Richmond Regional Park & Ride Investment Strategy

RRTPO TAC Briefing

October 8, 2019



Requested Action from TAC

Recommendation of the 2019 Richmond Regional Park and Ride (P&R) Investment Strategy Study to the Richmond Regional Transportation Planning Organization (RRTPO) policy board for review and adoption at the December 5, 2019 RRTPO meeting.



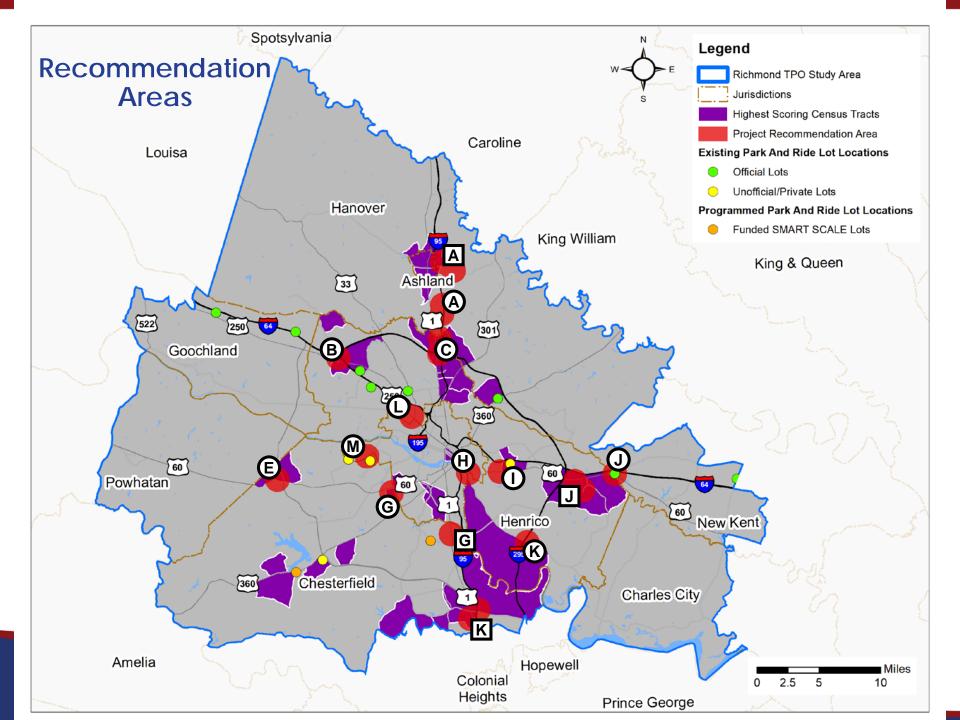
Project Scope

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



Project Recommendations





Recommended Lot Sizes

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

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Unit Cost Ranges for Park and Ride Projects

Low Unit Cost	High Unit Costs							
Typical Features/Amenities at Park and Ride Lot								
 Lower-density lot 	 Higher-density lot 							
 Minimal earthwork required 	 More significant earthwork required 							
 Minimal amenities 	 Greater number of amenities 							
 No transit service 	 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
A	I-95 at Lewistown Road near Lakeridge Parkway	\$2.06M	\$4.53M
А	I-95 at Route 54 east of interchange	\$2.06M	\$4.53M
B	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
E	US 60 at Route 288 near Westchester Commons	\$0.84M	\$1.80M
G	Chippenham Parkway at Midlothian Turnpike	\$3.29M	\$7.26M
G	Chippenham Parkway at US 1/US 301	\$2.72M	\$6.00M
Θ	Eastern Pulse Terminus	\$1.40M	\$3.06M
0	I-64 at S. Laburnum Avenue near US 60	\$1.31M	\$2.85M
J	Bottoms Bridge	\$1.03M	\$2.22M
J	I-295 at US 60 near Technology Boulevard/Elko Road	\$1.31M	\$2.85M
К	I-95 at Route 10	\$2.54M	\$5.58M
K	I-295 at Route 5	\$0.65M	\$1.38M
L	Western Pulse Terminus	\$2.91M	\$6.42M
\blacksquare	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



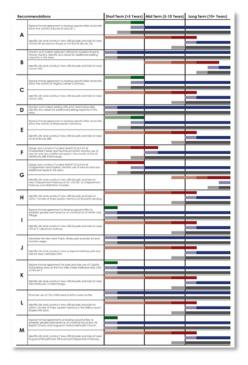
Monitoring

- 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







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





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





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





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

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Eligible Funding Recipients

	Funding Sources	Localities	GRTC	PlanRVA	VDOT	DRPT
Federal	Regional Surface Transportation Block				√	1
	Grant (RSTBG) Program	•			•	•
	Congestion Mitigation and Air Quality	\checkmark			\checkmark	\checkmark
	(CMAQ) Improvement Program	·			·	,
	Better Utilizing Investments to Leverage	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Development (BUILD) Grants	,	·		·	
	Transportation Alternatives Set-Aside	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	FTA 5307 Urbanized Area Formula		\checkmark			
	FTA 5309, Bus and Bus Related		./			
	Equipment and Facilities		•			
	SMART SCALE	\checkmark	\checkmark	\checkmark		
٩ د	Revenue Sharing	\checkmark			\checkmark	
State	VDOT District Maintenance Funds				\checkmark	
လ	DRPT Capital Assistance Funds	\checkmark	\checkmark			\checkmark
	Secondary Six-Year Plan	\checkmark				
	Local General Funds	\checkmark				
Local	Proffers	\checkmark				
	Transportation Service Districts	\checkmark				



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

Park and Ride An Investment Strategy for the Richmond Region



RRTPO Regional Park & Ride Investment Strategy

Richmod Regional Transportation Planning Organization