

COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

Aubrey L. Layne, Jr. Chairman 1401 East Broad Street Richmond, Virginia 23219 (804) 786-2701 Fax: (804) 786-2940

COMMONWEALTH TRANSPORTATION BOARD WORKSHOP AGENDA

Hyatt Regency Reston Reston ABC 1800 Presidents Street Reston, Virginia 20190 September 19, 2017 9:00 a.m.

- 1. DC2RVA Hanover/Hanover Area Community Advisory Committee Update Emily Stock, Virginia Department of Rail and Public Transportation Barbara Nelson, Richmond Regional TPO & CAC Member
- 2. Smart Scale Update Nick Donohue, Deputy Secretary of Transportation
- FY 2017 Budget / Actual Performance
 FY 2018 Year-to-Date
 August Revenue Update CTF and Regional Revenue Expectations
 John Lawson, Virginia Department of Transportation
- 4. PPTA Implementation Manual & Guidelines 2017 Updates Morteza Farajian, Virginia Department of Transportation
- 5. I-64 Express Lanes proposed Toll Supported Transit Services Jennifer DeBruhl, Virginia Department of Rail and Public Transportation
- 6. Update on Vanpool/VA Implementation Jennifer DeBruhl, Virginia Department of Rail and Public Transportation
- Rail Industrial Access Program Application Briefing Steel Dynamics Roanoke Bar Division Jeremy Latimer, Virginia Department of Rail and Public Transportation
- 8. VDOT Roadway Lighting Energy Performance Contract *Quintin Elliott, Virginia Department of Transportation*

Agenda Meeting of the Commonwealth Transportation Board Workshop Session September 19, 2017 Page 2

- 9. Commissioner's Items Charles Kilpatrick, Virginia Department of Transportation
- 10. Director's Items Jennifer Mitchell, Virginia Department of Rail & Public Transportation
- 11. Secretary's Items Aubrey Layne, Secretary of Transportation

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Virginia Department of Rail and Public Transportation

DC2RVA Ashland/Hanover Area Community Advisory Committee Update September 19, 2017

Emily Stock Manager of Rail Planning

Barbara Nelson Richmond Regional Transportation Planning **Organization & CAC** Member

CAC Membership

• PRPT•

CAC member organizations include:

- Town of Ashland
- CSX Transportation
- Hanover County
- Randolph-Macon College
- Richmond Regional Transportation Planning Organization



CAC Purpose

• PRPT•

 Advise and inform DRPT on DC2RVA alternatives and issues in Ashland/Hanover

- Review alternatives studied to date
- Recommend modifications or new alternatives
- Identify and represent the concerns of members' communities
- Apply a structured transparent approach seeking consensus



DC2RVA Draft Environmental Impact Statement

• PRPT•

CAC worked in parallel with the DC2RVA DEIS process. Communities are urged to participate and comment on the Draft EIS once it is complete.

Four Alignment Alternatives carried forward into Draft EIS for detailed review:

- No Additional Track in Downtown Ashland
- Three Tracks Through Ashland:
 - Add 1 Track East
 Center 3 Tracks
- Add 2 Track West Hanover County Bypass

No recommendation made for Ashland/Hanover area in the DEIS

CAC Meetings May through September 2017

• BRPT•

- May Reviewed NEPA laws, purpose and need, rail operations, and basis of design
- June Alternatives screening summary. CAC requested additional study for eastern bypass and below-grade options through town options.
- July Presented additional analysis for eastern bypass and below-grade options through town options, as requested by CAC in June. Reviewed rail operations modeling results. Public Comment period.
- August Reviewed alternatives in each category. Requested CAC to offer recommendations for "least objectionable."
- September CAC offered least objectionable alternatives.

Results



CAC 's Least Objectionable Alternatives

Note: these are not CAC endorsements of alternatives

- The 3-2-3 option is the least objectionable option for adding rail capacity through town at-grade.
- A three-track trench through the Town of Ashland is the least objectionable option for adding capacity below-grade.
- The western bypass closest to the Town of Ashland, identified as AWB 1, is the least objectionable option for adding rail capacity outside the Town of Ashland.



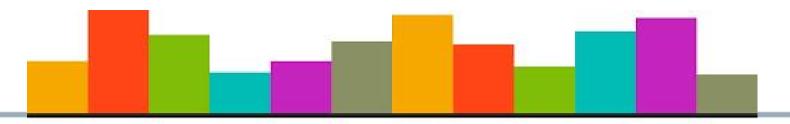


Virginia Department of Rail and Public Transportation

DC2RVA Ashland/Hanover Area Community Advisory Committee Update September 19, 2017

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SMART SCALE

Funding the Right Transportation Projects in Virginia

SMART SCALE Updates

Updates

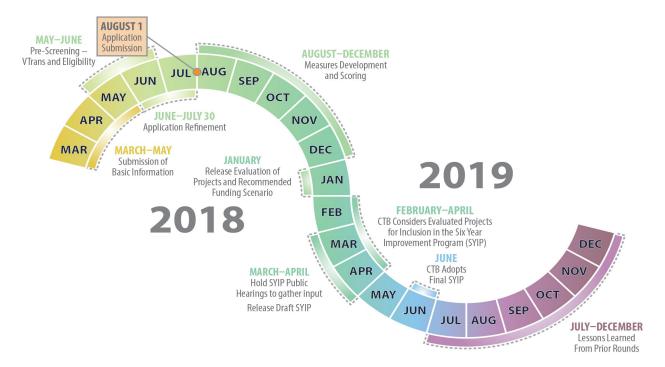


- Recap of proposed Round 3 changes
- Follow-up items from June meeting
 - Economic Development Measure
 - Cap on Square Footage
 - Distressed Communities
 - Congestion Measures
 - Current day demand versus forecasted demand 10 years in future
 - Scaling Throughput
- Summary of Feedback Received

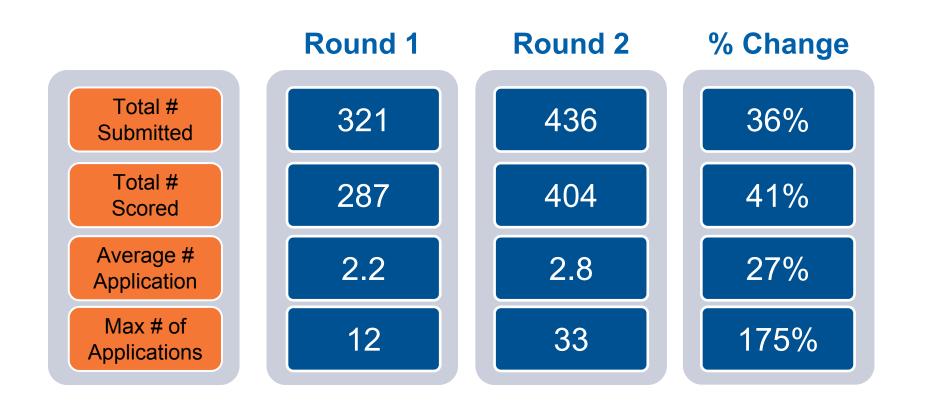


Biennial Schedule

- Begin application intake March 1st 2018
- June 1st deadline for creation of an application
- August 1st submissio deadline









Application Limits

• Establish 2 tiers based on population

Tier	Localities	MPOs/PDCs/Transit Agencies	Maximum Number of Applications
1	Less than 200K	Less than 500K	4
2	Greater than 200K	Greater than 500K	8



Project Readiness

- Formalize and strengthen policy on required level of project planning
 - New interchange on limited access facility
 - IJR with preferred alternative
 - Grade separation of at-grade intersection
 - At-grade improvement options have been assessed
 - New signal
 - Signal warrants have been met and signal justified
 - Major widening
 - Corridor optimization and alternatives to new lanes have been evaluated
- Demonstrate that a project has public support, requiring resolution of support from governing body

Proposed Changes to Measures -Update



Project Readiness/Public Support

 Draft Technical Guide was edited to reflect new requirements for resolutions to demonstrate public support

	Project Type	Regional Entity (MPOs, PDCs)	Locality* (Counties, Cities, and Towns)	Public Transit Agencies	
	Corridor of Statewide Significance	Yes	Yes, with a resolution of support from relevant regional entity	Yes, with resolution of support from relevant regional entity	
	Regional Network	Yes	Yes, with a resolution of support from relevant regional entity	Yes, with resolution of support from relevant entity	
	Urban Development Area	No	Yes, with a resolution of support from relevant regional entity	No	
Need to	Safety	No	Yes, with a resolution of support from relevant regional entity	No	ed projects

Table 2.2 Eligibility to Submit Projects

within Mro areas - INEED TO WORK WITH INCK ON LANGUAGE - Regionally significant projects in TMA areas must be in the CLRP

Office of the SECRETARY of TRANSPORTATION

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Funding the Right

in Virginia

Transportation Projects

Proposed Changes to Measures -Recap

Project Eligibility

SMART

SCALE

- Clarify the ineligibility of maintenance and State of Good Repair (SGR) projects
- If project scope is mostly the repair or replacement of existing assets then it is not eligible for SMART SCALE Examples include:
 - Signal system replacement (mast arms, signal heads)
 - Bridge replacement with wider lane widths and/or ped accommodations



SCALE

Proposed Changes to Measures -Recap

• Full Funding Policy

in Virginia

Transportation Projects

- Program not intended to replace committed local/regional funding sources, proffers, and/or other committed state/federal funding sources
- If \$ request is to add components to existing fully funded project then requested components will be analyzed independently

Relationship of Major Project Elements

• Add guidance that project elements must be associated (contiguous or same improvement type)



Congestion

- Person throughput scale based on length
- Safety
 - Remove DUI crashes and use blended rate for fatal and severe injury crashes

Accessibility – A.1 and A.2 - Access to Jobs

 Eliminate the 45 and 60 minute cap for auto and transit job access respectively

Land Use

- More specific definitions of mixed-use development
- New methodology Accessibility to key non-work destinations such as grocery, healthcare, education, etc.

Proposed Changes to Measures -Update



Congestion - Person Throughput – scale based on length

- SMART SCALE team has been working on various methods to better scale throughput based on the size of the project
- Challenges remain and center around the different approaches to calculating throughput modeled vs non-modeled projects
- Additional time, research and development is needed

Moving Forward

• Team will continue to work on items to address between now and October meeting

Proposed Changes to Measures -Update



Congestion - Current Day Demand vs. Forecasted Demand

- Pros
 - Would focus on areas that are a problem today as opposed to something that <u>may</u> be problem in the future
 - Eliminates projections and forecasting, simplifies congestion analysis
- Cons
 - Accounting for committed projects in SYIP for modeled improvement - non-standard methodology
 - High growth areas would not be reflected in analysis and limits ability to pro-actively address problems



Economic Development - ED.1 - Site Development

- Remove 0.5 points for consistent with local and regional plans project specifically referenced in local comp plan or regional economic development strategy = 0.5 points
- Project in areas with economic needs get up to 0.5 points
- Zoned properties must get primary/direct access from project
- Conceptual (0.5, 1) vs detailed site plans (2, 4 points) points based on whether submitted or approved
- Reduce buffer to max of 3 miles
- Considering establishment of maximum square footage based on project type and based on current level of development - cannot exceed x% of total current square footage in jurisdiction(s)

Economic Development - ED.2 - Intermodal Access

• Scale freight tonnage-based measure by the length of the improvement

Proposed Changes to Measures – Update



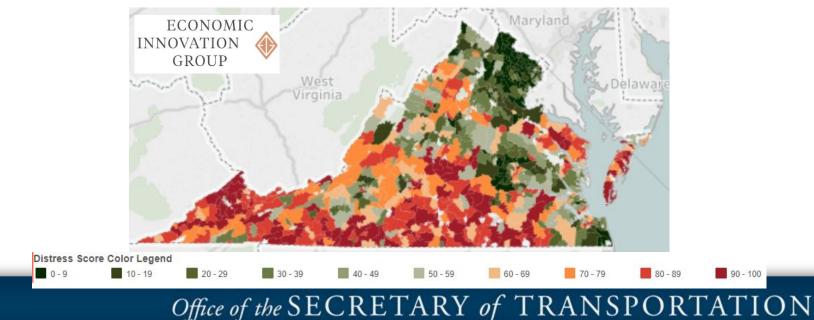
90 - 100

Economic Development - ED.1 - Site Development

Project in areas with greater economic needs get up to 0.5 points

Recommendation:

- Utilize data from Economic Innovation Group, data is zip code based •
- Values ranges from 100 to 0, with 100 being the most distressed
- Project points will be calculated by dividing distress value by 200, area with • greatest economic needs gets 0.5 points



Proposed Changes to Measures – Update



Economic Development - ED.1 - Site Development

 Considering establishment of maximum square footage based on project type and based on current level of development - cannot exceed x% of total current square footage in jurisdiction(s)

Update

- Requested and received data from several localities
- Concern about urban/rural total square footage and cap approach could disadvantage rural localities

Recommendation

- Establish statewide limit on amount of square footage, additional documentation required for anything above that amount
 - [Developing recommendation based on top X% of applications from previous two rounds]

What we have Heard



Draft Technical Guide made publicly available on August 20, 2017

Application Limits

- Concerns raised on whether the two tier approach provides
 advantage to most populated areas
- Concerns that limit could encourage applicants to submit maximum

Project Readiness

• Requested documentation (IJR, signal warrants) could be dated by the time funding is available

What we have Heard



Measures/Methods

- Congestion measures
 - Include weekend analysis
 - Include current year in congestion analysis
- Safety
 - Establish statewide thresholds for safety need
- Accessibility
 - Decay curves and travel time thresholds
- Economic Development
 - Increase buffers areas for Tier 2 and 3 project
 - Higher weighting for Intermodal Access and Travel Time Reliability when competing for High Priority Program
- Land Use
 - Larger buffer for larger projects

Schedule and Next Steps



September – October - Fall Transportation Meetings

- Training and Outreach on proposed changes
- Receive public comment on proposed changes

October CTB Meeting - Tentative

• Adopt Revised CTB Policy and Policy/Technical Guides



FY 2017 Budget / Actual Performance FY 2018 Year-to-Date August Revenue Update – CTF and Regional Revenue Expectations

John W. Lawson Chief Financial Officer September 19, 2017

Summary

FY 2017 Revenue performed slightly above forecast

Revenue over forecast dedicated to Priority Transportation Fund

Early FY 2018 results

Indicate that prior year revenue trends may continue Programmatic expenditures are as anticipated

August revenue update suggests slight improvement in future expectations

Will be incorporated in the FY 2019 – 2024 Update



FY 2017 Revenue Overview

Overall, the CTF experienced an annual revenue increase of 2.9 percent over FY 2016, one percent above the estimated annual growth rate

Performance over forecast was due to:

Motor Vehicle Sales and Use Tax – 4.3 percent vs. 2.1 percent Motor Fuels Tax – 1.3 percent vs. 0.9 percent

The transportation share of the State Retail Sales and Use Tax revenues were up by 2.0 percent, short 0.3 percent of the 2.3 percent forecast

Federal revenue collections, remain steady, supporting program activities as expected



Commonwealth Transportation Fund Highway Maintenance & Operating Fund and Transportation Trust Fund Revenues

	Year End Results							% Annual Growth
		FY 2017		EV 0047		EV 0040		Required
Revenue		Estimate	-	FY 2017	_	FY 2016	% Change	by Estimate
Motor Fuel Taxes	\$	868,900	\$	872,247	\$	860,798	1.3	0.9
Priority Transportation Fund (PTF)		163,142		163,142		150,346	8.5	8.5
Motor Vehicle Sales and Use Tax		976,500		997,150		956,480	4.3	2.1
State Sales and Use Tax		1,023,100		1,020,359		1,000,563	2.0	2.3
Motor Vehicle License Fees		253,000		260,173		253,399	2.7	(0.2)
International Registration Plan		68,100		66,202		67,716	(2.2)	0.6
Recordation Tax		47,200		48,109		44,199	8.8	6.8
Interest Earnings		3,300		6,376		3,699	72.4	(10.8)
Misc. Taxes, Fees and Revenues		17,300		18,401		18,431	(0.2)	(6.1)
Total State Taxes and Fees	\$	3,420,542	\$	3,452,159	\$	3,355,631	2.9	1.9

Source: Commonwealth of Virginia/Department of Accounts, HMOF and TTF Revenues, Summary Statement of Selected Revenue Estimates & Collections, Fiscal Years 2016 and 2017. 2017 Estimate updated December 2016

VDOT Federal Revenue

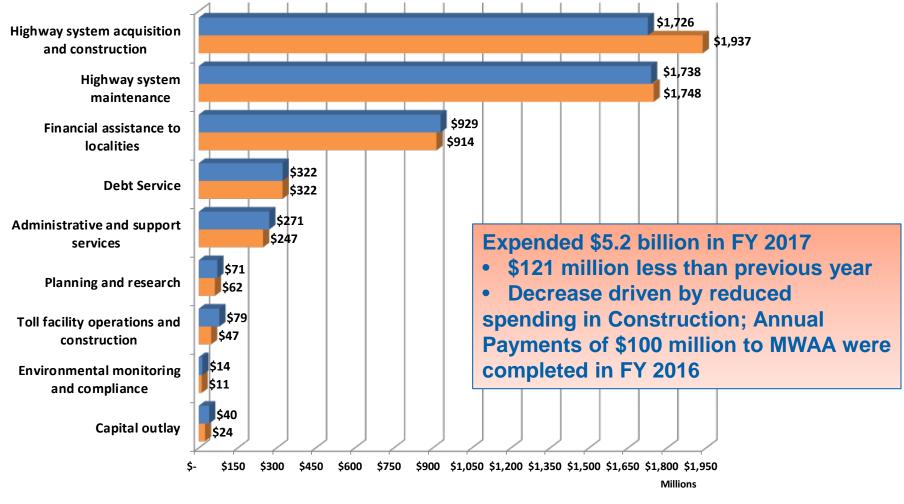
Federal revenue collections totaled \$1.17 billion for the year; \$3.7 million less than FY 2016

Revenue collections are as anticipated based on program activity

Reflects collections associated with Bonus Obligation Authority in the Maintenance Program

	(Dollars in Thousands)								
	 FY 2017			FY 20					
		% of Total			% of Total				
Program	 Revenue	Revenue		Revenue	Revenue	D	oifference		
Construction	\$ 709,869.4	60.8%	\$	764,268.7	65.3%	\$	(54,399.4)		
Maintenance	342,288.3	29.3%		300,750.6	25.7%		41,537.7		
ARRA	-	0.0%		4,068.5	0.3%		(4,068.5)		
Planning & Research	18,816.4	1.6%		15,015.8	1.3%		3,800.5		
Debt Service	83,274.9	7.1%		71,906.1	6.1%		11,368.7		
Other Programs	 12,424.4	1.1%		14,353.4	1.2%		(1,929.1)		
Total VDOT Programs	\$ 1,166,673.3	100.0%	\$	1,170,363.2	100.0%	\$	(3,689.9)		

Fiscal Year-end Expenditures by Program



FY 2017 Expenditures FY 2016 Expenditures



FY 2017 Construction Program Summary

Total expenditures were \$1.73 billion

\$211 million less than prior year

- Previous year reflects the last of three annual \$100 million payments to MWAA (per HB 2313)
- Larger projects with expenditure activity in FY 2016; FY 2017 was a transition year from Discretionary distribution to SMART Scale

Actual spending \$14 million greater than forecast

		FY 2017	(Do	ollars in millions FY 2016		rence
	Ex	Expenditures		penditures	Dire	itence
		to Date		to Date	Amount	Percentage
State of Good Repair	\$	30.1	\$	-		,
High Priority Projects		1.8				
Construction District Grant		10.6		-		
Specialized State and Federal		1,471.0		-		
Legacy Construction Formula		186.2		-		
Total Systems Construction		1,699.7		1,910.7	(211.0)	-11.0%
Program Management & Direction		26.3		26.0	0.3	1.1%
Total	\$	1,726.0	\$	1,936.7	\$ (210.7)	-10.9%
Anticipated Spanding Vegete Date	ė	1 711 0				
Anticipated Spending Year to Date	\$	1,711.9				
Variance	\$	14.1	,			

FY 2016 spending was recorded by highway system and other service areas. Expenditure activity is comparable in total only.

FY 2017 Maintenance Program Summary

Expended \$1.74 billion

Year-to-date spending was \$10.0 million less than in FY 2016

Included \$147 million for snow removal costs

		(Dollars in millions)											
	FY 2017						FY 2016						
			Ехр	enditures	%				Ехр	enditures	%		
Service Area	Allo	ocations		to Date	Expended		Alle	ocations		to Date	Expended	Diff	erence
Interstate Maintenance	\$	421.0	\$	329.0	78%		\$	383.0	\$	329.3	86%	\$	(0.4)
Primary Maintenance		621.1		486.7	78%			578.1		483.3	84%		3.4
Secondary Maintenance		579.6		633.6	109%			601.0		656.0	109%		(22.4)
Transportation Operations Services		144.7		212.6	147%			163.8		208.2	127%		4.4
Program Management & Direction		81.8		76.4	93%			76.4		71.4	94%		5.0
TOTAL	\$	1,848.3	\$	1,738.3	94.0%	-	\$	1,802.2	\$	1,748.2	97.0%	\$	(10.0)
Anticipated Spendi	ng Ye	ar to Date	\$	1,736.3									
		Variance	\$	1.9									

Financial Assistance to Localities - Overview of Special Funds

Northern Virginia Transportation Authority Fund

Activity	Forecast YTD	Actual YTD	Difference
Revenue Collected	\$325.0	\$332.4	\$7.4
Expenditures (Transfers to NVTA)	324.9	329.3	4.4
Balance	\$37.6	\$40.6	\$3.0

Dollars in millions

Hampton Roads Transportation Fund

Activity	Forecast YTD	Actual YTD	Difference
Revenue Collected	\$155.1	\$156.5	\$1.4
Expenditures (Transfers to HRTAC)	134.0	155.2	21.2
Balance	\$21.6	\$20.3	(\$1.3)
Dellere in millione			

Dollars in millions



Major Fund Cash Balances

		(in millions)				
	FY 2017		FY 2016			
	Year End		Year End			
Fund	Balance		Balance		Change	
Operating Funds						
Highway Maintenance and Operating	\$	219.9	\$	208.9	\$	11.0
Transportation Trust Fund - Construction		324.3		235.5		88.8
Total		544.2		444.4		99.8
Dedicated Funds						
ARRA				0.1		(0.1)
Concession Fund		13.1		14.1		(1.0)
Federal Reimb. Anticipation Notes		-		0.1		(0.1)
Priority Transportation Fund		205.1		182.0		23.0
Toll Facility Revolving Account		63.1		59.8		3.3
Transportation Partnership Opportunity Fund (TPOF)		45.6		24.0		21.6
Virginia Transportation Infrastructure Bank (VTIB)		186.5		195.1		(8.6)
Total		513.4		475.2	_	38.2
Bond Funds Held by Trustee						
CPR Bonds Fund		3.9		212.0		(208.0)
GARVEE Bonds Fund		343.0		103.2		239.8
Total		346.9		315.2		31.7
		0-10.0		010.2		01.7
Grand Total	\$	1,404.6	\$	1,234.8	\$	169.8



FY 2018 PERFORMANCE TO DATE

11

FY 2018 Revenue Summary (July Activity)

- Motor Fuel activity in July is tied to reconciliations of the accelerated payments in June; no trends can be determined based on actual activity
- Motor Vehicle Sales & Use Tax collections are up 2.1% over the previous year, or \$1.7 million
- State Retail Sales & Use Taxes were slightly below the previous year
- License Fees trail the previous year's activity by \$1.3 million or 6.1%



FY 2018 Expenditure Summary

- Construction Program spending was approximately \$6 million lower than anticipated
- Maintenance and Operations Program spending was \$30 million lower than anticipated in July
- Administrative Programs are in line with expectations
- I-66 Inside the Beltway and I-64 Express Lanes (Segment I) are scheduled to be in revenue operations in December;
 VDOT is estimating the spending rate to get to an annual expectations in the Program





AUGUST REVENUE UPDATE

14

August Revenue Updates

Update on the Commonwealth's revenue collections and future expectations released on August 21, 2017

Focused on General Fund revenue sources

Included updates to major transportation sources

Full annual update of the transportation revenue forecast will be provided in December as part of the Governor's Budget Bill for the 2018 General Assembly Session

Update indicates continued improvement in motor vehicle sales and use tax over official forecast





PPTA Implementation Manual & Guidelines 2017 Updates

Morteza Farajian, *Ph.D.* Director of P3 Office September 19, 2017



PURPOSE OF REVISIONS

- PPTA Requires Guidelines (Va. Code § 33.2-1819)
- Guidelines are Out-of-Date (Last Update in 2014)
- 2017 Version Will Incorporate Legislative Changes from 2015 and 2017
- 2017 Version Will Apply Only to VDOT and DRPT

VDOT

Key 2015 PPTA Legislative Changes

- Sets Requirements for Finding of Public Interest by CEO (Va. Code § 33.2-1803.1)
 - Statement of Benefits
 - Statement of Risks, Liabilities, and Responsibilities Assumed by Private Partner
 - Determination of High, Medium, or Low Project Delivery Risk
 - Rationale for Using Competitive Negotiations (When Used)
- CEO Must Certify the Finding of Public Interest to Governor and General Assembly before entering into a Comprehensive Agreement (Va. Code § 33.2-1803(D))
- Opportunity for Public Comment on Draft Comprehensive Agreement before Request for Proposals (Va. Code § 33.2-1820(B)(2))

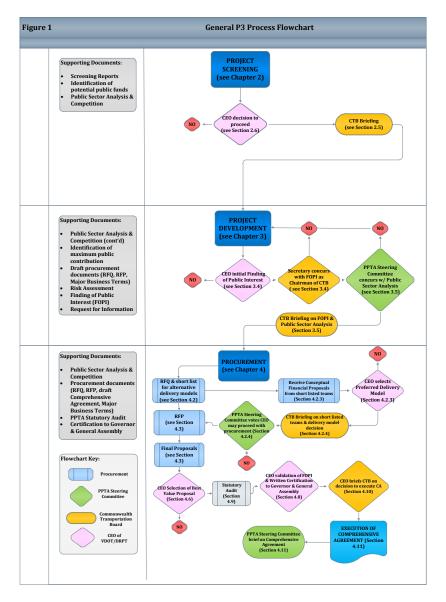
VDOT

Key 2017 PPTA Legislative Changes

- Mandates Public Sector Analysis & Competition (Va. Code § 33.2-1803.1:1)
 - Analyzes Cost for VDOT or DRPT to Develop the Facility Itself
 - Establishes a Maximum Public Contribution Before Procurement Begins
- Creates Transportation Public-Private Partnership Steering Committee
 - Reviews and Concurs with Public Sector Analysis & Competition (Va. Code § 33.2-1803.2(B))
 - Votes Whether Using PPTA "Serves the Public Interest" (Va. Code § 33.2-1803.2(C))
 - Briefed on Final Proposals and Evaluation (Va. Code § 33.2-1803.2(F))
- Secretary as Chairman of CTB Must Concur with CEO's Finding of Public Interest (Va. Code § 33.2-1803.1(A))
- Prohibits Certain Interim Agreements (Va. Code § 33.2-1809(C))

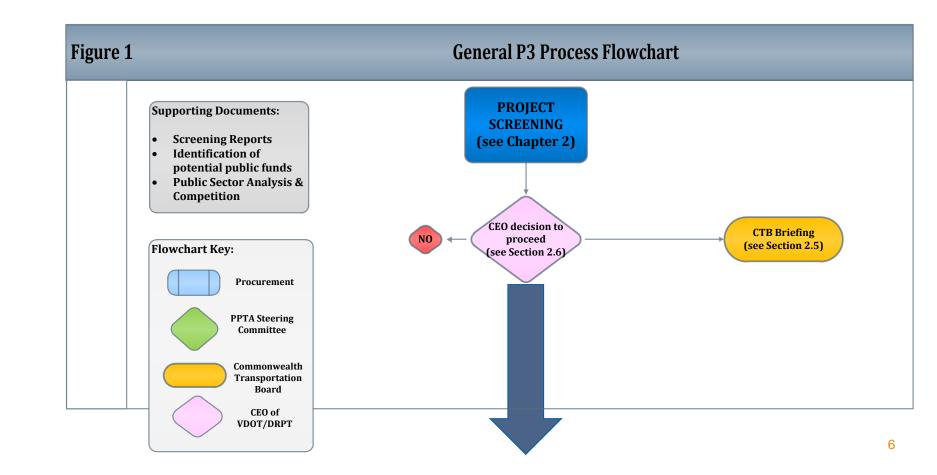
2017 General P3 Process Flowchart

DOT



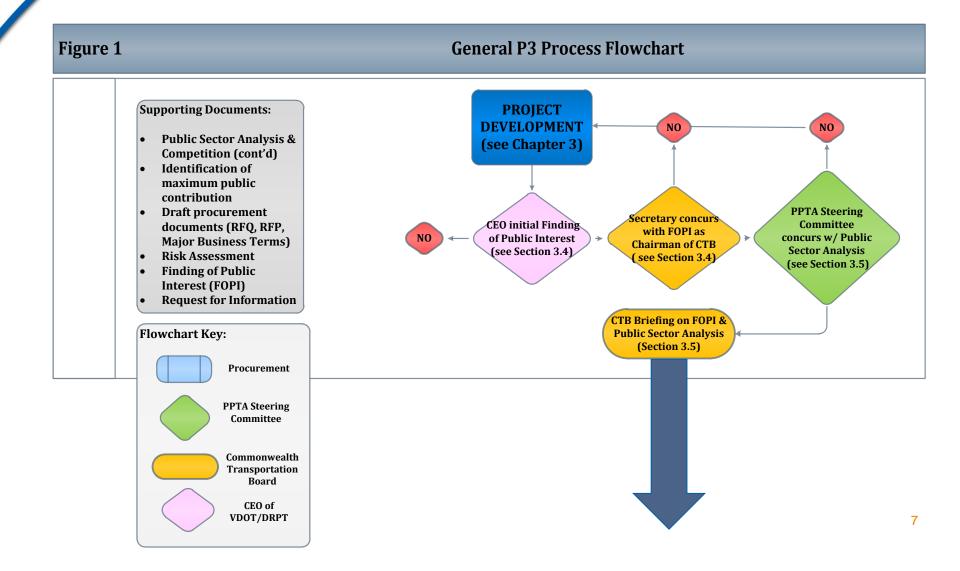
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2017 P3 Project Identification & Screening Phase



VDOT

2017 P3 Project Development Phase

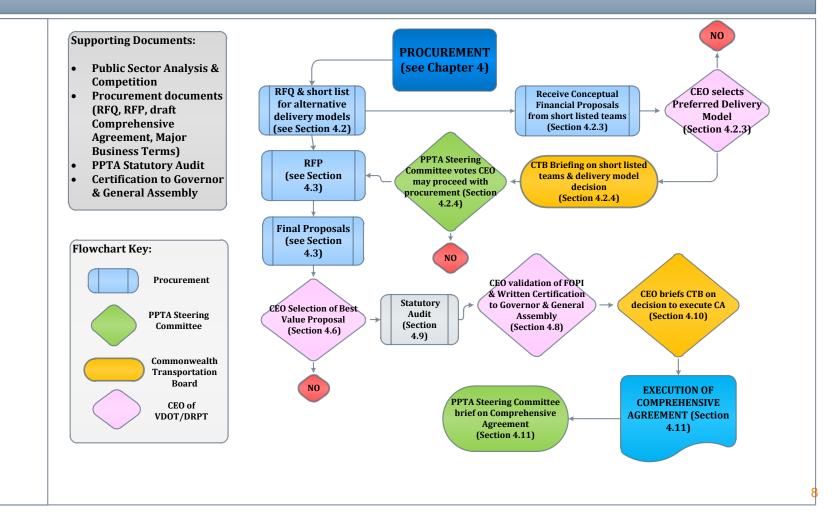


2017 P3 Project Procurement Phase

Figure 1

TDC

General P3 Process Flowchart



VDOT

Next Steps for Draft 2017 PPTA Manual

- 1. Draft 2017 PPTA Manual Posted at www.virginiadot.org/p3
- 2. CTB Reviews/Comments
- 3. Public Comment Period September 6 October 5
- 4. Integrate Comments
- 5. Final 2017 PPTA Manual Presentation at October CTB Meeting
- 6. Request CTB Resolution Recommending VDOT / DRPT Adopt 2017 PPTA Manual



PPTA Implementation Manual & Guidelines 2017 Updates

Morteza Farajian, *Ph.D.* Director of P3 Office September 20, 2017



Virginia Department of Rail and Public Transportation

I-64 Express Lanes – Proposed Toll Supported Transit Services

September 19, 2017

Jennifer DeBruhl Chief of Public Transportation Status of Prior Investments in Transit

DRPT-

• Toll Revenue Funded Elizabeth River Service (Source: HRT)

- 3 bus routes and ferry are partially funded through toll revenues
- Toll revenues support up to 40% of operating expenses for these services (depending on route)
- 1.2 million total boardings on toll revenue supported service in FY16
- FY18 boardings expected to increase due to the redevelopment of the Waterside District in Norfolk

Location of Express Lanes

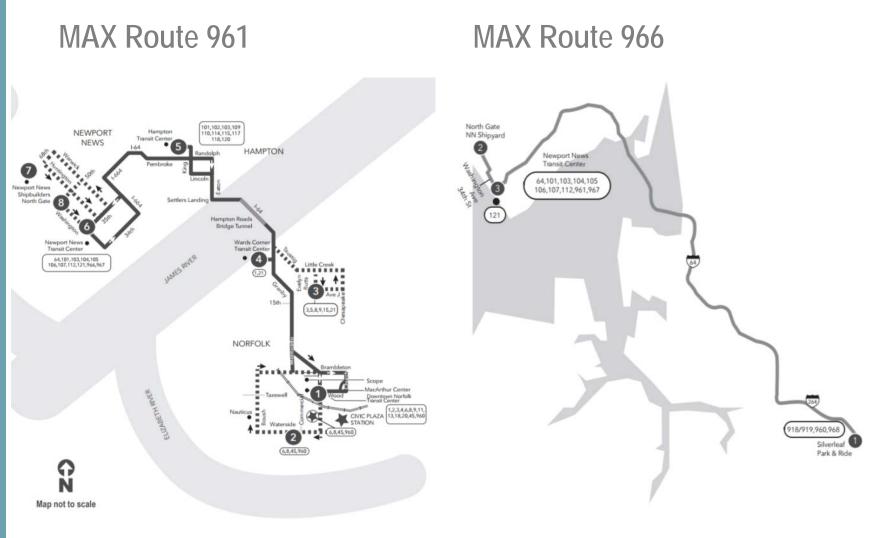
• BRPT•



Source: VDOT

Existing I-64 Corridor Transit Service

• DRPT•



Proposed Improvements to Transit in the I-64 Corridor

• BRPT•

• Availability of toll revenues would increase transit service in the corridor

- Increase peak hour frequency on MAX Route 961 by reducing peak hour headways from 60 to 30 minutes – 4 additional trips daily
- Add an additional peak period trip to MAX Route 966 which currently is only one trip per direction per peak period – 4 additional trips daily
- Toll-supported service would be operated only during the HOT hours

Cost and Benefits of Proposed Services

• PRPT•

• Estimated Cost (Source: HRT)

- \$1.0 million Initial Capital Outlay (in FY18 \$)
- \$230,000 Annual O&M Cost (in FY18 \$)
- Estimated Benefits (Source: HRT)
 - Additional 26,000 to 32,000 annual passenger trips
 - Proposed route improvements connect Norfolk/Virginia Beach with Newport News Shipbuilding
 - Shipyard employees nearly 25,000 workers
 - Plans to hire additional 3,000 workers
 - 15,000 existing spaces; no plans for increasing parking capacity
 - 1,200 to 1,500 employees use transit



Virginia Department of Rail and Public Transportation

I-64 Express Lanes – Proposed Toll Supported Transit Services

September 19, 2017



Virginia Department of Rail and Public Transportation

Update on Vanpool!VA Implementation

September 19, 2017

Jennifer DeBruhl Chief of Public Transportation Vanpool!VA Goals and Funding

-DRPT-

Goal: To increase the number of people we move through congested corridors in the Commonwealth

- Funding
 - Two years of start up funding (\$1.975M/year)
 - Vanpool Initiative to be self funded after the first two years of vanpool start up
 - This funding is set aside in the current SYIP

Vanpool!VA Components



Expand/Increase vanpool subsidy

Statewide vanpool brand





Improved ride matching

Vanpool Alliance (PRTC) Request

• PRPT•

- Request for \$1.4M to support expansion of their Vanpool Alliance program (2 year pilot)
 Increase stipend for new vanpools from \$200 to \$400/month
 - Must have 75% new riders to qualify
 - PRTC will report vanpool data to FTA, which will increase 5307 allocation after 2 years
 - Future 5307 funds will be used to maintain program
 - Goal is to increase person throughput in congested corridors and take advantage of express lanes

Other Vanpool!VA Activities Underway



- Conversion of existing transportation demand management grant with Hampton Roads Transit
- Development of agreement with Roanoke Valley – Alleghany Regional Commission to support development of statewide ridematching tools

Next Steps

• BRPT•

- Continued outreach and coordination to implement program – regional commuter assistance agencies and vanpool operators
- Development of statewide branding and marketing tools to support implementation
- Development/implementation of tools to streamline data reporting/data quality to ensure return on investment



Virginia Department of Rail and Public Transportation

Update on Vanpool!VA Implementation

September 19, 2017

Jennifer DeBruhl Chief of Public Transportation



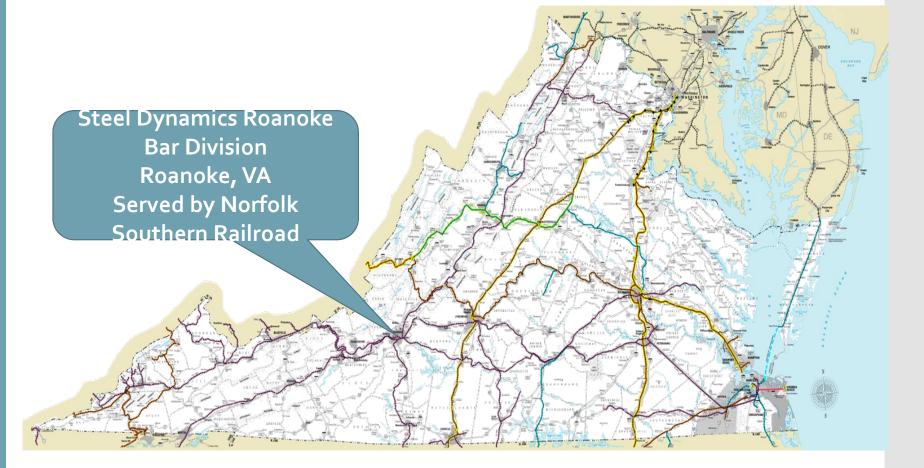
Virginia Department of Rail and Public Transportation

Rail Industrial Access Program Application Briefing

Steel Dynamics Roanoke Bar Division Roanoke, Virginia Jeremy Latimer Rail Transportation Programs Administrator Project Location:

Steel Dynamics Roanoke Bar Division

• PRPT•



Project Location:

Steel Dynamics Roanoke Bar Division





Project Summary

•BRPT•

- Steel Dynamics Roanoke Bar Division is headquartered in Roanoke, Virginia and part of Steel Dynamics, Inc. – one of the largest domestic steel producers and recyclers in the United States.
- Steel Dynamics is planning a \$28M expansion of an existing melt facility to serve a growing rebar market.
- This expansion requires additional rail capacity to ship rebar to industries and service centers located across the United States, Canada and Mexico; and to ports in Alabama and North Carolina for shipments to South America.
- Rail traffic is expected to increase 1,988 railcars within the first year of operation which is a 40% increase.

Project Summary

• BRPT•

- Application for \$450,000 in Rail Industrial Access Funds
 - \$28M Total Estimated Capital Expenditure
 - Building Improvements
 - Rail Construction
 - \$450,000 Estimated Rail Project Cost
 - Cost overruns responsibility of applicant
- Public Benefits:
 - 1,988 additional railcars annually
 - 4,971 existing cars per year
 - 12 new jobs associated with this facility
 - 40% of shipping (in and outbound) will ship by rail
- Application scores 64 of 100 points
- Minimum threshold will be at least 101 new carloads

Questions?

• PRPT•

Jeremy Latimer

jeremy.latimer@drpt.virginia.gov

www.drpt.virginia.gov 804-786-4440



VDOT Roadway Lighting Energy Performance Contract

CTB Workshop | September 2017 Quintin D. Elliott | Chief Deputy Commissioner

Background

□ VDOT Maintains 50,000 Roadway Lighting Fixtures

- Majority High Pressure Sodium (HPS) bulbs, 5 years life
- Estimated 10%~25% outages

СОТ

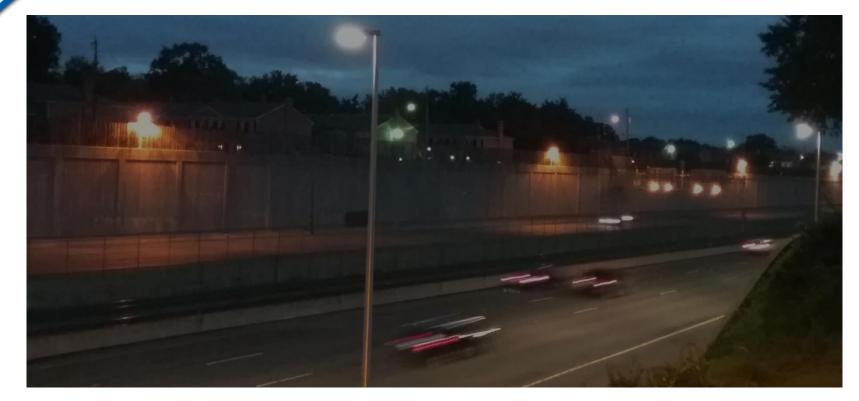
Proven Light-emitting Diodes (LEDs) Lighting + Controls Technology

- Consumes 50%+ less energy
- Lasts three times longer compared to HPS, **15** years life
- Reduce Operations & Maintenance (O&M costs)
- Improve monitoring & response
- Improved color rendering contributes to safety
- Opportunities for future capabilities: Wi-Fi, veh. detection, CAV

"...no other lighting technology has more energy-saving potential than LED ..." - US Department of Energy

VDOT

LED Policy Guidance



Governor and General Assembly LED Mandates

- Executive Order 31 (issued October 2014)
- 2017 Appropriation Act, Chapter 836 Item 80(H)

VDOT LED Strategic Migration Program

□ LED luminaires on <u>all</u> future exterior lighting projects

- Highway roadway lighting
- Parking lots (District/Residency/Area HQs, Park & Rides, Rest Areas, DMV Weigh Stations)
- Guide sign lighting

DOT

- Underbridges and tunnels
- Replace existing lights through attrition & stand-alone projects
- Evaluate Energy Performance Contract in Fredericksburg, Richmond & Hampton Roads Districts

How EPC/ESCO Works

Energy Performance Contract (EPC):

 Energy-savings improvements financed with an available line of credit secured by future energy savings

Energy Service Contractor (ESCO):

 Pre-approved design-build general contractor; combines a diagnostic front end & a guaranteed-savings back end

ESCO Services:

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- Develop package of feasible energy cost-reduction measures
- Annually track & report future energy consumption to DMME
- Provide guaranty; ESCO compensates agency if energy savings fall short

Sister Agency Roles

Department of General Services (DGS) – competitively procures ESCO contractors & make available for any government agency use

Department of Mines, Minerals,
 & Energy (DMME) – administers
 the program and advises agencies

Department of Treasury (TRS) – oversees the Virginia Energy Leasing Program (VELP)







Example EPC Projects

\$761 million cumulative EPC investment since 2001 Virginia DMV headquarters renovation

- \$6.9 million project to replace chillers, windows, etc.
- \$284k/year savings and 36% energy reduction
- Completed October 2014

□ Other state DOT lighting EPC or P3 projects

- Washington State & North Carolina (ESCO)
- Michigan, Arizona, & District of Columbia (P3)

"Cumulative EPC projects Net Present Value Savings of \$180M+ from avoided costs that exceed debt service during and after repayment of the loan." - DMME ESCO Program

VDOT EPC Project Timeline

- □ Late 2014/Early 2015: VDOT seeks proposals from DGSprocured ESCOs; Trane selected above other three responses
- □ <u>Apr 2015:</u> VDOT and Trane sign \$513,000 MOU for audit of CO facilities, rest areas, major tunnels, and roadway lighting
- <u>2015-2017</u>: ESCO energy audit evaluation, project development, roadway lighting inventory, equipment testing. Selected roadway lighting for a cost-effective EPC project

□ <u>Aug 2017</u>: Contract negotiation

Sept 20, 2017: CTB approval

- Sept 30, 2017: DMME, Treasury, and Governor's office approval for contract award and VELP financing
- Nov 2017: Construction period start
- □ July 2019: Construction completion
- □ Fall 2034: Project completion, Guaranty period end

Proposed VDOT EPC Project

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- Upgrade 9,627 existing lights in Fredericksburg, Richmond, and Hampton Roads Districts to LED
- Includes highway, park & ride, and rest area lights
- Install Lighting Controls System for monitoring and additional savings
- □ Finance 15-year VELP loan
- □ Schedule
 - Expected construction completion July 2019
 - Energy guaranty contract through 2034



VDOT EPC Project Costs & Benefits

Costs	Cost (Millions)
CONSTRUCTION COSTS **	\$15.9M
Operating Costs (2018-2034): Measurement & Verification (M&V) and Controls Interest Payment	\$1.0M \$3.4M
TOTAL PROJECT COSTS (over 15 years)	\$20.3M

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Project Savings (2018-2034)	Savings (Millions)
Total energy savings	\$18.3M
Operations & Maintenance savings	\$9.2M
TOTAL PROJECT SAVINGS (over 15 Years)	\$27.5M

NET PROJECT SAVINGS (\$27.5M-\$20.3M) = \$7.2M

** Include \$500K owner contingency & \$500K Pre-construction energy audit assessment cost