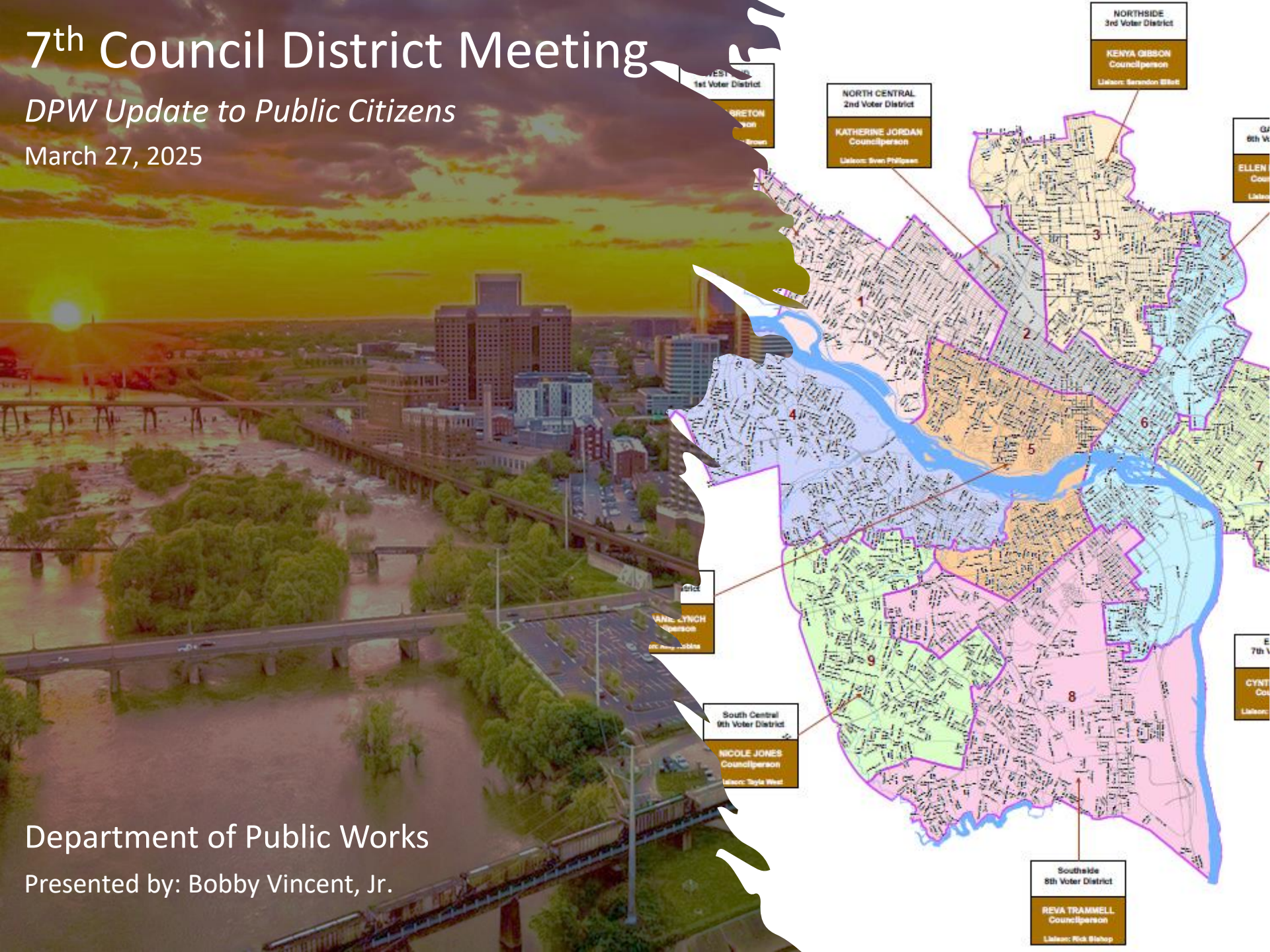


# 7<sup>th</sup> Council District Meeting

*DPW Update to Public Citizens*

March 27, 2025



WEST  
1st Voter District  
BRETON  
Councilperson  
Liaison: [Name]

NORTH CENTRAL  
2nd Voter District  
KATHERINE JORDAN  
Councilperson  
Liaison: Sven Phillips

NORTHSIDE  
3rd Voter District  
KENYA GIBSON  
Councilperson  
Liaison: Serendon Elliott

4  
VANCE LYNCH  
Councilperson  
Liaison: [Name]

South Central  
9th Voter District  
NICOLE JONES  
Councilperson  
Liaison: Toya West

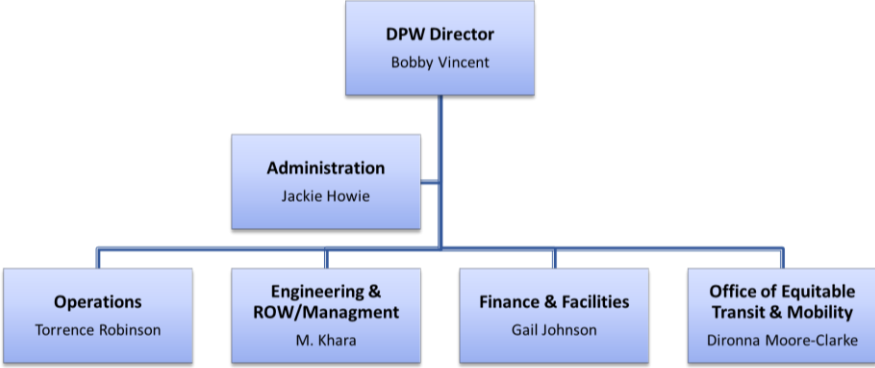
Southside  
8th Voter District  
REVA TRAMMELL  
Councilperson  
Liaison: Rick Bishop

Department of Public Works  
Presented by: Bobby Vincent, Jr.



# Department of Public Works

## Leadership Team, Mission, Vision, Overview



Roadway Maintenance



Bridge Maintenance



CIP Engineering



Right of Way Manager



Solid Waste



Urban Forestry

### MISSION

To provide a clean, safe and healthy environment

### VISION

To become the organizational leader in customer satisfaction by improving communication, assuring organizational alignment and affecting positive change while preserving our national accreditation

### OPERATING DIVISIONS

- Bridge Maintenance
- Capital Projects/Engineering
- Office of Equitable Transit & Mobility
- Facilities Management
- Grounds Maintenance
- Paving Infrastructure
- Right of Way Management
- Roadway Maintenance

- Solid Waste Management
- Street Cleaning
- Street Lighting
- Traffic Engineering
- Urban Forestry



Paving Infrastructure



Street Cleaning



Grounds Maintenance



Facilities Management



Traffic Engineering



OETM



Street Lights



DEPARTMENT OF  
**PUBLIC  
WORKS**

# RVA Statistics and General Public Information

**Geographical Size:**

**City Population:**

**Metropolitan Area Population:**

**Lane Miles of Roads:**

**Miles of Sidewalks:**

**Miles of Alleys:**

**Tree sites within Public ROW:**

**Bridges and Structures:**

**Streetlights:**

**Signals & Flashers**

**Bike Lanes:**

62.5 square miles

**231,782 (Ranked 100<sup>th</sup>)** *worldpopulationreview.com*

**1,314,434 (Ranked 44<sup>th</sup>)** *2020 Census*

**1,835 lane miles (2,626 w/parking & turning lanes)**

879 lane miles

**210 miles**

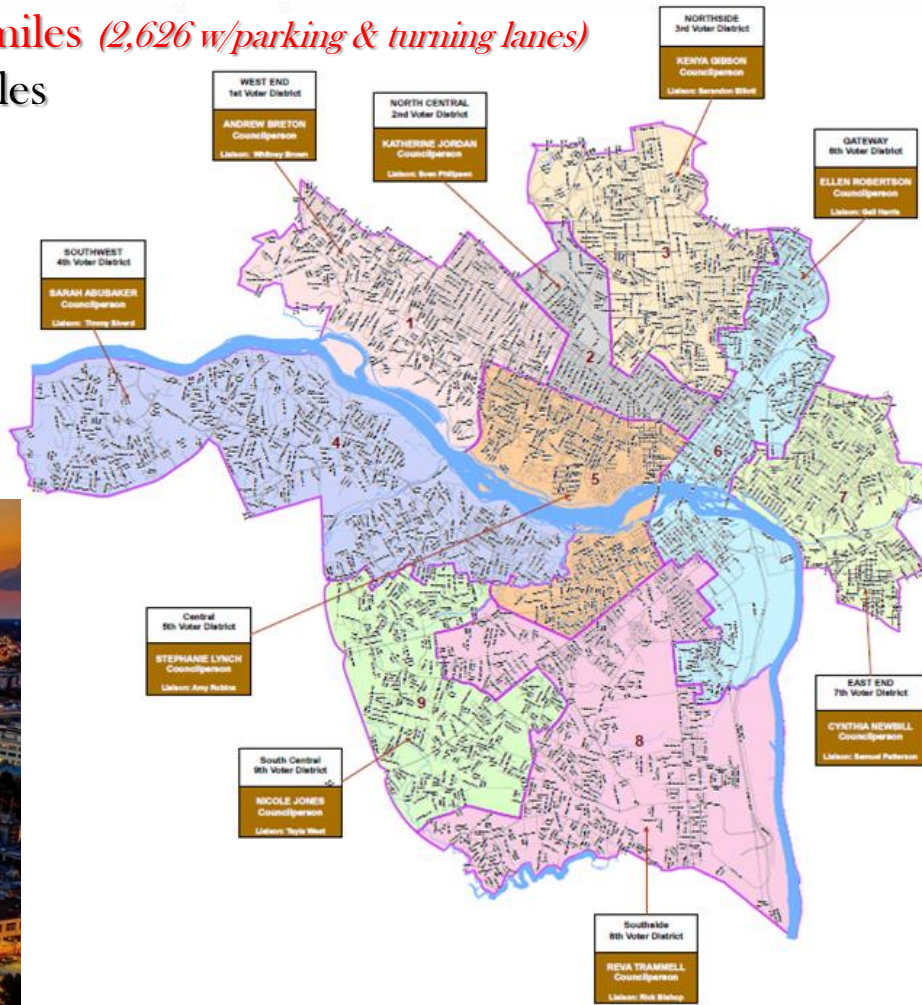
120,000

**84**

42,780

**521**

70.7 miles



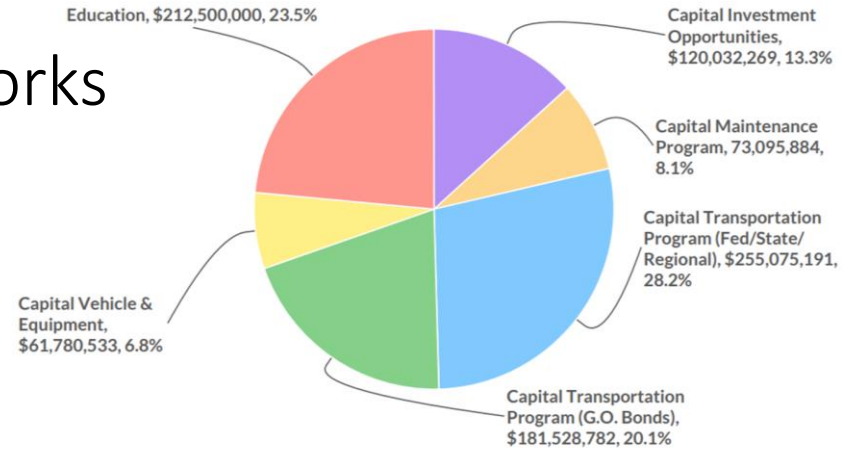




# Department of Public Works

## Budget and Fiscal Overview

FY 2025 - 2029 Adopted Capital Improvement Plan: Funding by Category



Budget Summary	FY 2022 Actual	FY 2023 Actual	FY 2024 Adopted	FY 2025 Adopted
Personnel Services	\$12,898,675	\$12,997,891	\$15,385,873	\$15,272,113
Operating	33,708,209	36,240,454	33,538,531	35,879,661
<b>Total General Fund</b>	<b>\$46,606,884</b>	<b>\$49,238,345</b>	<b>\$48,924,404</b>	<b>\$51,151,774</b>
Special Fund	55,280,467	54,717,378	56,097,568	61,079,031
Internal Service Fund	16,461,217	17,929,402	19,954,575	—
Parking Enterprise Fund	10,517,292	14,256,960	17,000,000	—
Capital Improvement Plan	49,049,485	84,752,293	101,806,909	118,133,593
<b>Total Summary</b>	<b>\$177,915,345</b>	<b>\$220,894,378</b>	<b>\$243,783,456</b>	<b>\$230,364,398</b>
Per Capita	\$776.67	\$974.72	\$1,074.09	\$1,005.80
General Fund Staffing	238.60	151.33	190.43	181.93
Other Funds Staffing	314.60	231.82	271.57	235.07
<b>*Total Staffing</b>	<b>553.20</b>	<b>383.15</b>	<b>462.00</b>	<b>417.00</b>

# Department of Public Works Transportation Fiscal Forecast

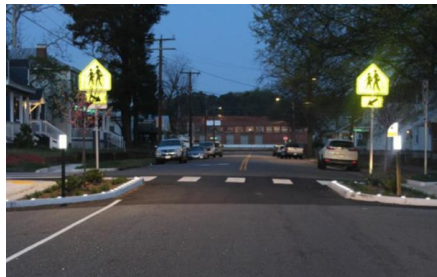
*Engineering, Planning and Operations*



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Category	FY25	FY26	FY27	FY28	FY29	Total
State Maintenance	\$ 38,000,000	\$ 38,000,000	\$ 38,000,000	\$ 38,000,000	\$ 38,000,000	\$ 190,000,000
CVTA Local	\$ 18,800,000	\$ 18,800,000	\$ 18,800,000	\$ 18,800,000	\$ 18,800,000	\$ 94,000,000
CVTA Regional						\$ 105,896,993
Federal / State	\$ 38,863,427	\$ 71,367,971	\$ 40,455,951	\$ 51,709,828	\$ 52,678,014	\$ 255,075,191
GO Bond	\$ 38,417,782	\$ 30,742,000	\$ 27,370,000	\$ 27,970,000	\$ 32,029,000	\$ 156,528,782
VDOT Work	\$ 22,906,000	\$ 22,725,000	\$ 10,800,000	\$ 20,070,000	\$ 6,728,000	\$ 83,229,000
Previous SYIP Allocations						\$ 280,414,000
<b>Totals</b>	<b>\$ 156,987,209</b>	<b>\$ 181,634,971</b>	<b>\$ 135,425,951</b>	<b>\$ 156,549,828</b>	<b>\$ 148,235,014</b>	<b>\$ 1,165,143,966</b>



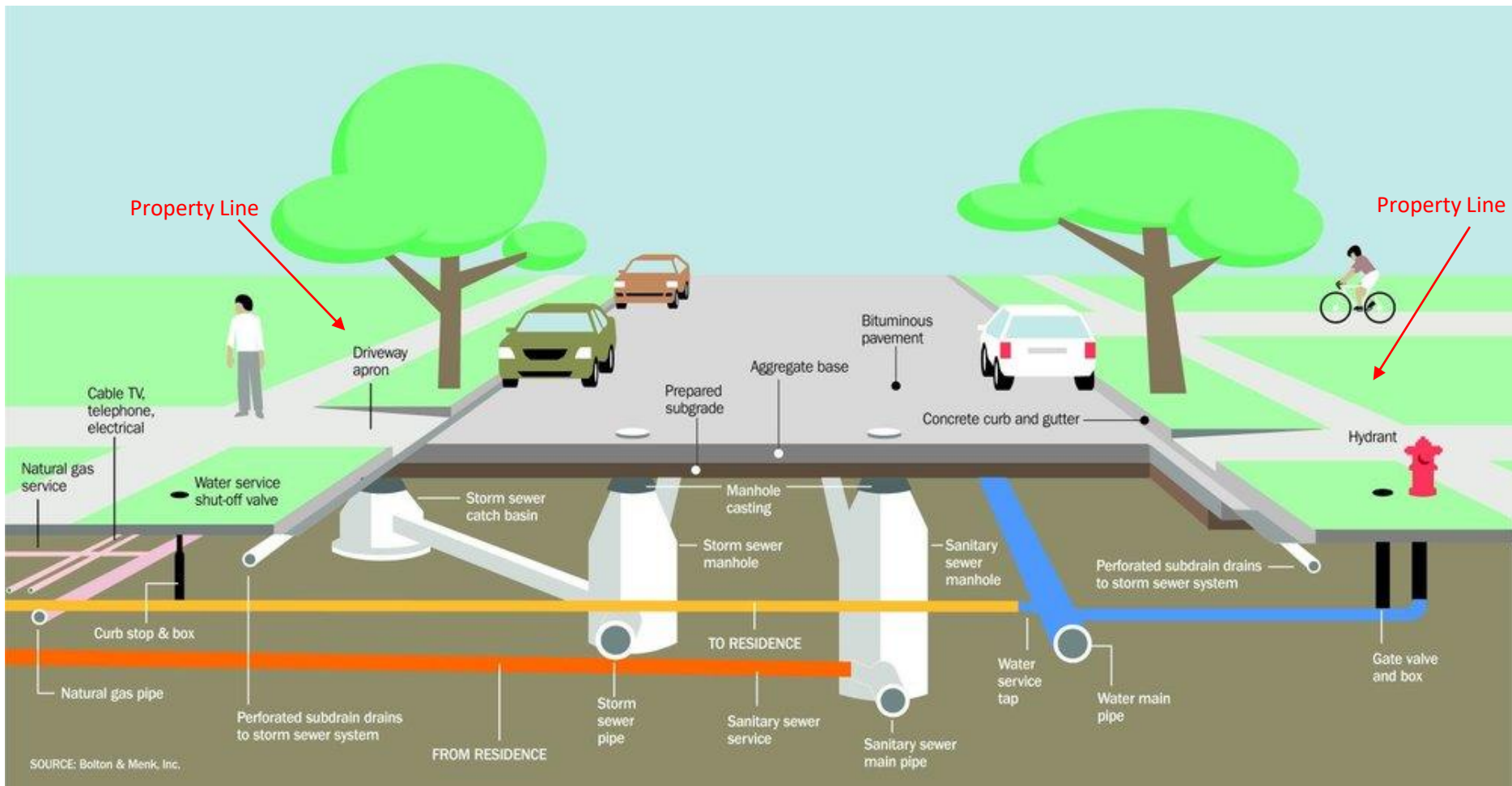


# City of Richmond's Public Right of Way

## Typical Street Layout w/in an Urban Area



When paving occurs, milling & overlay projects average 2" in depth. In the City of Richmond streets, even on local streets, there are several utilities that run underground within the public right of way. The main line pipes and conduits run at depths from 4' (48") to 20'+ (240"). Each main line has laterals at various depths to each property. Due to excavations, cavitations and upgrades, the earth around each of these can become compromised at any given time.

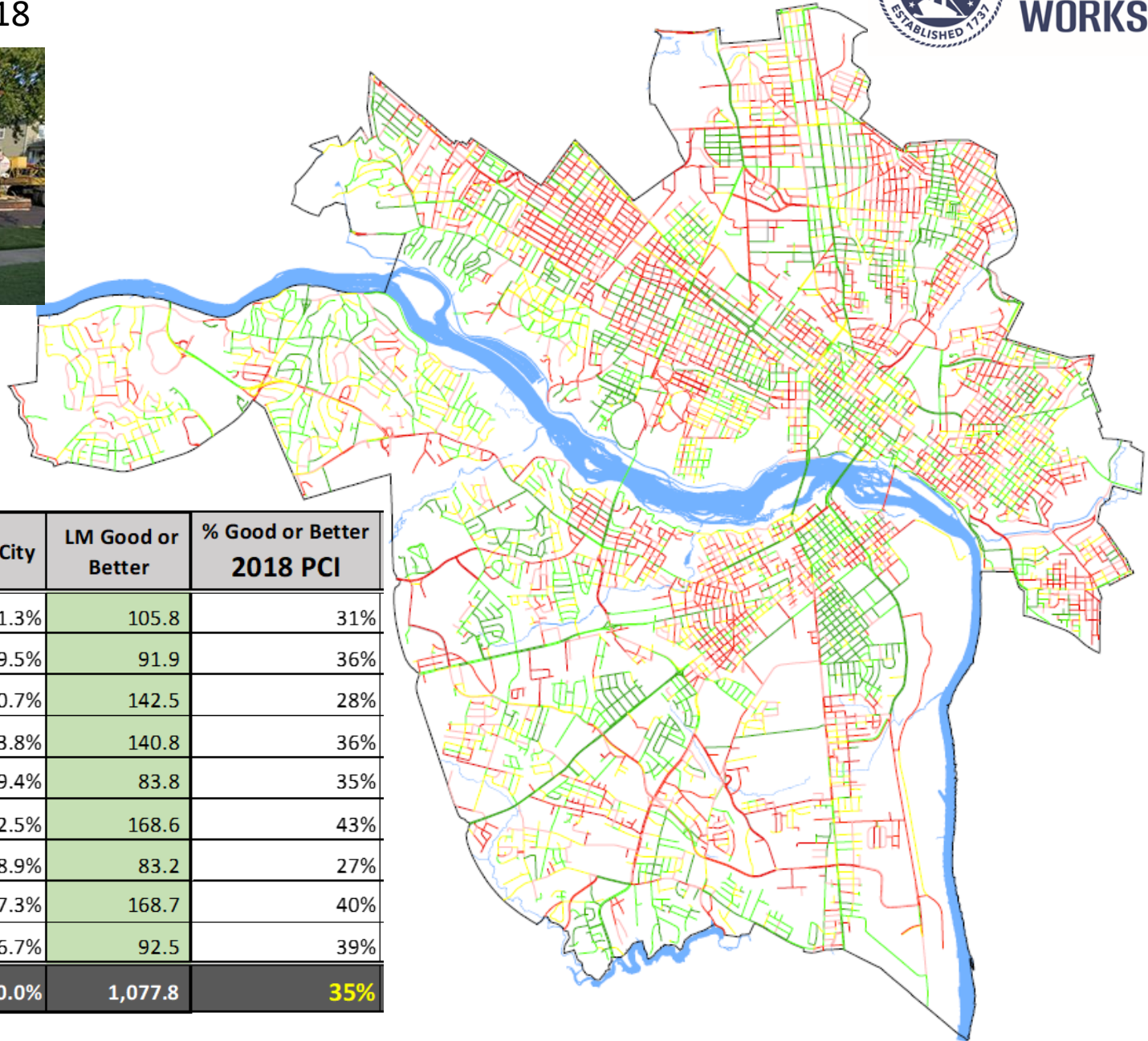


# Paving Condition Index (PCI)

City of Richmond 2018



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CD	Lane Miles	% of the City	LM Good or Better	% Good or Better 2018 PCI
1	296.8	11.3%	105.8	31%
2	249.6	9.5%	91.9	36%
3	280.4	10.7%	142.5	28%
4	362.1	13.8%	140.8	36%
5	246.1	9.4%	83.8	35%
6	327.5	12.5%	168.6	43%
7	233.0	8.9%	83.2	27%
8	454.2	17.3%	168.7	40%
9	177.1	6.7%	92.5	39%
<b>Totals</b>	<b>2,626.8</b>	<b>100.0%</b>	<b>1,077.8</b>	<b>35%</b>

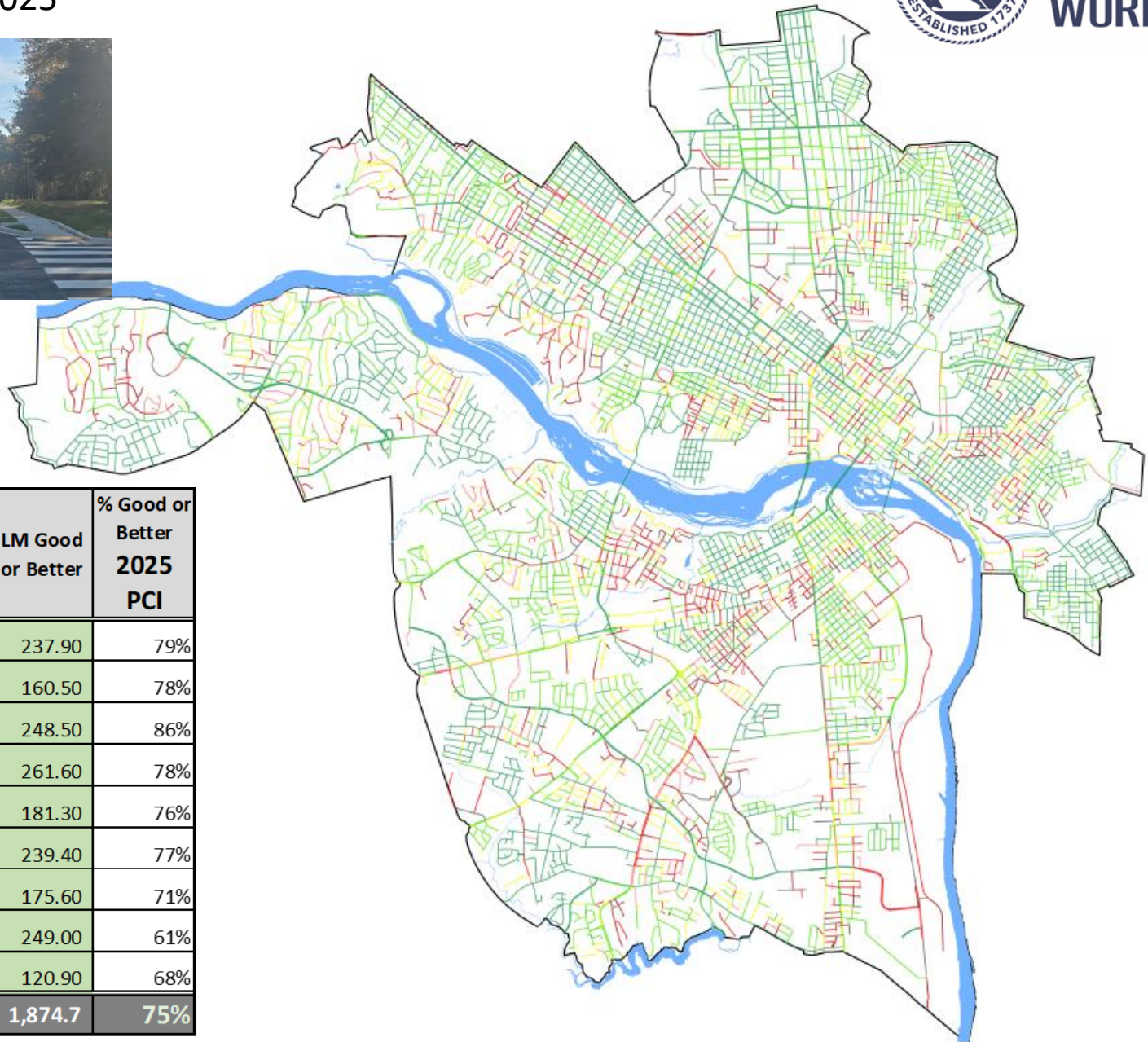
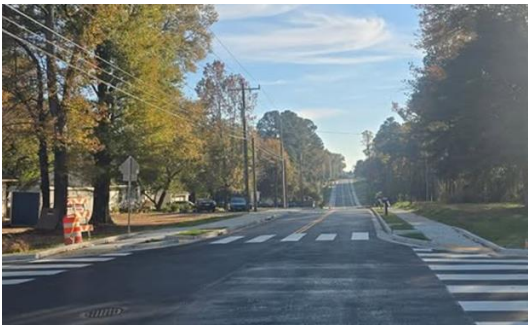


# Paving Condition Index (PCI)

City of Richmond 2025



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CD	Total	% of the City	LM Good or Better	% Good or Better 2025 PCI
1	302.8	12.0%	237.90	79%
2	206.9	8.2%	160.50	78%
3	290.4	11.5%	248.50	86%
4	334.9	13.3%	261.60	78%
5	238.4	9.5%	181.30	76%
6	311.6	12.4%	239.40	77%
7	246.8	9.8%	175.60	71%
8	405.6	16.1%	249.00	61%
9	177.2	7.0%	120.90	68%
<b>Totals</b>	<b>2,514.6</b>	<b>100.0%</b>	<b>1,874.7</b>	<b>75%</b>



# Department of Public Works

## Major Construction Projects Briefing



### Milling and Overlay Projects

- This process is a road construction and maintenance technique that involves removing the top 1-2 inches of asphalt and replacing it with a new layer.
  - Typically occurs on Arterial and Collector Streets
  - Estimated Cost **\$19 - 23 per square yard (20% increase from FY24)**
  - Life expectancy of 7-10 years



Milling and Overlay Operation

### Heat Scarification and Slurry Projects

- Heat scarification is a process that uses heat to soften and remove the top layer of asphalt pavement, then remixes the material with a rejuvenating agent and reapply it to the roadway surface.
- Slurry Seal Program – after the heat scarification process, the street surface, albeit smooth, is left porous. Therefore, it is typically followed by an emulsified asphalt slurry application to seal and prolong the life of the surface.
  - Typically occurs on Collector and Neighborhood Streets
  - Estimated Cost **\$10 - 12 per square yard (20% increase from FY24)**
  - Life expectancy of 7 years



Heat Scarification Operation

### Annual Budget and Accomplishments – 30-40 areas annually

- The program averages nearly 200 lane miles per year
- Consist of Paving, Bike Lanes, Speed Tables, and Striping
- These programs are typically funded accordingly
  - \$5,000,000 CVTA
  - \$10,000,000 GO Bonds CIP
  - \$5,000,000 Public Utilities (final restoration)
  - \$1,500,000 State of Good Repair (VDOT)



Completed Slurry Seal Application

# Paving Program FY2026

## FY2025 & FY2026 Comparison



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CD	Project Description	SY	MLM	Unit Cost	Total
1	Cary Street Road	48,148.0	7.5	\$ 21.00	\$ 1,011,108.00
1	River Road	16,103.1	2.5	\$ 21.00	\$ 338,165.33
1	Thompson Street	4,321.8	0.7	\$ 21.00	\$ 90,757.33
1	Westmoreland Place	28,480.3	4.4	\$ 18.25	\$ 519,766.02
2	Berrington Ct	1,550.0	0.2	\$ 21.00	\$ 32,550.00
2	Floyd Ave	1,163.6	0.2	\$ 21.00	\$ 24,434.67
3			-	\$ 11.00	\$ -
4	Pineway Dr	3,676.4	0.6	\$ 21.00	\$ 77,205.33
4	Riverside Dr	3,496.0	0.5	\$ 21.00	\$ 73,416.00
4	Southampton Area	34,353.1	5.3	\$ 11.00	\$ 377,884.21
4	Westlake Hills	26,074.2	4.0	\$ 18.25	\$ 475,854.52
5	Woodland Heights	16,848.2	2.6	\$ 18.25	\$ 307,480.02
5	Swansboro Area	27,302.1	4.2	\$ 11.00	\$ 300,323.21
6	8th St	15,585.8	2.4	\$ 24.50	\$ 381,851.56
6	Commerce Rd	126,835.6	19.7	\$ 24.50	\$ 3,107,471.11
6	N 11th St	4,560.1	0.7	\$ 21.00	\$ 95,762.33
7	Chimborazo Area	60,344.4	9.4	\$ 18.25	\$ 1,101,286.03
7	Church Hill North	49,352.4	7.6	\$ 18.25	\$ 900,682.03
7	E Marshall st	10,509.1	1.6	\$ 24.50	\$ 257,473.22
7	E Richmond Rd	12,083.3	1.9	\$ 21.00	\$ 253,750.00
7	N 28th St	1,415.7	0.2	\$ 24.50	\$ 34,683.83
7	N 31st St	28,424.0	4.4	\$ 24.50	\$ 696,388.00
7	U Street	2,331.0	0.4	\$ 24.50	\$ 57,109.50
8	Walmsley Area	36,649.1	5.7	\$ 11.00	\$ 403,140.21
9	South Garden Area	64,872.1	10.1	\$ 11.00	\$ 713,593.21
6&8	Bellemead RD	28,603.3	4.4	\$ 24.50	\$ 700,781.67
<b>Totals</b>		<b>653,082.9</b>	<b>101.2</b>		<b>\$ 12,332,917.34</b>

FY2026 Paving Program					
CD	SY	LM	Cost	%	PCI
1	97,053.2	15.0	1,959,796.7	14.9%	73%
2	2,713.6	0.4	56,984.7	0.4%	78%
3	-	-	-	0.0%	85%
4	67,599.8	10.5	1,004,360.1	10.4%	66%
5	44,150.3	6.8	607,803.2	6.8%	70%
6	161,283.1	25.0	3,935,475.8	24.7%	77%
7	164,460.0	25.5	3,301,372.6	25.2%	72%
8	50,950.8	7.9	753,531.0	7.8%	58%
9	64,872.1	10.1	713,593.2	9.9%	69%
<b>Total</b>	<b>653,082.9</b>	<b>101.2</b>	<b>\$ 12,332,917.34</b>	<b>100.0%</b>	

FY2025 Paving Program					
CD	SY	LM	Cost	%	PCI
1	192,056.1	29.8	\$ 2,528,201.39	16.0%	73%
2	52,029.1	8.1	\$ 690,783.89	4.3%	78%
3	121,804.9	18.9	\$ 1,441,016.59	10.1%	85%
4	152,295.4	23.6	\$ 1,725,723.45	12.7%	66%
5	61,052.6	9.5	\$ 763,158.34	5.1%	70%
6	39,023.3	6.0	\$ 663,396.67	3.2%	77%
7	168,341.8	26.1	\$ 2,485,058.95	14.0%	72%
8	376,521.3	58.3	\$ 5,537,526.00	31.4%	58%
9	37,667.0	5.8	\$ 753,932.58	3.1%	69%
<b>Total</b>	<b>1,200,791.5</b>	<b>186.1</b>	<b>\$ 16,588,797.86</b>	<b>100.0%</b>	

- Hull Street Road
- Richmond Hwy
- South Garden Area
- N. Barton Heights
- Oregon Hill Area
- Westbrook Avenue
- Union Hill Area
- 18<sup>th</sup> St/Oliver Hill Way

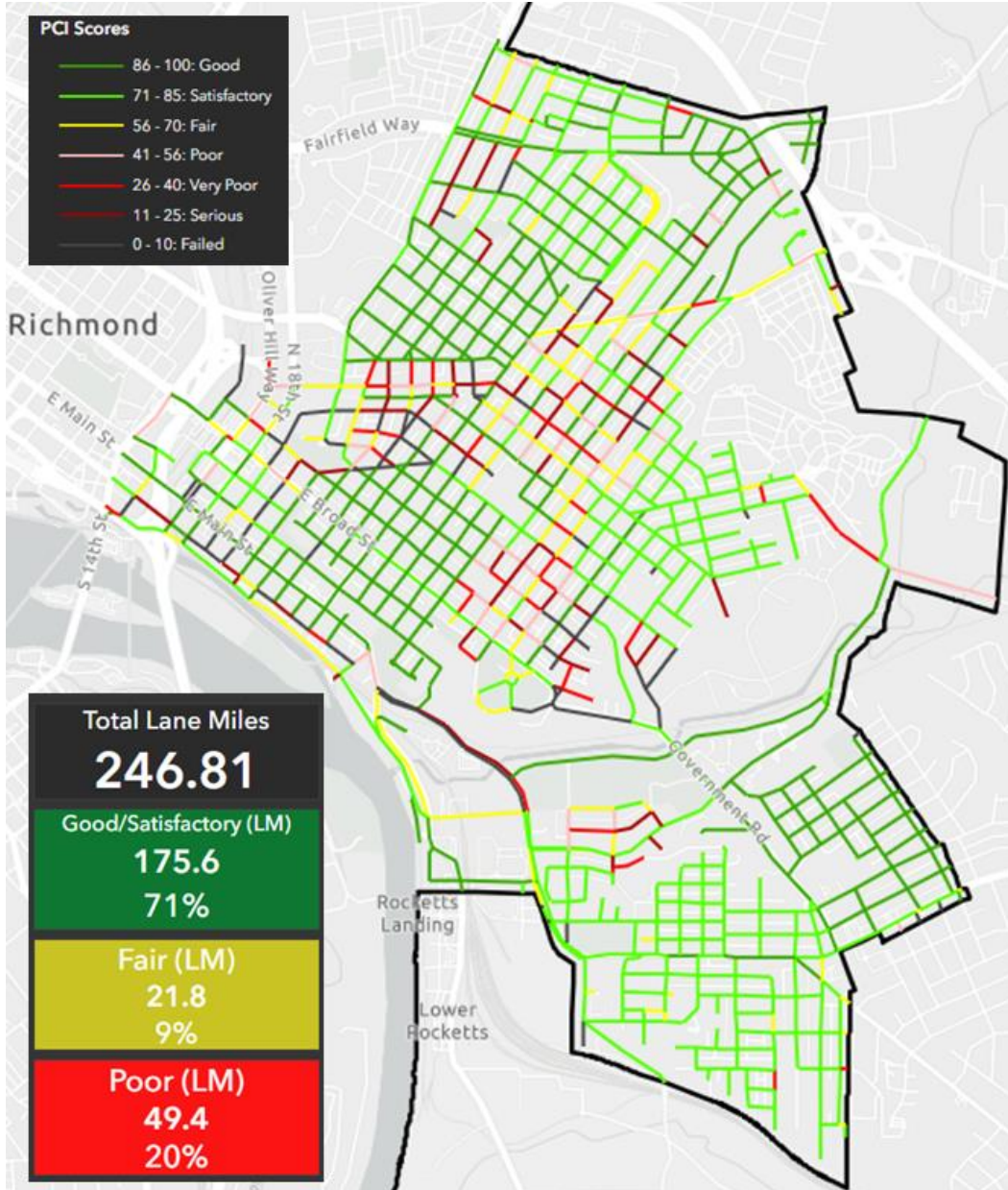


# Pavement Condition Rating (PCI)

7<sup>th</sup> District - City of Richmond



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FY2024 Paving Program				
CD	SY	LM	Cost	% LM
1	227,836.0	35.3	2,692,713.7	19.7%
2	87,363.0	13.5	1,266,868.1	7.6%
3	76,637.0	11.9	1,166,717.6	6.6%
4	376,096.0	58.3	3,949,804.6	32.5%
5	76,059.5	11.8	914,235.2	6.6%
6	36,633.0	5.7	457,660.4	3.2%
7	86,783.0	13.4	1,165,405.2	7.5%
8	91,555.5	14.2	1,451,513.9	7.9%
9	97,215.0	15.1	1,168,139.8	8.4%
<b>Total</b>	<b>1,156,178.0</b>	<b>179.2</b>	<b>\$ 14,233,058.44</b>	<b>100.0%</b>

FY2023 Paving Program				
CD	SY	LM	Cost	%
1	144,943.3	22.5	\$ 1,436,367.00	10.3%
2	206,506.6	32.0	\$ 2,187,264.00	14.6%
3	249,691.0	38.7	\$ 3,102,987.00	17.7%
4	125,240.9	19.4	\$ 1,531,100.00	8.9%
5	72,325.7	11.2	\$ 672,628.00	5.1%
6	81,276.6	12.6	\$ 755,872.00	5.8%
7	254,854.3	39.5	\$ 2,591,525.00	18.1%
8	111,406.0	17.3	\$ 1,276,536.00	7.9%
9	163,894.0	25.4	\$ 1,976,919.00	11.6%
<b>Total</b>	<b>1,410,138.4</b>	<b>218.5</b>	<b>\$ 15,531,198.00</b>	<b>100.0%</b>

FY2022 Paving Program				
CD	SY	LM	Cost	%
1	149,442.5	23.2	\$ 2,172,637.50	11.8%
2	88,942.5	13.8	\$ 1,310,512.50	7.0%
3	133,000.0	20.6	\$ 2,030,740.00	10.5%
4	183,420.0	28.4	\$ 1,547,703.60	14.5%
5	29,502.0	4.6	\$ 339,273.00	2.3%
6	233,600.5	36.2	\$ 2,427,973.74	18.5%
7	179,282.0	27.8	\$ 2,653,583.42	14.2%
8	110,608.0	17.1	\$ 1,423,164.00	8.8%
9	156,100.0	24.2	\$ 1,689,825.00	12.4%
<b>Total</b>	<b>1,263,897.5</b>	<b>195.9</b>	<b>\$ 15,595,412.76</b>	<b>100.0%</b>





# SIDEWALKS

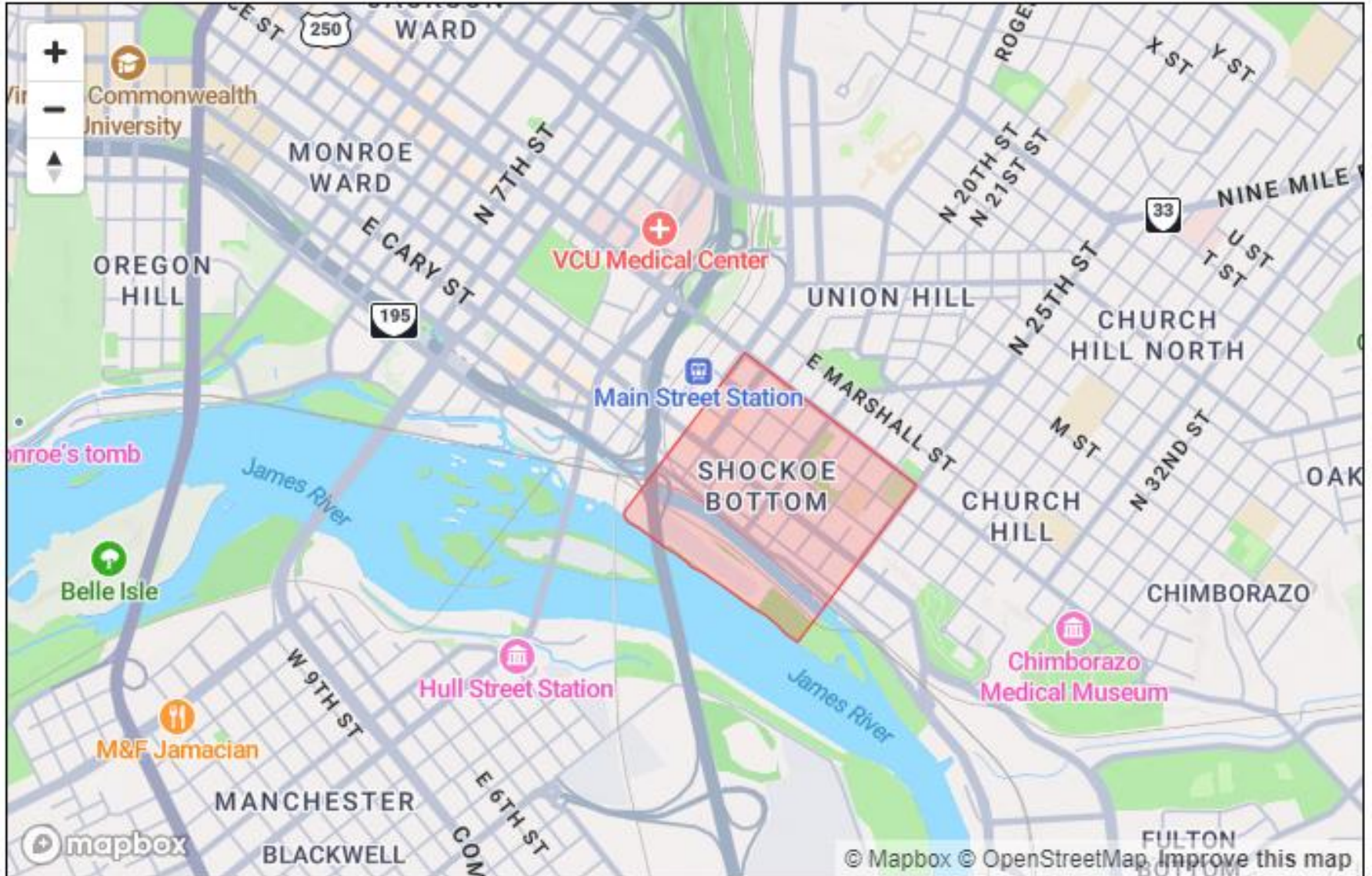




# 1742

Richmond is incorporated as a city

0.23 SQUARE MILES





# 1867

Richmond annexed **Lower Fan, Oregon Hill, Belle Isle, Church Hill, Union Hill**

3 SQUARE MILES ADDED





# 1942

Richmond annexed **Westover Hills, Windsor Farms, Bryan Park, Edgewood, Mechanicsville Tpke, Port of Richmond**

17 SQUARE MILES ADDED

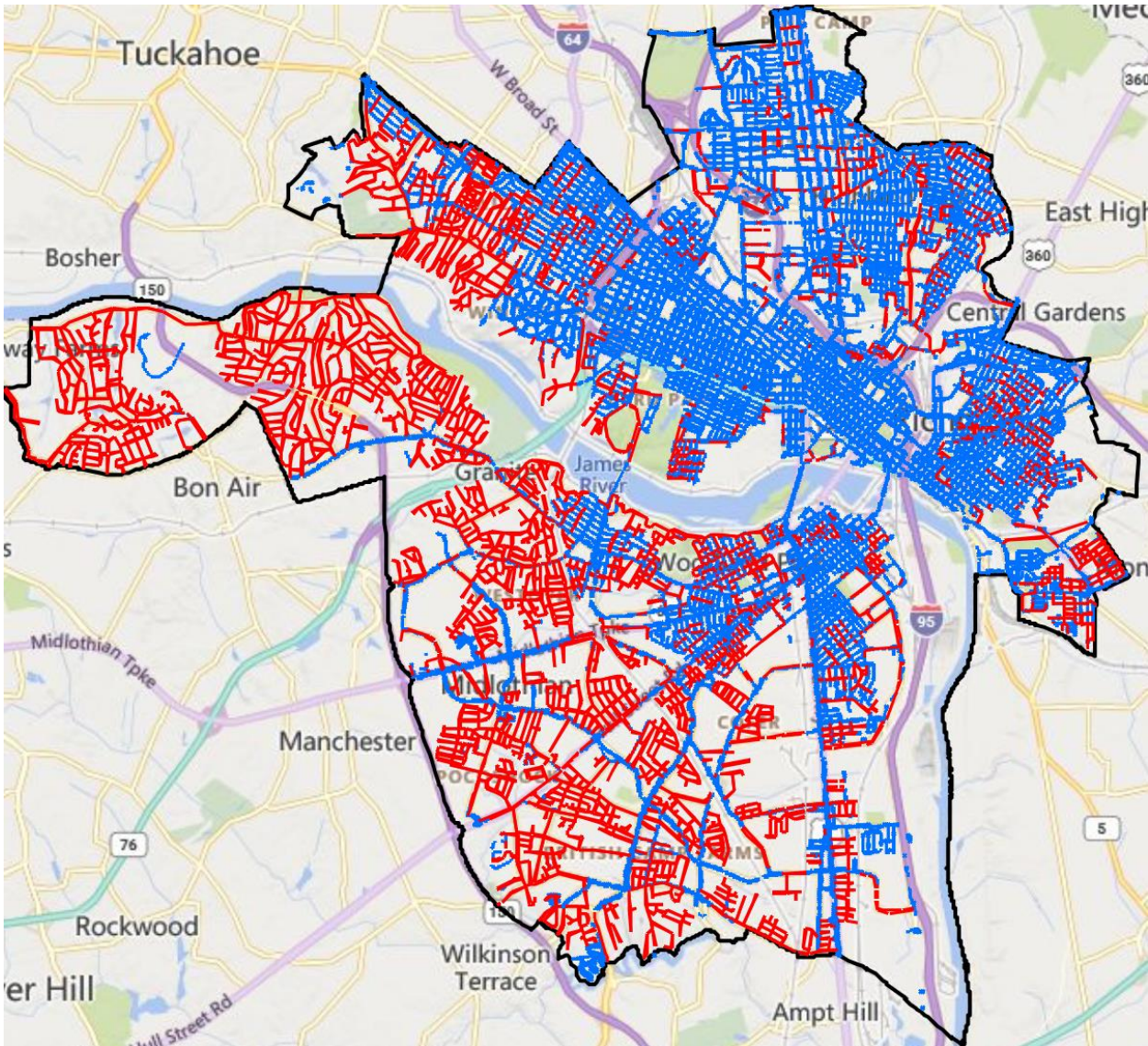




# Sidewalk CIP and Maintenance



Existing Sidewalks **BLUE**, Missing Sidewalks **RED**



Council District	% of the City	Lane Miles per District
1	13.8%	104.673
2	11.9%	90.220
3	13.9%	105.454
4	3.8%	28.969
5	13.6%	103.476
6	15.7%	119.226
7	15.3%	116.554
8	9.2%	69.909
9	3.0%	22.479
<b>Total LM</b>		<b>760.960</b>



# Sidewalk Maintenance

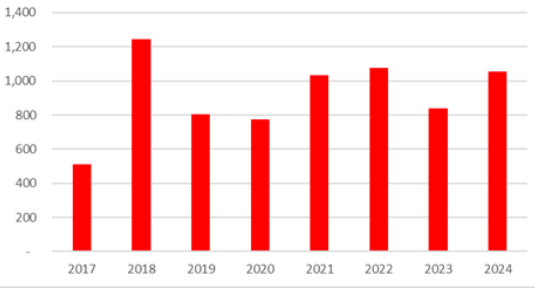
Sidewalk Maintenance **Request** and **Completions** 2017-2024



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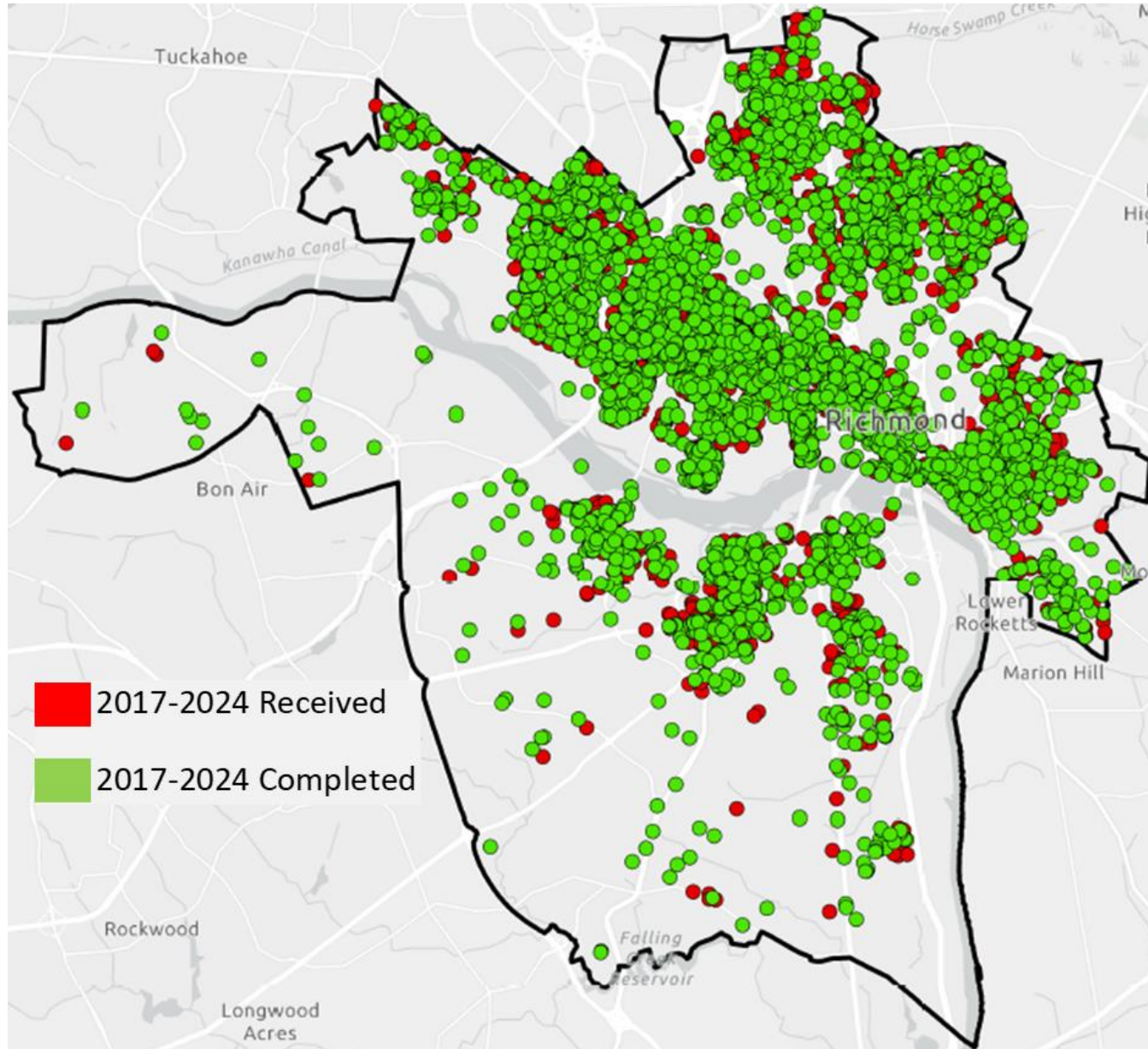
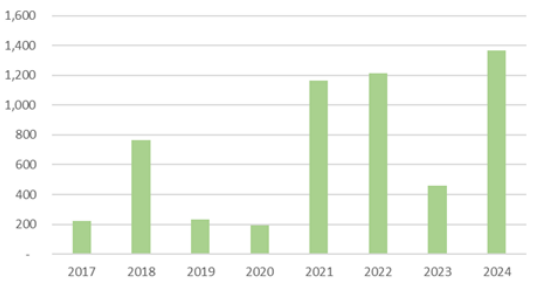
## Total Received – 7,333

Sidewalk Request Received



## Total Completed – 5,625

Sidewalk Request Closed





# VDOT High Injury Network KA Crash Data – Richmond 2015 - 2023



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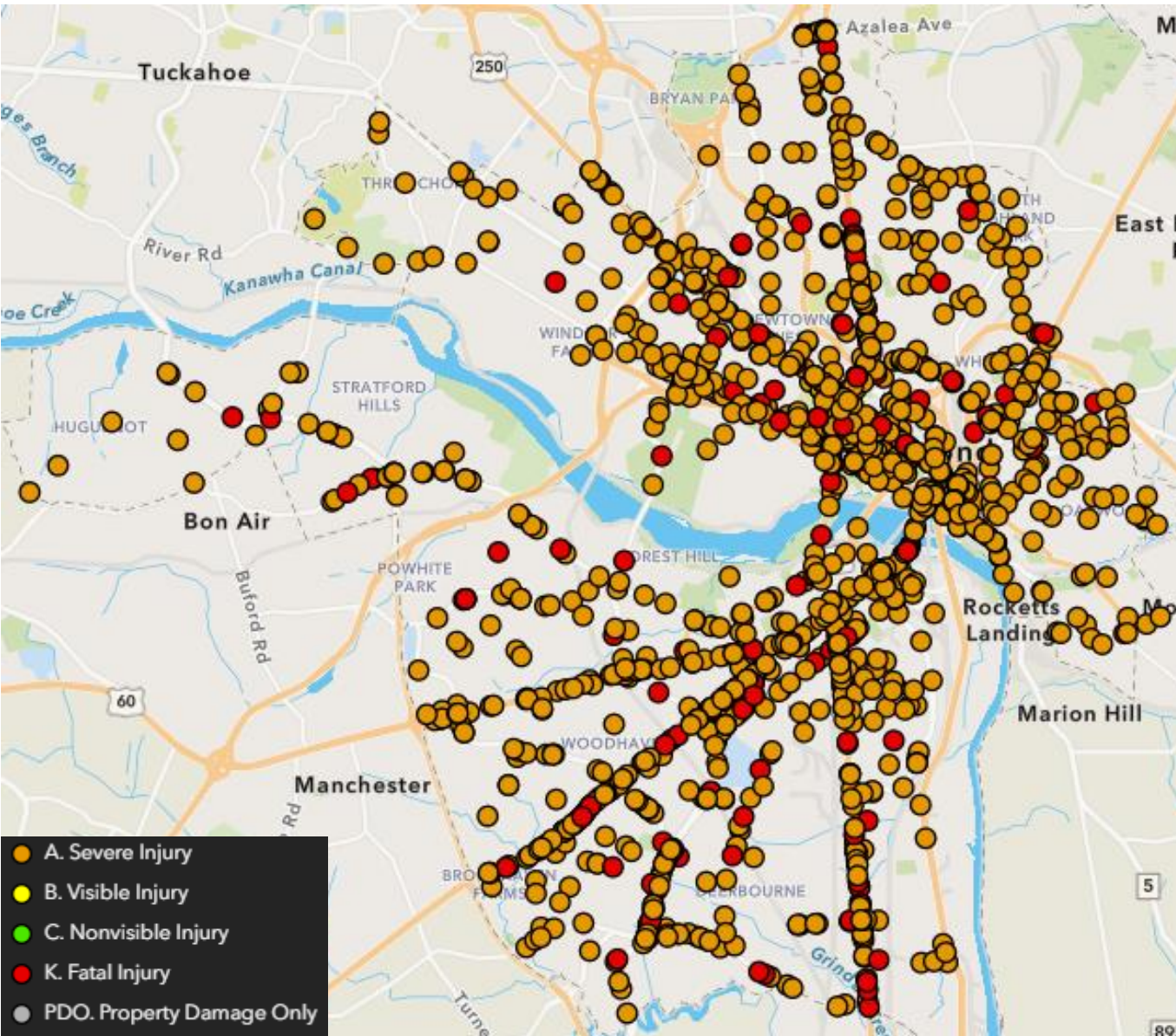
## City/VDOT Accident Data

- 39,331 Accidents
- 1,564 Severe Injuries
- 146 Fatalities



## Factors in Prioritizing Calming Projects:

- » Crash history;
- » Traffic volumes;
- » Road speed profile
- » Length of road segment
- » Distance to the nearest traffic control device





# Citywide 2025 Speed Management Study

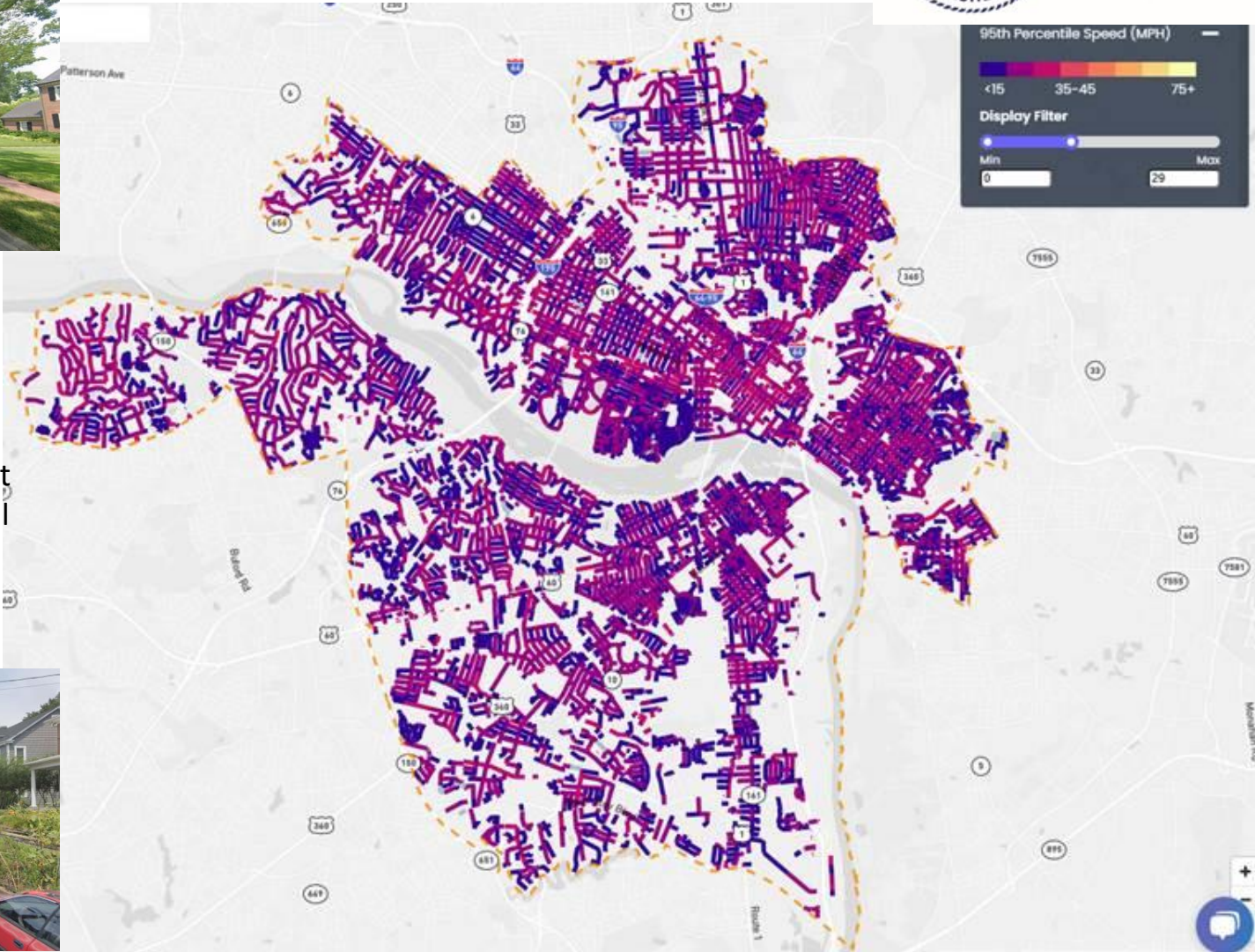
## 95<sup>th</sup> Percentile Data (*UrbanSDK*)



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This illustration is indicating that **95%** of the people are driving at or below the designed speed for these streets. These are the areas where neighborhood request come from for the occasional speeder that can have negative impacts especially on perception.



Street Design is accurate and 95% of the people are driving at or below the designed speed limit

# Citywide 2025 Speed Management Study

## 85<sup>th</sup> Percentile Data (*UrbanSDK*)



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This illustration is indicating that **85%** of the people are driving at or below the designed speed for these streets, MEANING 15% are driving TOO FAST...WHY, because the road is designed for a higher speed. THIS is where we are trying to re-design and engineer the High Injury Network to reduce serious injuries and fatalities.



Street design undergoing modifications to change the vantage point of the driver

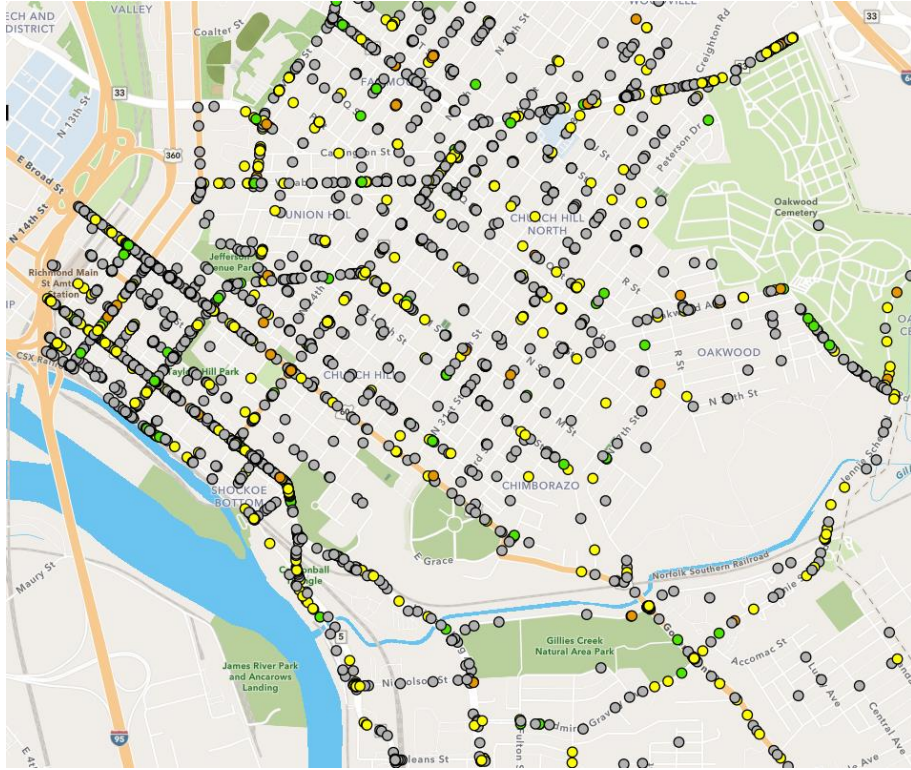


# VDOT 7<sup>th</sup> District Crash Data SnapShot

2015 - 2023

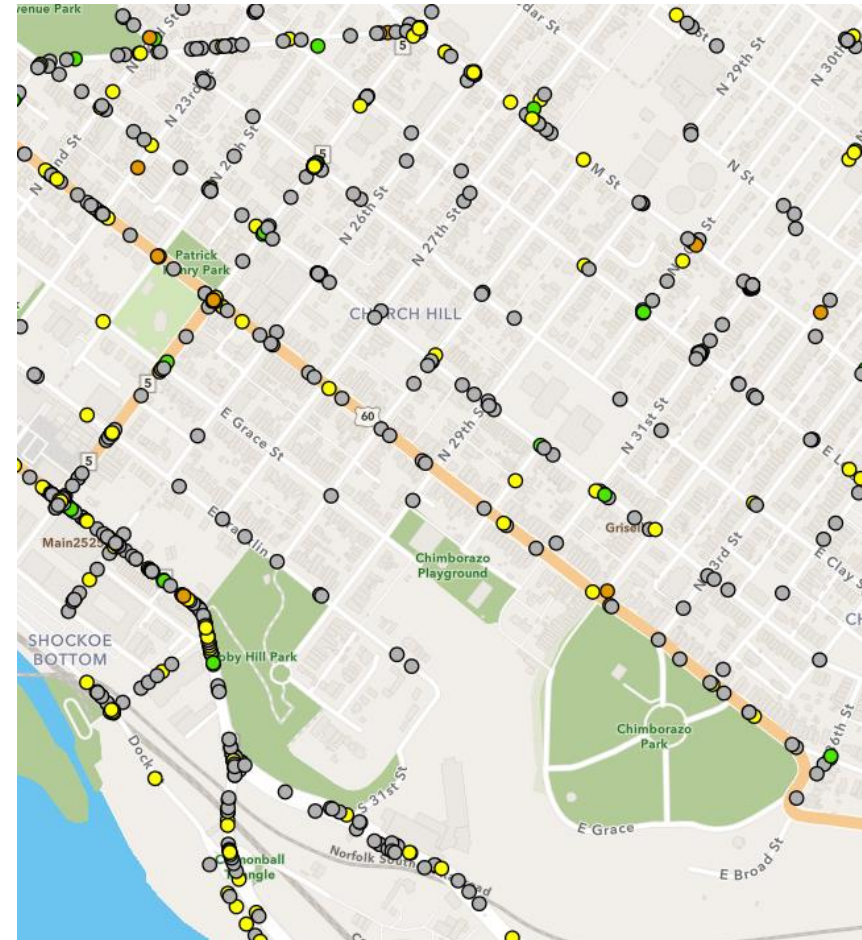


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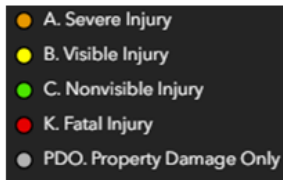
## Neighborhoods

Shockoe Bottom, Church Hill and  
Chimborazo Areas



## 3,440 Total 7<sup>th</sup> CD Accidents

- 2,372 Property Damage Only
- 153 Non-Visible Injury
- 803 Visible Injury
- 108 Severe Injury
- 4 Fatalities





# Speed Tables and Traffic Calming Citywide

## 62 Different 7<sup>th</sup> District Traffic Calming Projects



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When placed in series, speed tables should be installed between 600 feet and 750 feet apart.

Speed tables should be placed at least 5 feet from a driveway, 20 feet from an alley, 300 feet from a STOP or YIELD sign, 600 feet from a traffic signal, and 750 feet from another traffic calming device.

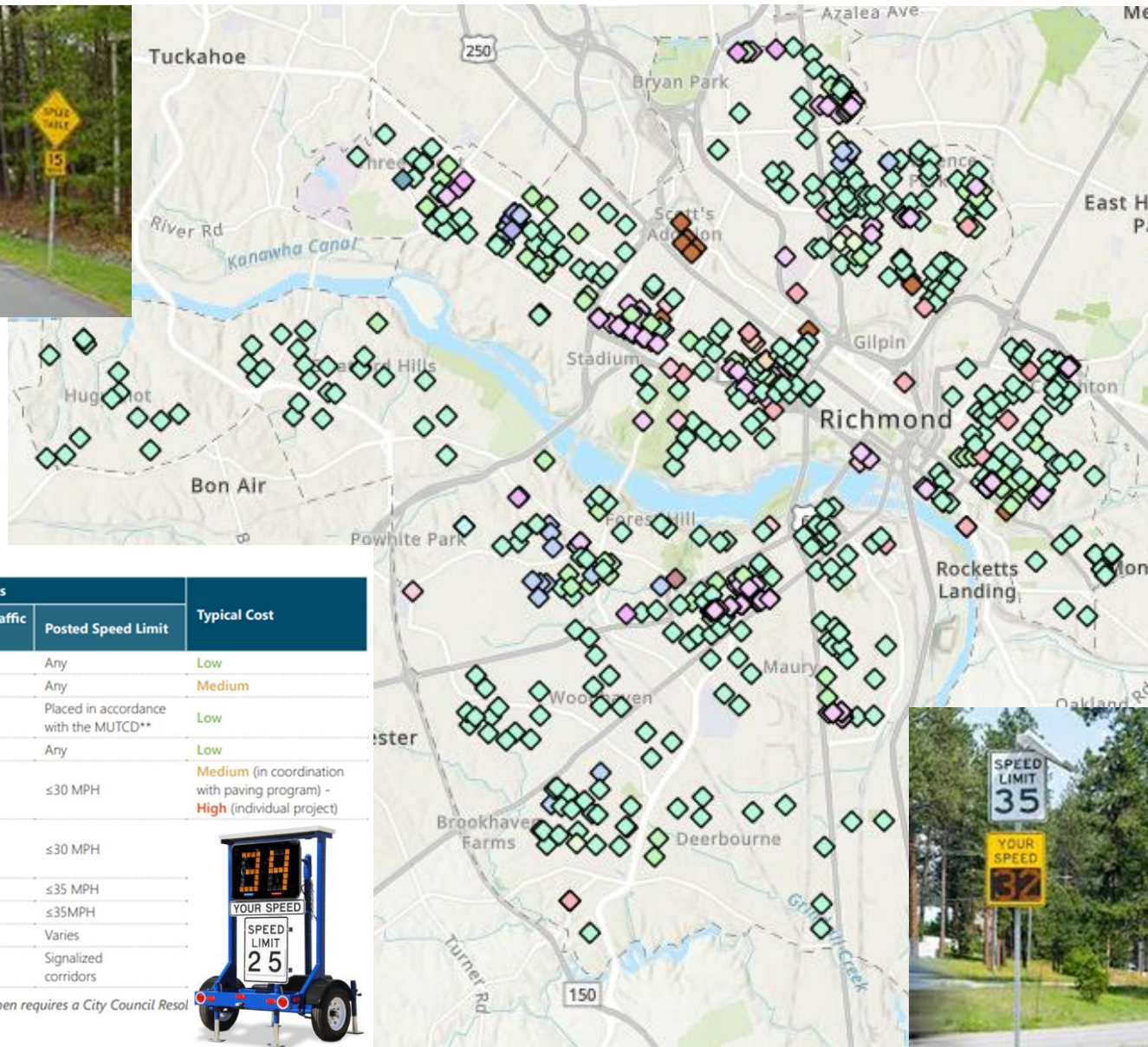


Table 1. Summary of Traffic Calming Strategies

	Strategies	Page #	Residential Roads		Typical Cost
			Average Daily Traffic (ADT)	Posted Speed Limit	
LEVEL 1	Education	14	NA	Any	Low
	Enforcement	16	≥500 vpd	Any	Medium
	Signing	19		Placed in accordance with the MUTCD**	Low
	Enhanced Speed Program*	23	Any	Any	Low
	Speed Tables	24	≤7,500 vpd	≤30 MPH	Medium (in coordination with paving program) - High (individual project)
LEVEL 2	Raised Crosswalks	26	≤7,500 vpd	≤30 MPH	
	Neighborhood Traffic Circles	27	≤7,500 vpd	≤35 MPH	
	Curb Extensions	29	≤16,000 vpd	≤35MPH	
	Roadway Reconfiguration /Road Diet	31	<16,000 VPD	Varies	
	Traffic Signal Retiming	33		Signalized corridors	



\* certain criteria as established by Richmond City Council must be met and then requires a City Council Resolution

\*\* MUTCD - Manual on Uniform Traffic Control Devices





Questions and  
Comments





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**Transportation Projects are funded at \$656M:**

- Complete Streets at \$105M
- Fall Line Trail construction at \$58.4M
- Major Bridge Improvements at \$160M
- Major Arterial Upgrades such as Hull Street funded at \$50M

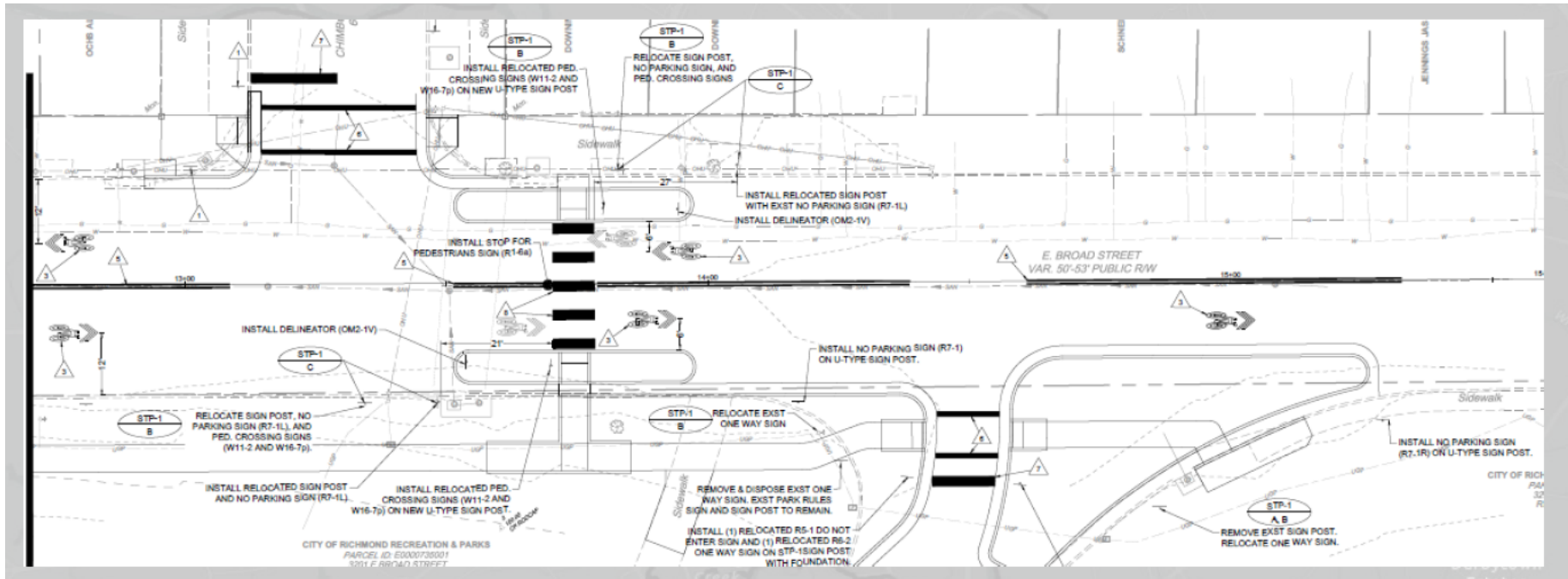
<b>FY 2025 - 2029 Capital Improvement Program Funding Sources Detail</b>						
<b>General Fund</b>	<b>Adopted</b>	<b>Planned</b>				
<b>Sources of Funds</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>TOTAL</b>
<b>Federal/State/Regional Transportation Funds</b>						
Central Virginia Transportation Authority (CVTA)	6,500,000	17,035,303	20,084,951	15,042,828	21,106,014	79,769,096
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	6,236,000	—	—	—	—	6,236,000
Federal - Other	3,770,000	2,328,000	—	—	—	6,098,000
Highway Safety Improvement Program (HSIP)	8,444,502	14,428,000	749,000	—	—	23,621,502
Metropolitan Planning Organization - Regional Surface Transportation Program (MPO RSTP)	4,722,139	9,724,000	—	—	—	14,446,139
Revenue Reduction - State	(422,214)	—	—	—	—	(422,214)
Revenue Reduction - TAP	(309,000)	—	—	—	—	(309,000)
Revenue Sharing	2,091,391	349,000	—	—	—	2,440,391
Smart Scale	9,584,000	27,268,000	15,622,000	37,667,000	33,572,000	123,713,000
State of Good Repair (SGR)	1,423,000	812,000	—	—	—	2,235,000
<b>Subtotal: Federal/State/Regional Transportation Funds</b>	<b>42,039,818</b>	<b>71,944,303</b>	<b>36,455,951</b>	<b>52,709,828</b>	<b>54,678,014</b>	<b>257,827,914</b>



# Chimborazo Park ROW Safety Improvements



**Description & Scope:** pedestrian improvements along East Broad Street at, and between the roadway's intersections with North 33rd Street, Chimborazo Boulevard, and North 34th Street, including installation of new sidewalk along the Southeast-Bound side of East Broad Street, ADA-compliant curb ramps, curb extensions, pavement removal, and roadway width reduction. **Projected Summer 2025 start date.**





# Government Road Safety Improvements



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**Description & Scope:** geotechnical study, design and long-term stabilization of the Chimborazo Park slope failure in the vicinity of Government Road. Phase I is estimated at \$1.35 million to stabilize Government Road and Phase II is estimated at \$2.76 million to stabilize Park Access Road. Phase III is estimated at a cost of \$3.3 million to stabilize remaining part of the Government Road in the future. **Projected Fall 2025 Start Date**

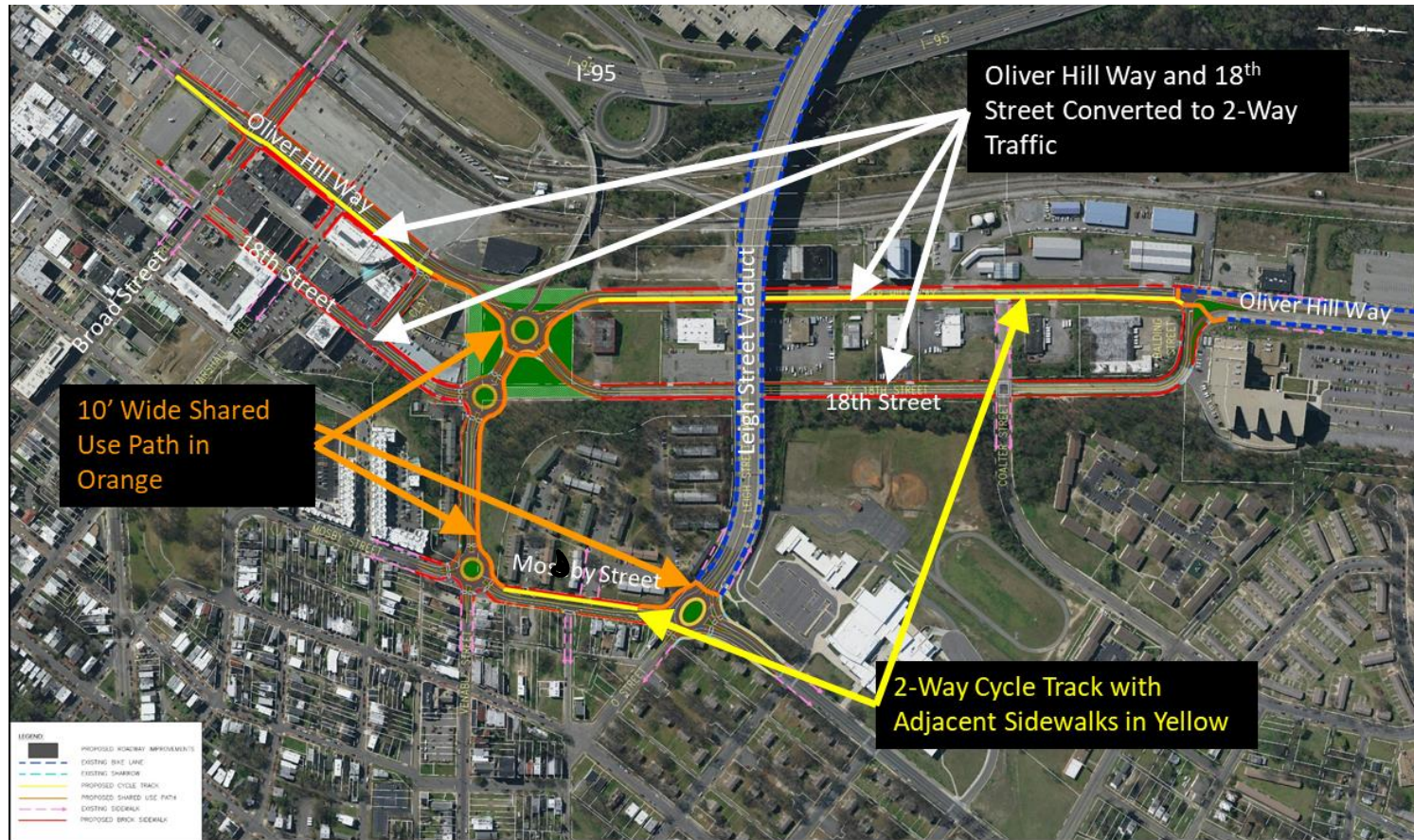




# Shockoe Valley Streets Project Overview



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This project includes improvements in the vicinity of the Broad Street interchange with I-95. Some of the corridors and intersections improvements based on traffic analysis will include Oliver Hill and Venable Street (newly proposed roundabout or traffic signal), Venable Street and 18th Street (new roundabout), Mosby and Venable Street (roundabout), 17th Street and Broad Street (new traffic signal), the Martin Luther King Bridge, Mosby and “O” Street (new roundabout). Some streets, like 18<sup>th</sup> Street from Balding to Broad and Oliver Hill from Broad might be converted, after traffic analysis, from one-way to two-way traffic.



# Department of Public Works

## Major Streetscape Construction Projects

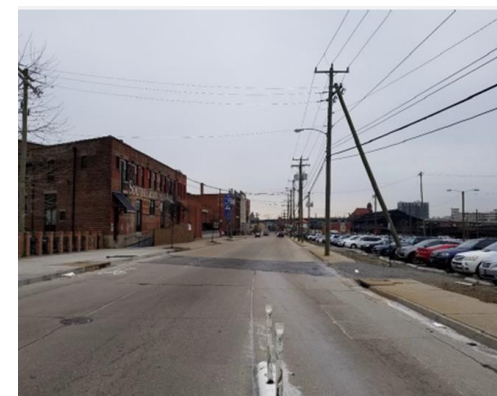


### Streetscape Projects

A streetscape project is a program that aims to improve the design and conditions of a street to accommodate the needs of all users.

Streetscape projects can include a variety of improvements, such as:

- Roadway: Narrowing of travel lanes for traffic calming
- Sidewalks: Widening sidewalks and improving connectivity
- Lighting: Upgrade and increasing of street lighting
- Landscaping: Adding trees or other landscaping
- Street furniture: Adding benches, garbage cans, etc.
- Signage: Improving way-finding, directional, or regulatory signage
- Bicycling infrastructure: Adding bicycle lanes
- Street crossing safety: High Visibility Crosswalks
- Traffic calming: Speed Tables, Bump Outs, Narrowing ROW



PROJECT	TOTAL PROJECT	Category Tabulation
Belvidere Street Gateway- Phase IV, Rowe St Section A, Idle	\$718,000.00	\$21,826,862.00
Biotech Phase 3 (VBTP Streetscape)	\$1,220,000.00	
Hull Street Streetscape PE & CN (Landscape, Lighting, Signa	\$4,061,000.00	
Jefferson Ave. Improvements -Phase II	\$1,395,000.00	
Leigh Street Streetscape	\$6,608,000.00	
Maury StreetScape Project	\$4,618,000.00	
Nicholson Street Streetscape	\$1,292,000.00	
North Patterson Ave	\$302,862.00	
Richmond Highway Phase II	\$0.00	
Scotts Addition BRT Street Scape Project	\$1,612,000.00	



# Department of Public Works

## Multi-modal Crossing Improvements



Intersection and multi-modal crossing upgrades can improve safety and traffic flow for pedestrians, bicyclists, and drivers. Some common upgrades include

- **Improved visibility**
- **Raised intersections**
- **Improved signal timing**
- **Better bicycle facilities**

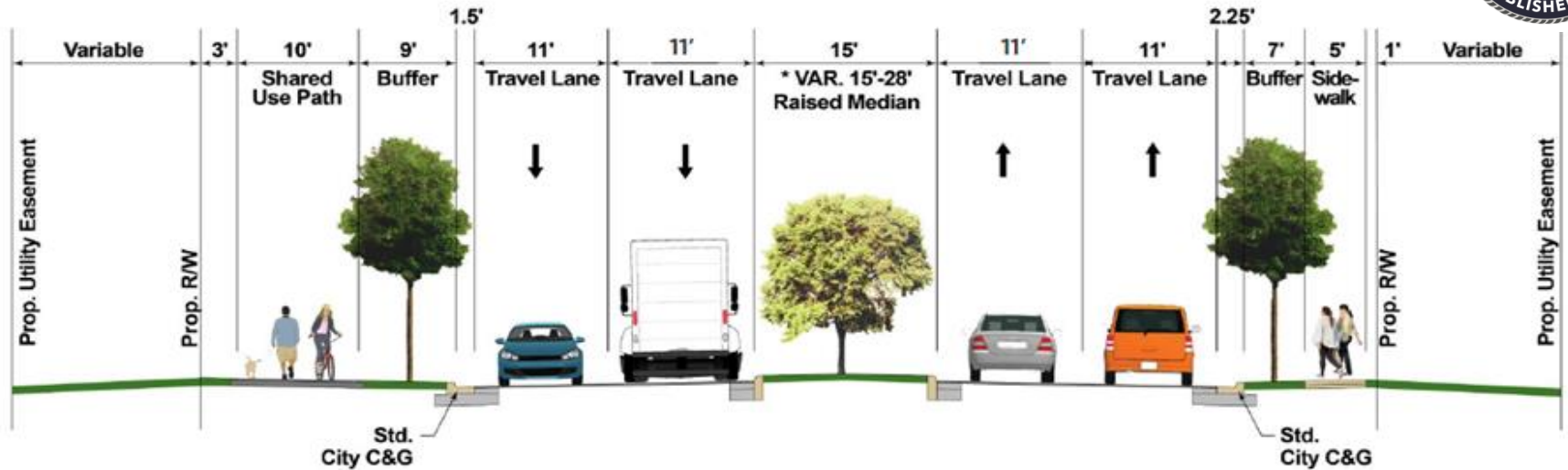


PROJECT	TOTAL PROJECT	Category Tabulation
21st St @ Main St Traffic Signal Upgrade	\$375,000.00	\$59,402,083.00
32nd St @ Midlothian Tpke	\$425,000.00	
7th St @ Hospital St New Traffic Signal	\$975,000.00	
Automated Traffic Signal Performance Measures (ATSPM)	\$7,424,000.00	
Belt Blvd & Hull St Hull Street (Bus Transfer Center) - Pedestr	\$1,555,352.00	
Broad St @ Commonwealth Ave Traffic Signal Upgrade	\$425,000.00	
Brook Rd @ Westbrook Ave Traffic Signal Improvements	\$500,000.00	
Chamberlayne Ave @ Bacon St New Traffic Signal	\$750,000.00	
Chamberlayne Ave @ School St Traffic Signal Upgrade	\$400,000.00	
Cumberland St @ Laurel St New Traffic Signal	\$460,000.00	
E Main St./Williamsburg Ave. Intersection Improvement	\$2,370,000.00	
Forest Hill Ave @ Bainbridge St/Broad Rock Rd Traffic Signal	\$375,000.00	
HVSB Systemic Improvements - Signal Controlled Intersection	\$4,737,000.00	
Malvern Ave @ Cary St Traffic Signal Improvements	\$500,000.00	
New Traffic Control Signals	\$2,111,818.00	
Patterson Ave @ Pepper Ave New Traffic Signal	\$400,000.00	
Patterson Ave @ St. Christopher Rd New Traffic Signal	\$400,000.00	
Richmond Highway - Rte 1 Intersection Improvement Harwood	\$11,637,000.00	
Richmond Signal System (RSS) Smart City Traffic Signals Co	\$7,266,535.00	
Richmond Signal System Phase IV - Remote Control	\$10,383,000.00	
Semmes Avenue Forest Hill Int./Ped. Safety UPC: 113445 & 1	\$2,397,990.00	
Systemic Improvements - Stop Controlled Intersections	\$3,534,388.00	



# Department of Public Works

## Bridge Replacement and Complete Streets Projects



PROJECT	TOTAL PROJECT	Category Tabulation
Arthur Ashe Blvd Bridge Replacement	\$23,000,000.00	\$64,134,879.00
Columbia St over Goodes Creek structure replacement	\$1,600,000.00	
E. Broad St over Abandoned RR spur	\$3,965,009.00	
E. Richmond Rd over Gillies Crk Bridge Replacement	\$1,800,000.00	
E. Richmond Rd over Stony Run Bridge Replacement	\$1,852,870.00	
Hull St over Manchester Canal	\$9,176,000.00	
Lombardy St over CSX Bridge replacement	\$15,941,000.00	
Lynhaven Ave over Broad Rock Creek Bridge Replacement	\$1,100,000.00	
Martin Luther King Bridge Repairs	\$5,700,000.00	
Hey Road Improvements	\$1,600,000.00	
Hull Street Improvements - VDOT Phase I	\$33,100,000.00	
Jahnke Road Improvement - PE, RW & CN	\$14,000,000.00	
Shockoe Valley Streets Improvement Project	\$31,846,000.00	

