

Richmond Regional Park & Ride Investment Strategy

RRTPO Policy Board Briefing & Action
December 5, 2019

Requested Action

RESOLVED, that the Richmond Regional Transportation Planning Organization adopts the *2019 Richmond Regional Park and Ride Investment Strategy Study* to be used as a comprehensive guide by participating entities to plan, design, fund and implement Park and Ride lots in the Richmond region.

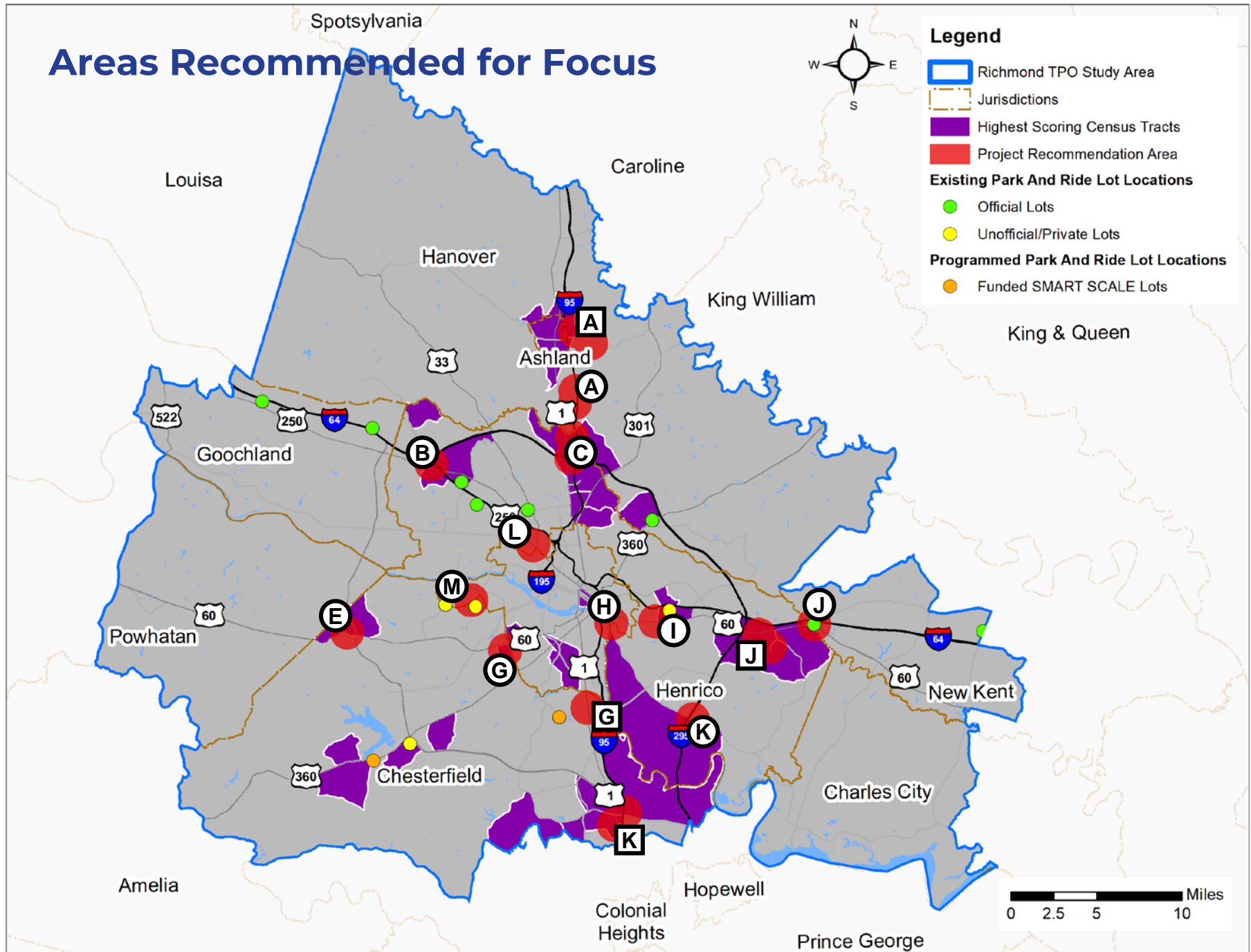
Project Scope

- Existing Conditions
- Needs Evaluation
- Project Recommendations
- Implementation Strategy
- Funding Needs and Potential Funding Sources

Project Recommendations

- P&R projects aligned with regional needs
- congestion relief, increased accessibility and multimodal connectivity
- short-, medium- and long-term recommendations
- strategies for funding and implementing
- focus on P&R for next Long-Range Transportation Plan (LRTP) for 2045

Areas Recommended for Focus



Recommended Lot Sizes

	Project Recommendation Area	Parking Spaces	Lot Area (Acres)
Ⓐ	I-95 at Lewistown Road near Lakeridge Parkway	200	1.4
Ⓐ	I-95 at Route 54 east of interchange	200	1.4
Ⓑ	I-64 at I-295 in Short Pump	320	2.2
Ⓒ	I-95 at I-295 near Virginia Center Commons	380	2.6
Ⓔ	US 60 at Route 288 near Westchester Commons	70	0.5
Ⓖ	Chippenham Parkway at Midlothian Turnpike	330	2.3
Ⓖ	Chippenham Parkway at US 1/US 301	270	1.9
Ⓗ	Eastern Pulse Terminus	130	0.9
Ⓘ	I-64 at S. Laburnum Avenue near US 60	120	0.8
Ⓙ	Bottoms Bridge	90*	0.6
Ⓙ	I-295 at US 60 near Technology Boulevard/Elko Road	120*	0.8
Ⓚ	I-95 at Route 10	250	1.7
Ⓚ	I-295 at Route 5	50	0.3
Ⓛ	Western Pulse Terminus	290	2.0
Ⓜ	Huguenot Road/Forest Hill Avenue/Chippenham Parkway	130	0.9

*Note: The recommended spaces for the project recommendation areas in Needs Area J are in addition to the existing 40 spaces at the Bottoms Bridge lot.

Unit Cost Ranges for Park and Ride Projects

Low Unit Cost	High Unit Costs
Typical Features/Amenities at Park and Ride Lot	
<ul style="list-style-type: none"> Lower-density lot Minimal earthwork required Minimal amenities No transit service 	<ul style="list-style-type: none"> Higher-density lot More significant earthwork required Greater number of amenities Transit service
Per Space Unit Cost	
\$9,500	\$21,000
Per space unit costs include PE, construction, lighting/landscaping, and earthwork	
Per Lot Unit Cost	
\$180,000	\$330,000
Per lot unit costs are in addition to per space costs and include stormwater management and electric charging	
Note: Costs reported in 2019 dollars.	

Recommended Lot Cost Estimates

	Project Recommendation Area	Low Cost	High Cost
Ⓐ	I-95 at Lewistown Road near Lakeridge Parkway	\$2.06M	\$4.53M
Ⓐ	I-95 at Route 54 east of interchange	\$2.06M	\$4.53M
Ⓑ	I-64 at I-295 in Short Pump	\$3.19M	\$7.05M
Ⓒ	I-95 at I-295 near Virginia Center Commons	\$3.76M	\$8.31M
Ⓔ	US 60 at Route 288 near Westchester Commons	\$0.84M	\$1.80M
Ⓖ	Chippenham Parkway at Midlothian Turnpike	\$3.29M	\$7.26M
Ⓖ	Chippenham Parkway at US 1/US 301	\$2.72M	\$6.00M
Ⓗ	Eastern Pulse Terminus	\$1.40M	\$3.06M
Ⓘ	I-64 at S. Laburnum Avenue near US 60	\$1.31M	\$2.85M
Ⓙ	Bottoms Bridge	\$1.03M	\$2.22M
Ⓙ	I-295 at US 60 near Technology Boulevard/Elko Road	\$1.31M	\$2.85M
Ⓚ	I-95 at Route 10	\$2.54M	\$5.58M
Ⓚ	I-295 at Route 5	\$0.65M	\$1.38M
Ⓛ	Western Pulse Terminus	\$2.91M	\$6.42M
Ⓜ	Huguenot Road/Forest Hill Avenue/Chippenham Parkway	\$1.40M	\$3.06M

Implementation Strategy

Implementation Activities



Agreements

- Site Identification
- Formal Agreements or Leases



Planning, Design & Construction

- Site Identification
- Planning & Design
- Construction



Marketing

- Develop Strategy
- Targeted Outreach

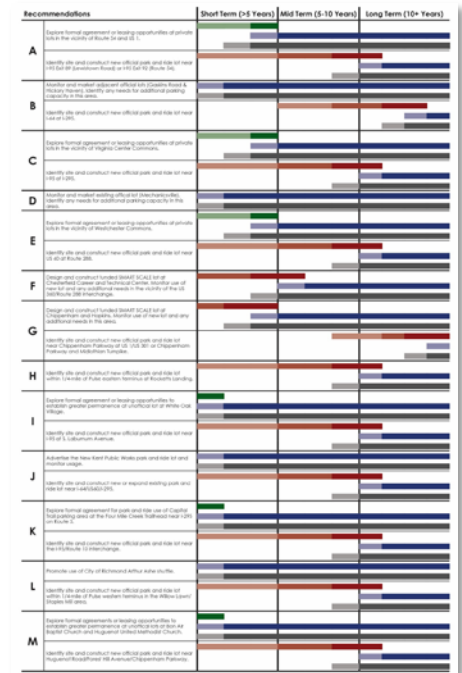


Monitoring

- Develop Strategy
- Inspection & Evaluation

Implementation Schedule

- Some activities can begin in the short term (< 5 years)
 - Formal Agreements
 - Site Identification
 - Monitoring & Marketing Existing Lots
- Design and construction of new lots can be completed in the mid-term (5-10 years) or long-term (10+ years) timeframes
 - Timing dependent on land acquisition and ability to secure funding



Roles and Responsibilities



Agreements

- Depending on parties involved in agreement, **Localities**, **GRTC**, and/or **VDOT** lead identification of sites and negotiation of formal agreements and leases
- **RRTPO** and **PlanRVA** support through development of regional strategy
- **Private Sector Partners** support through coordination with public stakeholders

Roles and Responsibilities



Planning, Design & Construction

- Depending on lot owner, **Localities**, **GRTC**, and/or **VDOT** lead or support identification of sites and planning, design, and construction of new or expanded lots
- **RRTPO** and **PlanRVA** support through development of regional strategy
- **RideFinders** supports identification of sites at vanpool origins
- **DRPT** supports in conjunction with transit and vanpool services
- **Private Sector** leads or supports in accordance with development proffers

Roles and Responsibilities



Marketing

- Depending on lot owner, **Localities**, **GRTC**, and/or **VDOT** lead development and implementation of marketing strategy
- **RideFinders** leads implementation of marketing strategy for lots that accommodate vanpool services
- **RRTPO** and **PlanRVA** lead development and implementation of regional marketing strategy
- **VDOT** leads development and implementation of statewide marketing strategy
- **Private Sector** supports in accordance with leases or agreements
- **Employers** lead effort for advertising and incentivizing employee use of lots

Roles and Responsibilities



Monitoring

- Depending on lot owner, **Localities**, **GRTC**, and/or **VDOT** lead development of monitoring strategy and inspection/evaluation
- **RideFinders** supports development of monitoring strategy at lots that accommodate vanpool services
- **RRTPO** and **PlanRVA** lead development of regional monitoring strategy and regional evaluation efforts
- **VDOT** leads development of statewide monitoring strategy and statewide inspection/evaluation efforts
- **Private Sector** supports in accordance with leases or agreements

Potential Funding Sources

Eligible Uses of Funding Sources

Funding Sources		Planning	Design	Construction	Maintenance	Monitoring	Marketing	Minor Improvements	Transit Improvements	Leases
Federal	Regional Surface Transportation Block Grant (RSTBG) Program	✓	✓	✓	✓	✓	✓	✓	✓	
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	✓	✓	✓	✓	✓	✓	✓	✓	
	Better Utilizing Investments to Leverage Development (BUILD) Grants	✓	✓	✓					✓	
	Transportation Alternatives Set-Aside							✓	✓	
	FTA 5307 Urbanized Area Formula								✓	
	FTA 5309, Bus and Bus Related Equipment and Facilities								✓	
State	SMART SCALE	✓	✓	✓					✓	
	Revenue Sharing	✓	✓	✓					✓	
	VDOT District Maintenance Funds				✓					
	DRPT Capital Assistance Funds	✓	✓	✓					✓	
	Secondary Six-Year Plan	✓	✓	✓				✓	✓	
Local	Local General Funds	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Proffers	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Transportation Service Districts	✓	✓	✓	✓	✓	✓	✓	✓	

Eligible Funding Recipients

Funding Sources		Localities	GRTC	PlanRVA	VDOT	DRPT
Federal	Regional Surface Transportation Block Grant (RSTBG) Program	✓			✓	✓
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	✓			✓	✓
	Better Utilizing Investments to Leverage Development (BUILD) Grants	✓	✓	✓	✓	✓
	Transportation Alternatives Set-Aside	✓	✓	✓	✓	✓
	FTA 5307 Urbanized Area Formula		✓			
	FTA 5309, Bus and Bus Related Equipment and Facilities		✓			
State	SMART SCALE	✓	✓	✓		
	Revenue Sharing	✓			✓	
	VDOT District Maintenance Funds				✓	
	DRPT Capital Assistance Funds	✓	✓			✓
	Secondary Six-Year Plan	✓				
Local	Local General Funds	✓				
	Proffers	✓				
	Transportation Service Districts	✓				

Next Steps

- Seek adoption of this study by TPO Policy Board (December)
- Take steps to incorporate strategy into *plan2045* (Long Range Transportation Plan) and state plans
- Steps toward implementation can start immediately
 - Identify sites and initiate formal agreements with private lot owners
 - Identify sites for new lot construction
 - Monitor use and conditions of existing lots
 - Develop and implement marketing strategies to promote existing lots
 - Identify and secure funding
- Continue cooperation and collaboration of regional stakeholders to prioritize and push projects forward
- Continually update regional and state planning efforts as projects are implemented

Story Map Preview



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