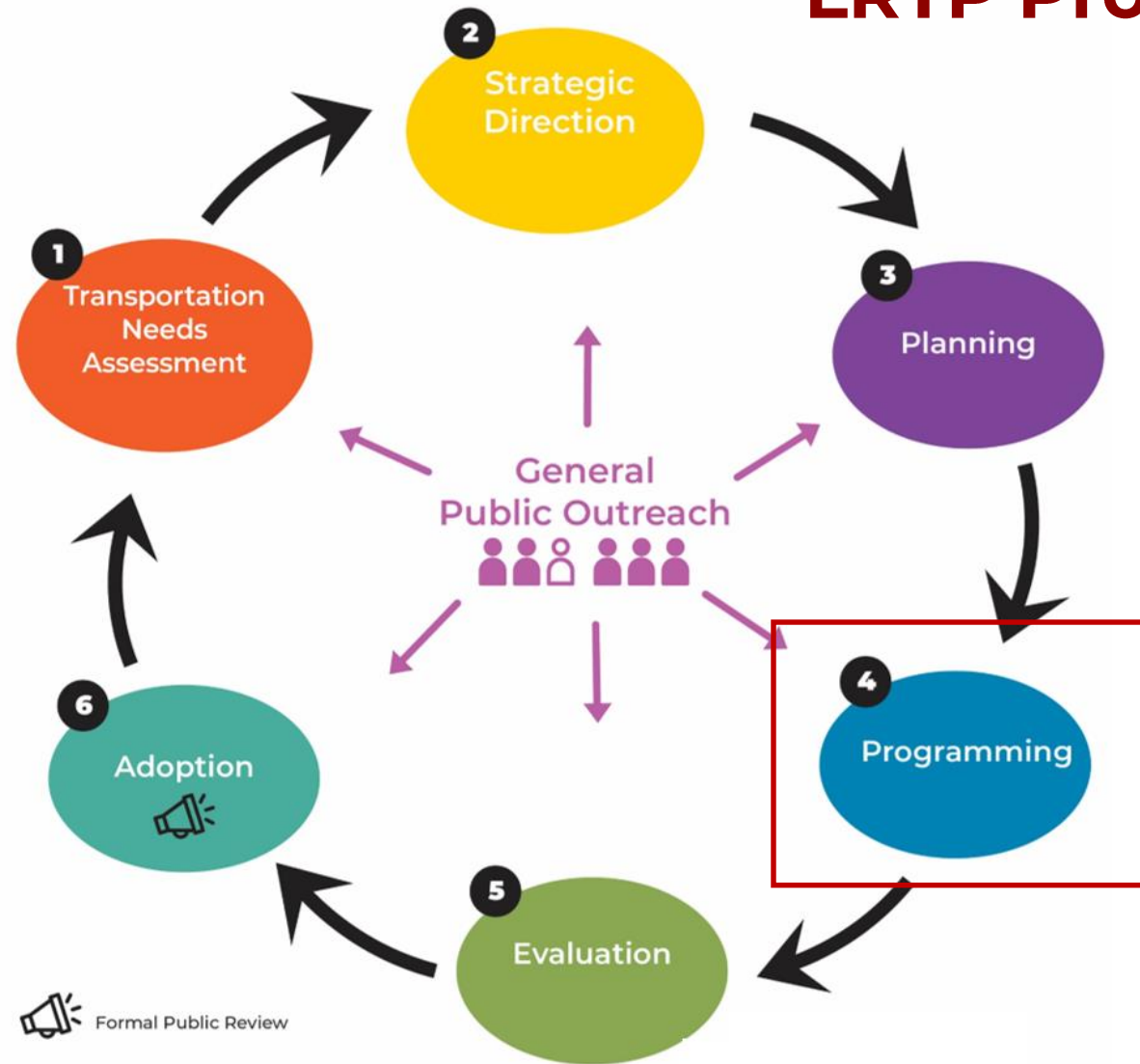
Richmond Regional
**Transportation
Planning
Organization**

SUPPORTED BY **PlanRVA**
THE REGIONAL
COMMISSION

4. LRTP Process Update Task 4

Programming

L RTP Process Flow



Task 4: Programming

1. Universe of Projects Scoring Results
2. Budget Allocation Survey Results
3. Constrained Budget Development
4. Staff Recommended Constrained List of Projects
5. Next Steps

Universe of Projects Scoring Results

1. All Highway, Transit, Park and Ride and Active Transportation Projects Scored – 243 Projects
2. Total \$7.8 Billion Needs (Cost inflated to 2030 Dollars)
3. Bridges Projects not scored. SGR dedicated funding. All projects will be in the Constrained list – 16 projects.
4. Rail Projects not scored. All projects to be in the Vision list – 9 projects
5. Scoring Process
 - Raw Value for each PM calculated for each Projects – $243 * 15 = 3645$ values
 - PM value normalized in the range 0-100 for each category
 - PM weights applied to normalized value
 - All PM value added to get the Project Benefit Score
 - Project Benefit score divided by project cost to get the ConnectRVA 2045 Project Score
 - Project Ranking done in descending order
6. Scoresheet & Scorecards
7. [Story Map](#)

Universe of Projects Scoring Results

Top Soring Projects within each Goal Category

Ranking	Goals				
	Safety	Mobility	Accessibility	Economic Development	Environment/Land Use
1	Rt 1 North BRT	I-95 & Broad Street/ I-64	Rt 1 North BRT	Broad St BRT	Rt 1 North BRT
2	Midlothian BRT	VA-76 (Powhite Pkwy)	Rt 1 North Enhanced	I-95 Widening (62-64)	West End South BRT
3	West End South BRT	I-64 Aux Lane (183)	Midlothian BRT	I-95 & Broad Street/ I-64 Interchange Modification	Midlothian BRT
4	Broad St BRT	I-95 & I-64 Interchange	West End South BRT	Midlothian BRT	Broad St BRT
5	I-95 & Broad Street/ I-64 Interchange Modification	I-64 Aux Lane (183)	Broad St BRT	West End South BRT	Midlothian Enhanced

Project Benefit Rank	Project	Project Benefit Score
1	Rt 1 North BRT	74.443
2	Midlothian BRT	47.965
3	West End South BRT	47.501
4	Broad St BRT	44.627
5	I-95 & Broad Street/ I-64 Interchange Modification	37.288

Projects with Highest Benefit

Universe of Projects Scoring Results

ConnectRVA 2045 Top-5 Ranked Projects

Route/Corridor/ Intersection/ Interchange	Project Description	Project Benefit Score	Project Total Cost (Inflated to 2030 Dollars)	Connect RVA 2045 Project Score	Connect RVA 2045 Project Rank
Fall Line / Route 1	Richmond Fall Line Trail: Segment 5B - MM 25.6 to MM 26.6	19.877	1,379,000	144.1	1
I-295	Construction of a SB auxiliary lane between the existing lane drop on I-295 SB and Chamberlayne Rd (Exit 41) off ramp (0.4mi)	7.685	678,000	113.3	2
Fall Line / Route 1	Richmond Fall Line Trail: Segment 6B - MM 30.5 to MM 31.2	7.030	627,000	112.1	3
Fall Line / Route 1	Richmond Fall Line Trail: Segment 4D - MM 23.9 to MM 24.3	8.529	770,000	110.8	4
23rd St & Franklin St.	23rd Street & Franklin Street Neighborhood Transit Center	3.600	394,000	91.4	5

Budget Allocation Survey Results

Went Live: April 16
Closed: May 15
Total Visitors: 512
Completed Survey: 278
General Comments: 78

ConnectRVA 2045

More at:

Start Here
Where should transportation money be focused?

WELCOME

Help us plan for the future!
ConnectRVA 2045 will guide the Richmond region's transportation investments over the next 20 years to support the mobility needs of our community and its future growth.

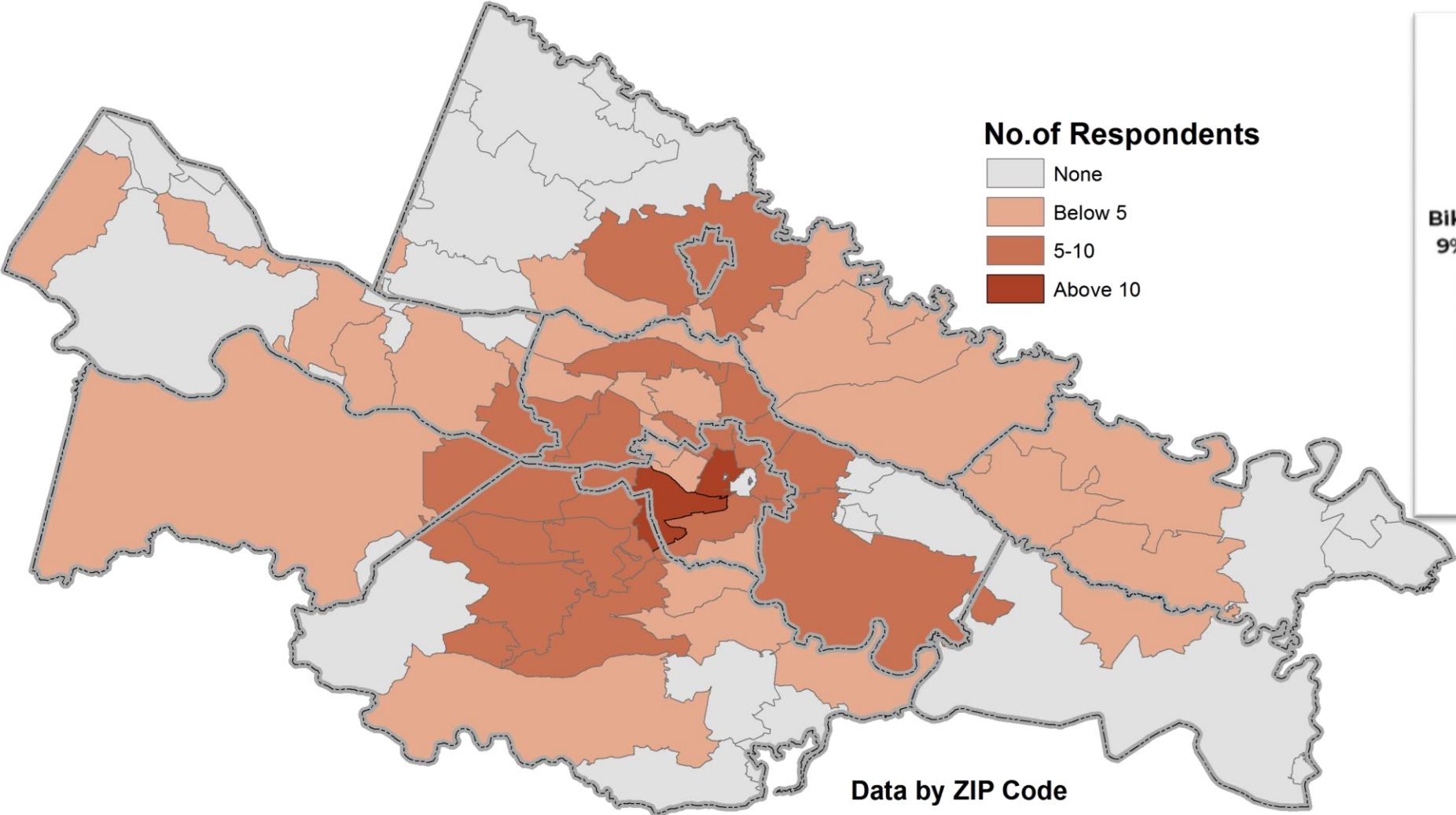
→ Begin

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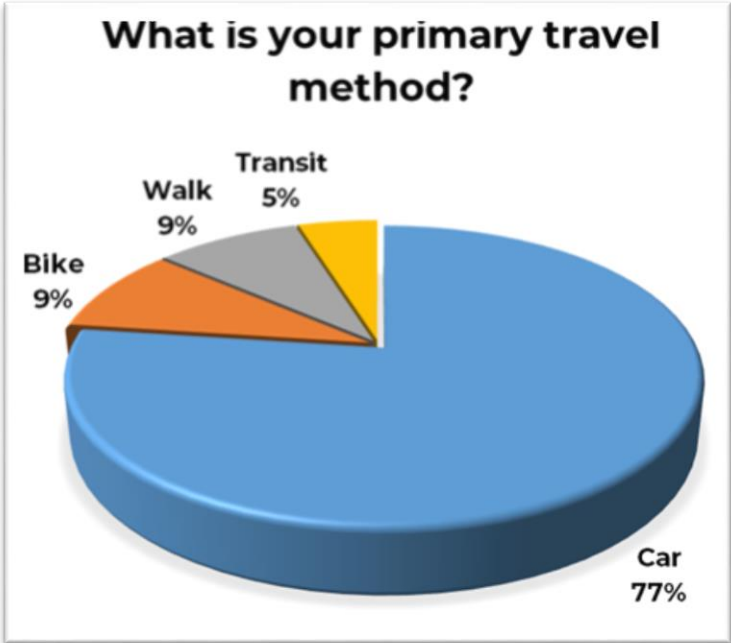
This survey will assist the Advisory Committee in prioritizing the Universe of Projects.

MetroQuest

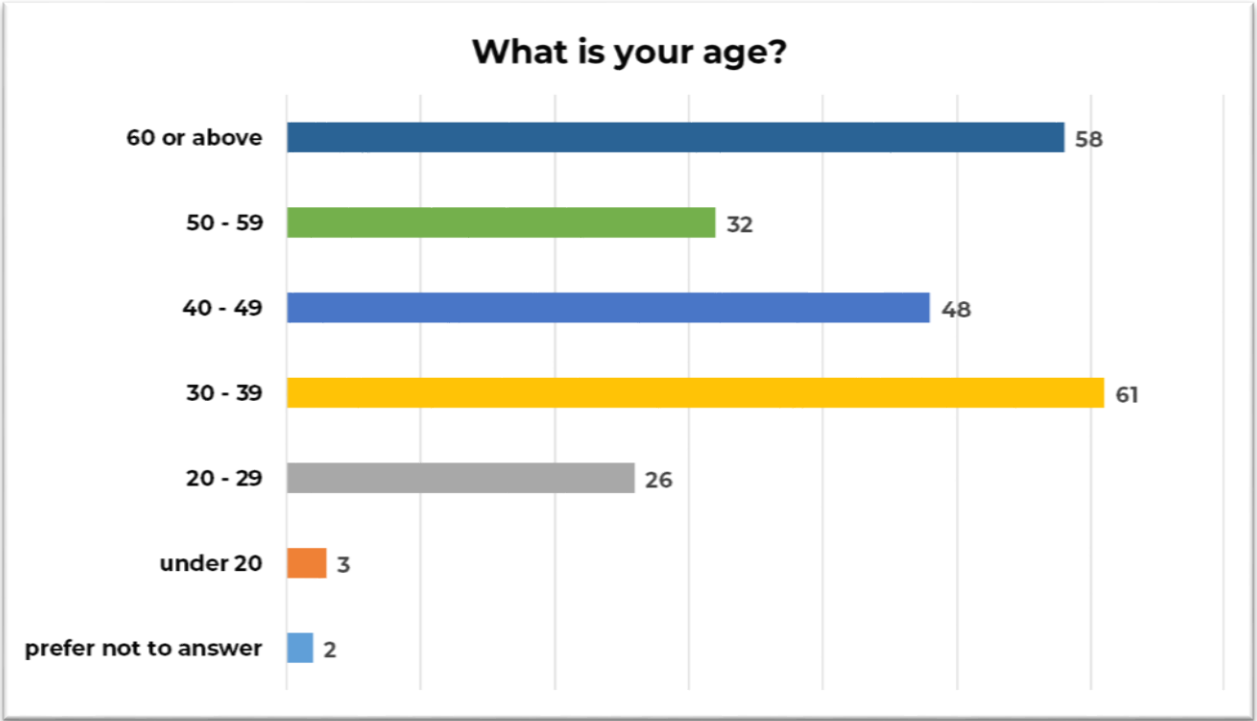
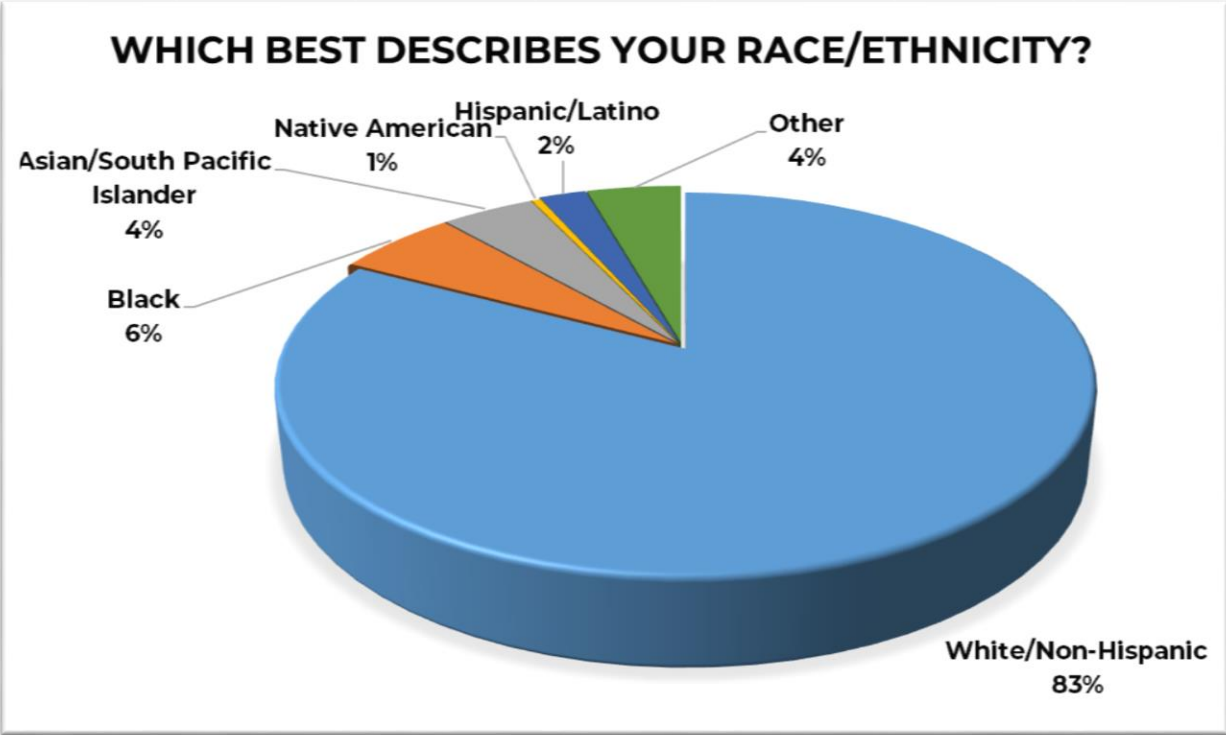
Budget Allocation Survey Results



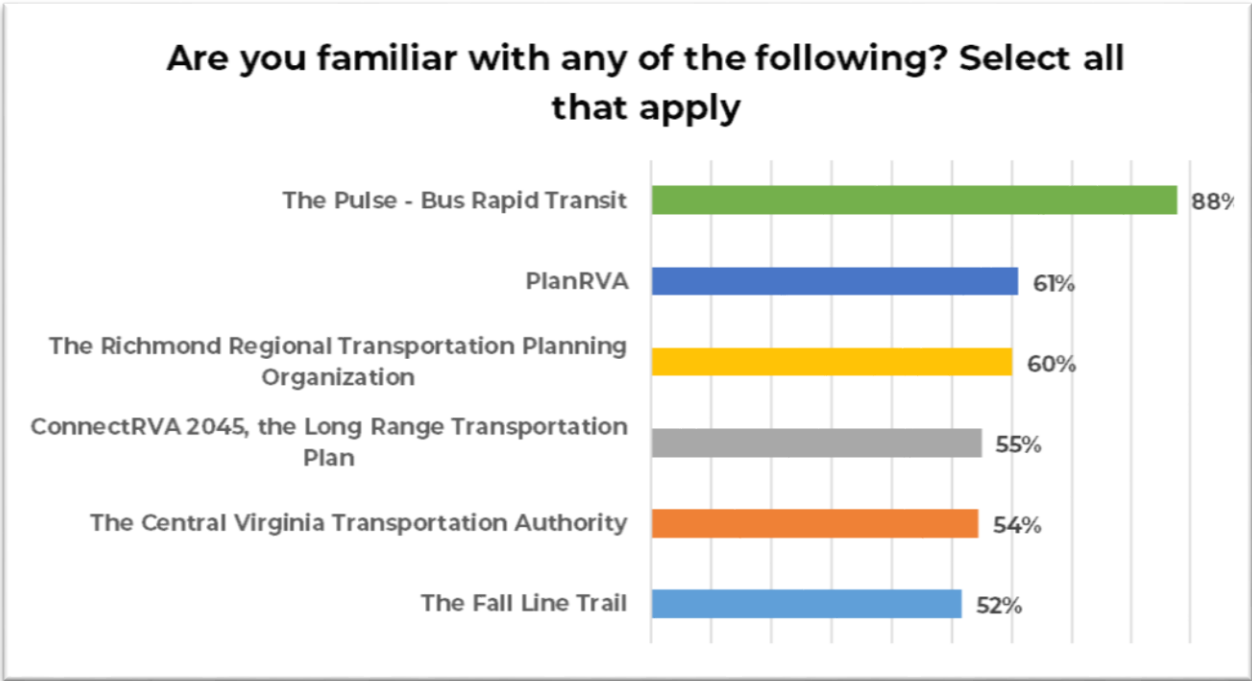
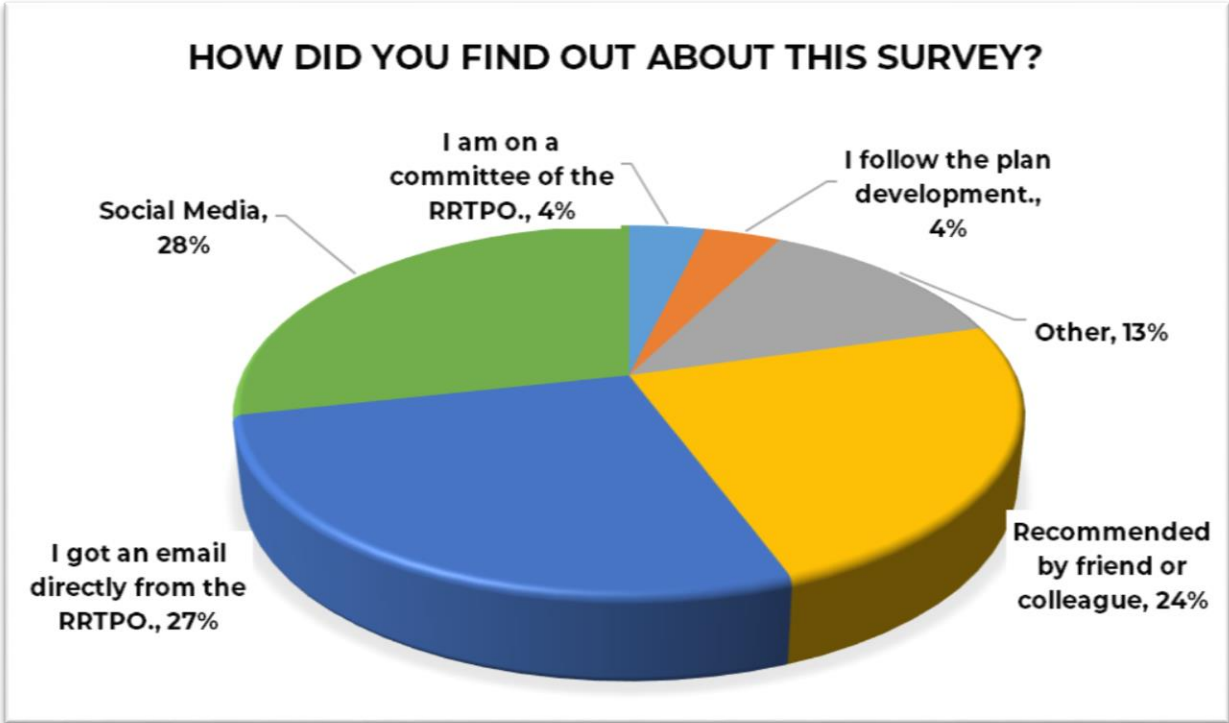
Respondents by Home Location



Budget Allocation Survey Results



Budget Allocation Survey Results



Budget Allocation Survey Results

3

How should the money be spent?
Please distribute the budget into the categories.

BUDGET ALLOCATION

Please drag coins to indicate where you would allocate resources.

1

10

10

90

Highway Maintenance

0

Transit Frequency

0

Bicycle & Pedestrian Infrastructure

0

Highway Expansion

0

Transit Network Expansion

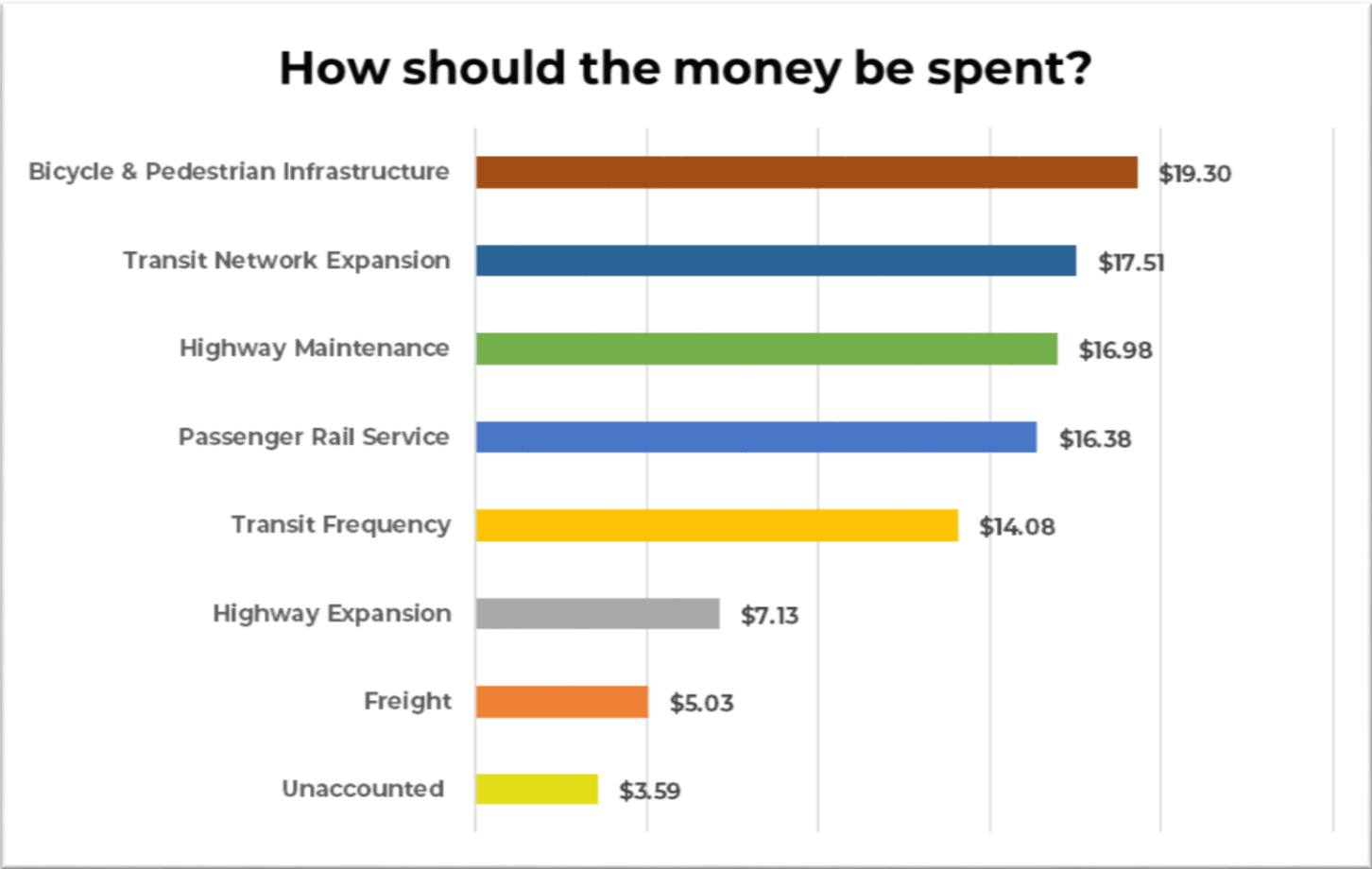
0

Freight

0

Passenger Rail Service

0



Constrained Budget Development

- Constraint means investments possible within limits of expected revenues
- Requires projection of revenues to 2045
- VDOT prepared highway revenue projections
- DRPT prepared near-term federal transit projections and all state capital grants and operating contributions
- RRTPO prepared long-term federal transit projections and other GRTC revenue projections based on recent consultant studies

	Projected Revenue (in millions of dollars)			
	Current	Near-Term	Mid-Term	Long-Term
	2022 – 2027	2028 – 2033	2034 – 2039	2040 – 2045
Federal Transit Funds	97.7	106.3	117.6	130.1
FTA 5303	2.4	2.6	2.8	3.1
FTA 5307/5340	80.6	87.7	97.0	107.3
FTA 5339	9.2	10.0	11.1	12.3
FTA 5310	5.6	6.0	6.7	7.4
State Transit Funds	98.8	112.4	126.3	141.9
Operating Assistance (GRTC)	70.1	77.0	86.7	97.6
Capital Assistance (GRTC)	15.5	20.9	23.6	26.5
FTA 5303 - State Match	0.29	0.32	0.35	0.39
FTA 5307/5340 - State Match	10.1	11.0	12.1	13.4
FTA 5339 - State Match	1.8	2.0	2.2	2.5
FTA 5310 - State Match	1.1	1.2	1.3	1.5
Local & Agency Transit Funds	354.5	421.2	499.0	581.7
CVTA Revenue - GRTC	194.0	239.0	291.8	346.0
Operating Contributions - GRTC	97.6	110.1	124.3	140.2
Operating Revenues - GRTC	51.8	60.0	69.6	80.7
Local Match - 5303 (RRTPO)	0.29	0.32	0.35	0.39
Local Match - 5307 (GRTC)	10.1	11.0	12.1	13.4
Local Match - 5339 (GRTC)	0.46	0.50	0.55	0.61
Local Match - 5310 Recipients	0.28	0.30	0.33	0.37
	551.0	639.9	742.9	853.7

NOTE: Revenues include GRTC operating revenues

	Projected Revenue (in millions of dollars)			
	Current	Near-Term	Mid-Term	Long-Term
	(2022 – 2027)	(2028 – 2033)	(2034 – 2039)	(2040 – 2045)
Federal & State Highway Funds	2,302.1	2,696.7	3,098.1	3,546.4
Administrative	72.3	81.8	93.6	107.2
Maintenance (Localities)	577.5	714.8	814.5	928.0
Maintenance (VDOT)	992.3	1,144.9	1,301.8	1,480.6
State of Good Repair	115.0	202.9	250.5	301.1
Other Discretionary Construction	32.0	0.0	0.0	0.0
District Grant Program	183.3	210.5	242.3	276.0
High Priority Projects	145.2	135.3	167.0	200.7
TA Set-Aside	6.7	7.4	8.2	9.1
RSTP	101.1	112.3	124.3	137.5
RSTP Match	25.3	28.1	31.1	34.4
CMAQ	41.2	46.9	51.9	57.4
CMAQ Match	10.3	11.7	13.0	14.3
Regional Funds	452.6	557.6	680.9	807.2
CVTA Revenue	452.6	557.6	680.9	807.2
Local Funds	646.6	796.5	972.7	1,153.2
CVTA Revenue	646.6	796.5	972.7	1,153.2
Highway Operating & Capital Funds	3,401.3	4,050.7	4,751.6	5,506.8

ConnectRVA 2045 Total: ~\$20.5 billion

NOTE: Revenues include GRTC operating revenues

Planned Investments

- Planned investments cover entire plan period (2022 to 2045)
- Investments divided into time periods (current, near, mid, and long term)
 - Generalized inflation rate applied for each time period → 2.5%/year to Year 3 of the time period
- Investments divided among programmatic (maintenance and operations), local, and regional projects
- Funding split determined by current investment levels and funding sources

Local/Programmatic Total: ~\$14.3B

	Programmatic Investments (in millions)			
	Current	Near-Term	Mid-Term	Long-Term
	2022 - 2027	2028 - 2033	2034 – 2039	2040 – 2045
Programmatic Expenses & Investments	\$ 2,185.8	\$ 2,681.4	\$ 3,105.9	\$ 3,571.2
Highway Maintenance (Localities)	\$ 577.5	\$ 714.8	\$ 814.5	\$ 928.0
Highway Maintenance (VDOT)	\$ 992.3	\$ 1,144.9	\$ 1,301.8	\$ 1,480.6
State of Good Repair (VDOT)	\$ 115.0	\$ 202.9	\$ 250.5	\$ 301.1
Highway Planning & Administration	\$ 72.3	\$ 81.8	\$ 93.6	\$ 107.2
Transit Planning (RRTPO)	\$ 2.9	\$ 2.9	\$ 3.2	\$ 3.5
GRTC Operations & Maintenance	\$ 425.9	\$ 534.0	\$ 642.3	\$ 750.7
GRAND TOTAL				\$ 11,544.4

	Local Investments (in millions)			
	Current	Near-Term	Mid-Term	Long-Term
	2022 - 2027	2028 - 2033	2034 – 2039	2040 – 2045
Local Capital Investments	\$ 623.8	\$ 603.4	\$ 708.0	\$ 822.7
Local Transportation Projects (inclusion guidelines)	\$ 517.4	\$ 513.8	\$ 623.1	\$ 735.9
Enhanced Mobility (5310) Investments	\$ 6.9	\$ 7.6	\$ 8.4	\$ 9.3
GRTC Local Capital Improvements	\$ 99.4	\$ 82.1	\$ 76.6	\$ 77.6
GRAND TOTAL				\$ 2,757.9

Regional Investments

- Regional budget developed after accounting for local and programmatic investments
- Budget also accounts for funds to cover planned regional projects in the SYIP and any balances remaining on these projects after FY27
- Remaining funds split into categories based on limits on their use:
 - Flexible – RSTP, CVTA, Smart Scale funds
 - Air Quality – CMAQ (restricted to CMAQ-eligible projects)
 - Transit – GRTC CVTA, 5307 (restricted to transit projects)
 - Active – TA Set-Aside (restricted to bike/ped projects)

Available Constrained Plan Budget

in millions

	CURRENT	NEAR-TERM	MID-TERM	LONG-TERM
Active Funds	\$ 5.6	\$ 7.4	\$ 8.2	\$ 9.1
Air Quality Funds	\$ -	\$ 58.6	\$ 64.8	\$ 71.7
Transit Funds	\$ 15.8	\$ 13.0	\$ 12.2	\$ 12.3
Flexible Funds	\$ 654.4	\$ 1,123.9	\$ 1,595.4	\$ 1,873.6
Total Available	\$ 675.8	\$ 1,203.0	\$ 1,680.6	\$ 1,966.7

Total Available for Constrained Plan: ~\$6.2B

Unallocated Funds for Constrained Plan: ~\$5.5B

Notes:

1. Active Funds for current term calculated based on unallocated 2023-2027 funds only
2. Available budget removes \$467M in committed projects from SYIP for the Current term; \$203M for balance of committed projects in Near Term
3. RSTP/CMAQ assumed to be allocated in current term

Constrained Plan Development

- Projects assigned funding based on eligibility and score
- For each time period, the remaining candidate projects were reviewed in order
- If sufficient funding was available, the project was selected. If not, we moved down the list to the next project.
- For projects eligible for multiple funding sources, funds were used in the following order: **Transit/Active > Air Quality > Flexible**
- Any remaining funds at the end of the process were added to the budget for the next period

	Regional Investments (in millions)			
	Current	Near-Term	Mid-Term	Long-Term
	2022 - 2027	2028 - 2033	2034 – 2039	2040 – 2045
Regional Capital Investments	\$ 1,138.4	\$ 1,406.7	\$ 1,679.8	\$ 1,970.8
Active Transportation	\$ 197.2	\$ 47.3	\$ 63.5	\$ 51.6
Roadway	\$ 747.5	\$ 1,328.7	\$ 1,417.4	\$ 1,869.8
Park & Ride	\$ 70.6	\$ -	\$ -	\$ -
Intermodal	\$ 3.9	\$ -	\$ -	\$ -
Transit	\$ 119.2	\$ 30.7	\$ 198.9	\$ -
Unassigned Balance	\$ -	\$ -	\$ -	\$ 49.3
	GRAND TOTAL			\$ 6,195.7

Notes:

1. Current Term includes \$467M in investments already planned in the draft SYIP
2. Current Term includes new Smart Scale consensus scenario with all funding assumed to be in FY22 – FY27
3. Near Term includes \$203M in balance for projects planned in the draft SYIP
4. \$4.2M surplus carried over from Current to Near Term
5. \$3.3M surplus carried over from Near Term to Mid Term
6. \$4.1M surplus carried over from Mid Term to Long Term
7. \$49.3M remaining unassigned balance in Long Term

Staff Recommended Constrained List of Projects

1. Project in the Constrained Plan are normally based on their Scored Rank
2. Rank 224 - cutoff rank to be in the Constrained list of Projects
3. Exceptions
 - Projects Removed from Constrained list
 - Strong Opposition from the public
 - Cumulative Projects (if the first section is not in the constrained list)
 - Not the Priority for the Project Champions
 - BRT Routes (All Enhanced Transit Routes are in the Constrained Plan)
 - Project Added/Time Band Swapped in the Constrained List
 - To use all Funding Sources
 - To put complementary projects (For e.g., NB and SB sections) in the same Timeband

Staff Recommended Constrained List of Projects

- 1. Of the 243 Highway, Transit, Park and Ride and Active Transportation Projects Scored – 208 projects are in the Constrained List
- 2. All Active Transportation and Park and Ride Projects in the Constrained List
- 3. Bridge Projects not scored. All projects in the Constrained list – 16 Projects.
- 4. Rail Projects not scored. No Project in the Constrained List – 9 Projects

Total Projects UoP	268
Projects Scored	243
Projects Not Scored	25
Projects in the Constrained List	224
Projects in the Vision List	44

Staff Recommended Constrained List of Projects

Time Band	Fiscal Years	# of Projects	Inflated Cost	Flexible Funds	Transit Funds	Active Funds	CMAQ Funds
Committed List							
1 (Current)	FY22-FY27	62*	\$466,787,410				
Constrained List							
1 (Current)	FY22-FY27	97	\$671,621,000	\$650,200,562	\$15,786,523	\$5,633,915	\$0
2 (Near-Term)	FY28-FY33	47	\$1,203,886,000	\$1,124,850,791	\$13,031,461	\$7,418,452	\$58,585,296
3 (Mid-term)	FY34-FY39	36	\$1,679,824,000	\$1,594,642,539	\$12,152,635	\$8,208,032	\$64,820,794
4 (Long-Term)	FY40-FY45	23	\$1,921,407,000	\$1,869,760,000	\$0	\$9,081,650	\$42,565,350
Total (All Time Bands)	FY22-FY45	203	\$5,476,738,000	\$5,239,453,892	\$40,970,619	\$30,342,049	\$165,971,440
Note: * Five Projects from the UoP are in the committed list							

Staff Recommended Constrained List of Projects

Vision List			
Project Type	# of Projects	Project Total Cost (2020 Dollars)	Project Total Cost (Inflated to 2030 Dollars)
Highway, Transit, Active Transportation and Park and Ride	35	\$1,553,399,500	\$1,988,483,000
Rail	9	\$1,372,940,000	\$1,757,480,000

Next Steps

- Public Review Period - 6/2-6/17
- Review with Project Champions/AC Members – 6/3-6/14
- Final Draft – 6/18
- LRTP-AC Approval - 6/24
- Policy Board Approval – 7/1

5. LRTP Final Schedule

Schedule June-October

- **Phase 4: Programming (Cost-Constrained Plan Development)**
 - LRTP-AC Introduction – 6/2
 - Public Review Period - 6/2-6/17
 - Review with Project Champions/AC Members – 6/3-6/16
 - LRTP-AC Approval - 6/24
 - Policy Board Approval – 7/1
- **Phase 5: Constrained Plan Evaluation**
 - Air Quality Conformity Assessment
 - Interagency Consultation/RRTPO TAC – 7/8
 - Public Review Period – 7/9 -7/24
 - Policy Board Approval – 8/5
 - FHWA Conformity Determination – 9/23

Schedule June-October

- **Phase 5: Constrained Plan Evaluation (7/1- 8/15)**

- Environmental Justice Analysis
- Accessibility Analysis
- ConnectRVA 2045 Performance Measures
- Economic Impact Analysis (TBD)
- LRTP-AC Update – July and August Meetings
- Policy Board Update - 9/2

- **Phase 6: Plan Adoption**

- Draft Plan Assembly by 8/15
- Public Review Period - 8/15-9/15
- LRTP-AC Plan Adoption – Last Week of September
- Policy Board Plan Adoption – First Week of October

Connect RVA 2045



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