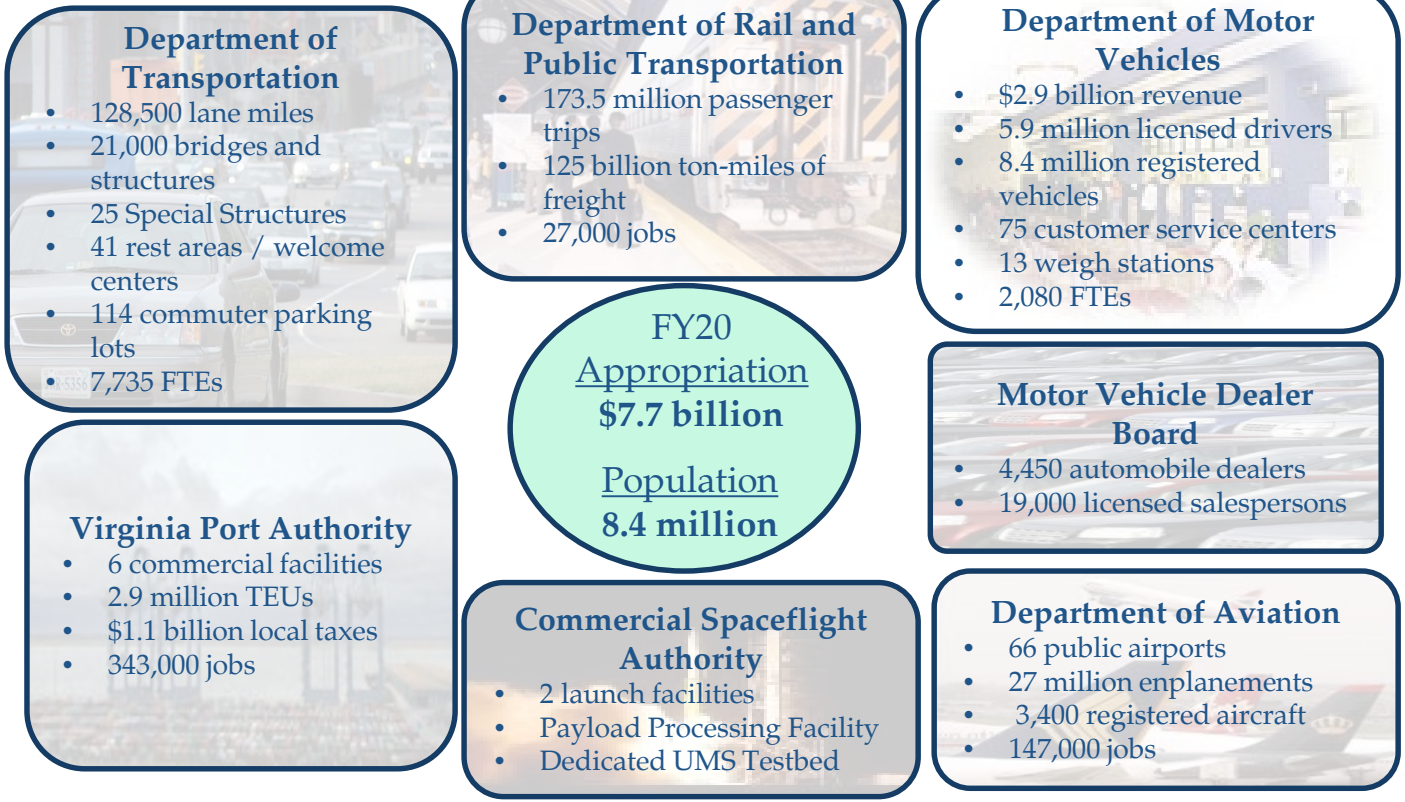
Transportation Financing:

Decade of Difference

November 22, 2019

Transportation Infrastructure Investments Support Multiple Public Policy Objectives

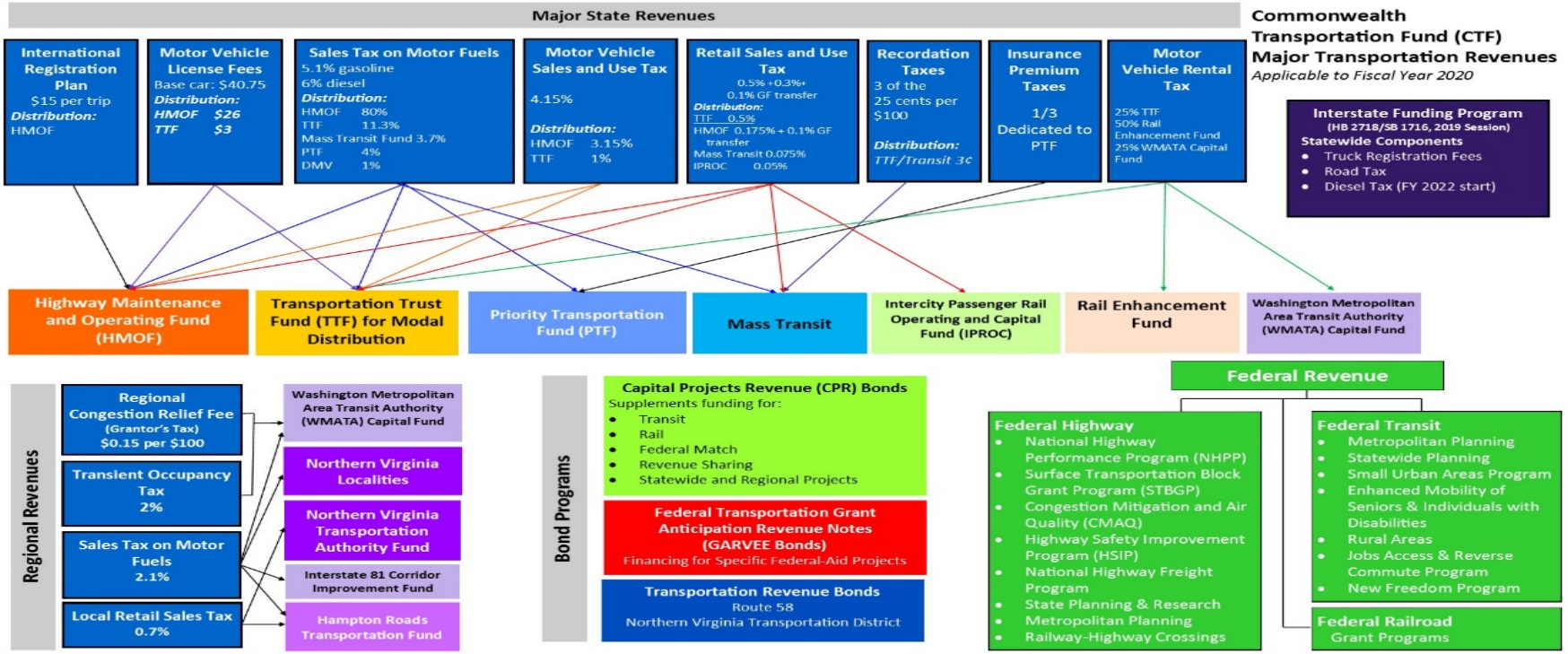
Virginia's Transportation Programs: Air, Land, Sea & Space



Topics:

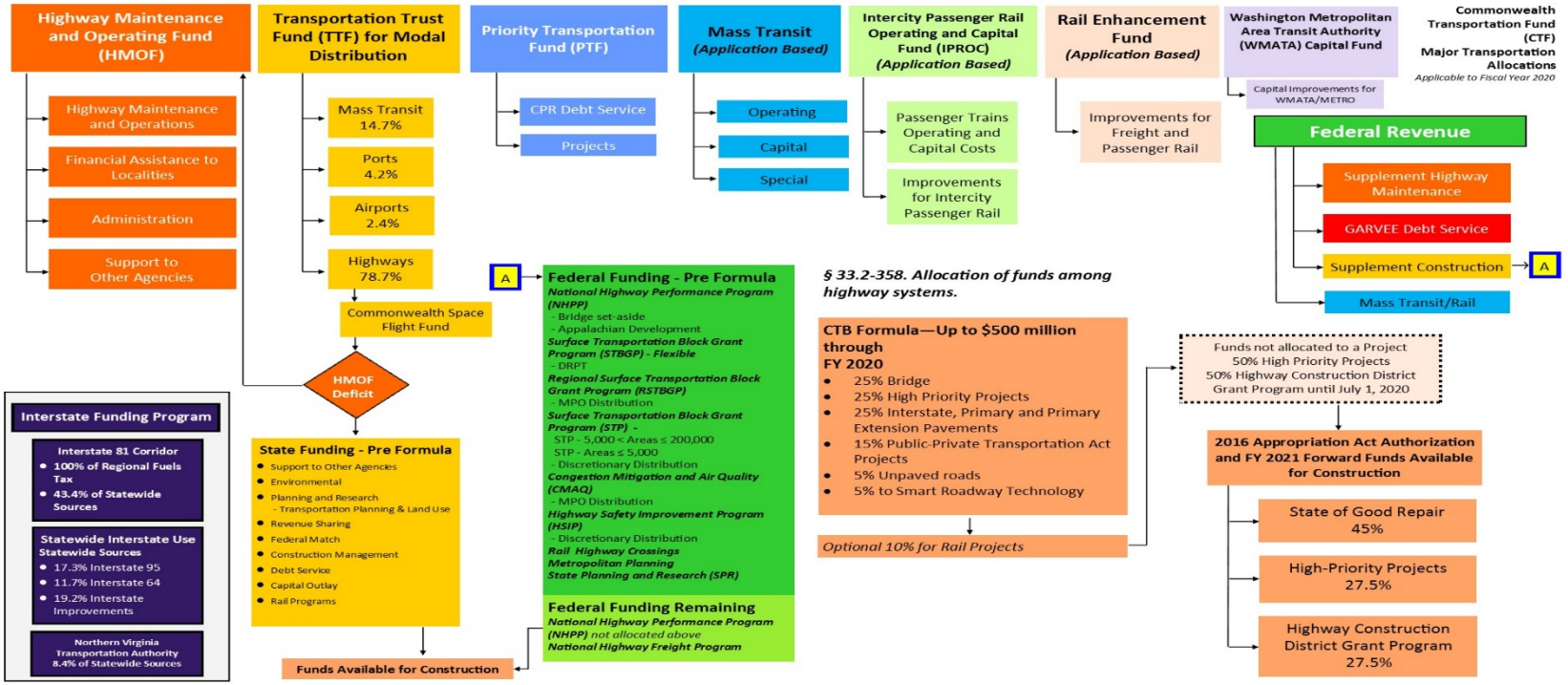
- Transportation Funding & Where the Money Goes
- Recent Legislative Activity
- Challenges to Funding Sustainability
- 2020 Outlook

Transportation Funding is Complicated



Source: Virginia Department of Transportation.

Transportation Spending is Complex



Source: Virginia Department of Transportation.

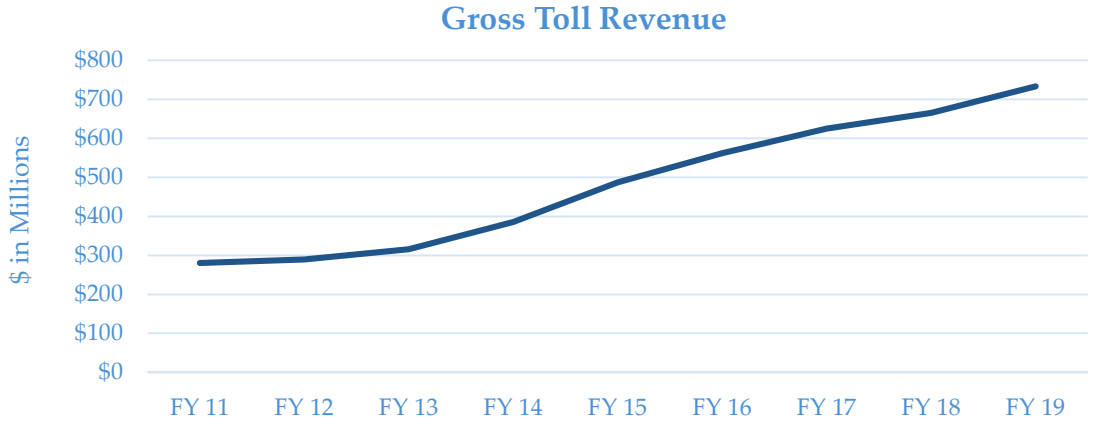
Largest State Revenue Sources are Tied to Consumer Behavior

State Revenue Sources ($ in millions)	FY 20
Retail Sales & Use Tax	$ 1,115.5
Motor Vehicle Sales	921.3
Motor Fuels	903.0
Road Tax	11.9
International Registration Plan	65.0
Motor Vehicle Licenses	261.3
Motor Vehicle Rental Tax	43.5
Recordation Tax	43.6
Insurance Premiums	188.0
Miscellaneous	23.9
Total State	**$ 3,577.0**

- Main transportation funding sources are indirect user taxes.
  - Dedicated Sales Tax is largest single state revenue source.
  - Approximately 4% average annual growth.
  - May grow more slowly in the future.
- Direct user funding from fuels taxes are increasingly stagnant with forecast to decline over time.
  - After a reduction in rate, and stagnant consumption, motor fuels tax revenue is approximately the same level as FY 2008.
  - Growth rate of under 1%.

Toll Projects Capture Direct User Value and Enhance Throughput

- Toll-financed improvements have resulted in more than $10.0 billion in capital improvement project investments.
  - Focus on active traffic management to maximize vehicle throughput.
  - Can provide additional funding streams to support investments in other modes.
  - Terms of these projects can be longer than 50 years.
- In FY 2019,Virginia toll roads generated more than $725.0 million in gross revenues.
  - Gross toll revenues have doubled in past five years.
  - Use of this financing model will likely increase.



Virginia's Toll Facilities	
Chesapeake Bay Bridge Tunnel	Chesapeake Expressway
Dominion Boulevard	Powhite Parkway
Pocahontas Parkway	Downtown Expressway
Dulles Toll Road	Coleman Bridge
South Norfolk Jordan Bridge	Dulles Greenway
Elizabeth River Crossings	I-95 HOT Lanes
I-64 HOT Lanes	I-395 HOT Lanes
I-495 Express	I-66

VDOT Drives Transportation Agency Spending

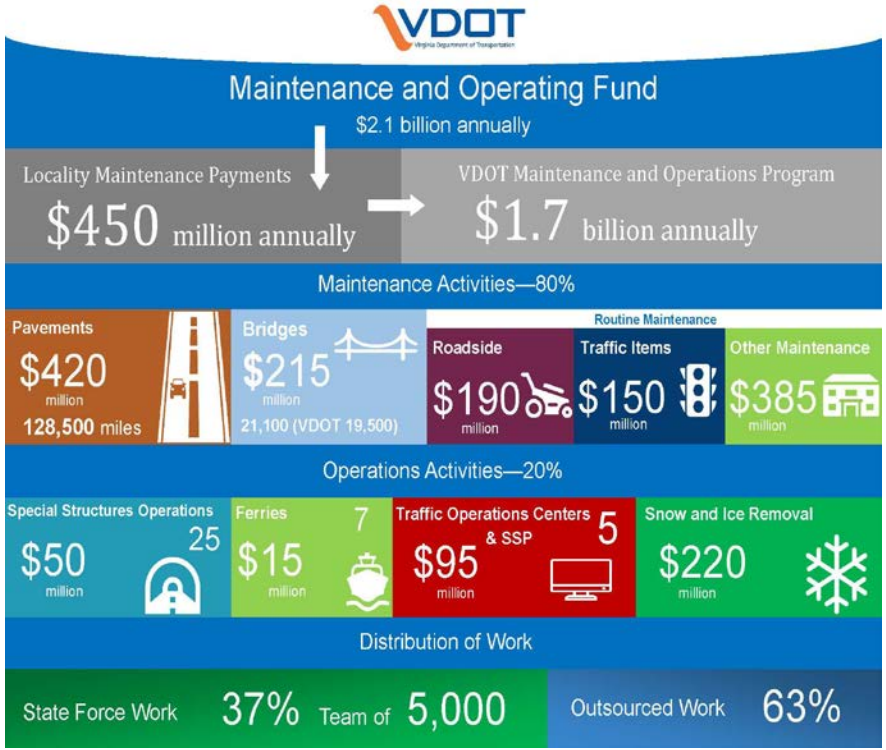
Agency Title	FY 2020 ($ in millions)			FTEs
	GF	NGF	Total	
Secretary of Transportation	$0.0	$0.9	$0.9	6
Commercial Space Flight Authority	0.0	15.8	23.3*	*See note (a)*
Department of Aviation	>0.1	35.9	35.9	37
Department of Motor Vehicles	0.0	293.6	293.6	2,080
Department of Motor Vehicles – Transfer Payments	0.0	185.9	185.9	0
Department of Rail & Public Transportation	0.0	590.5	590.5	64
Department of Transportation	40.0	6,342.2	6,382.2	7,735
Motor Vehicle Dealer Board	0.0	3.1	3.1	25
Virginia Port Authority	1.0	222.1	223.1	236
Total	**$41.0**	**$7,689.9**	**$7,730.9**	**10,183**

** Includes one-time transfer of $7.5 million NGF from TTF to VCSFA in FY20.*

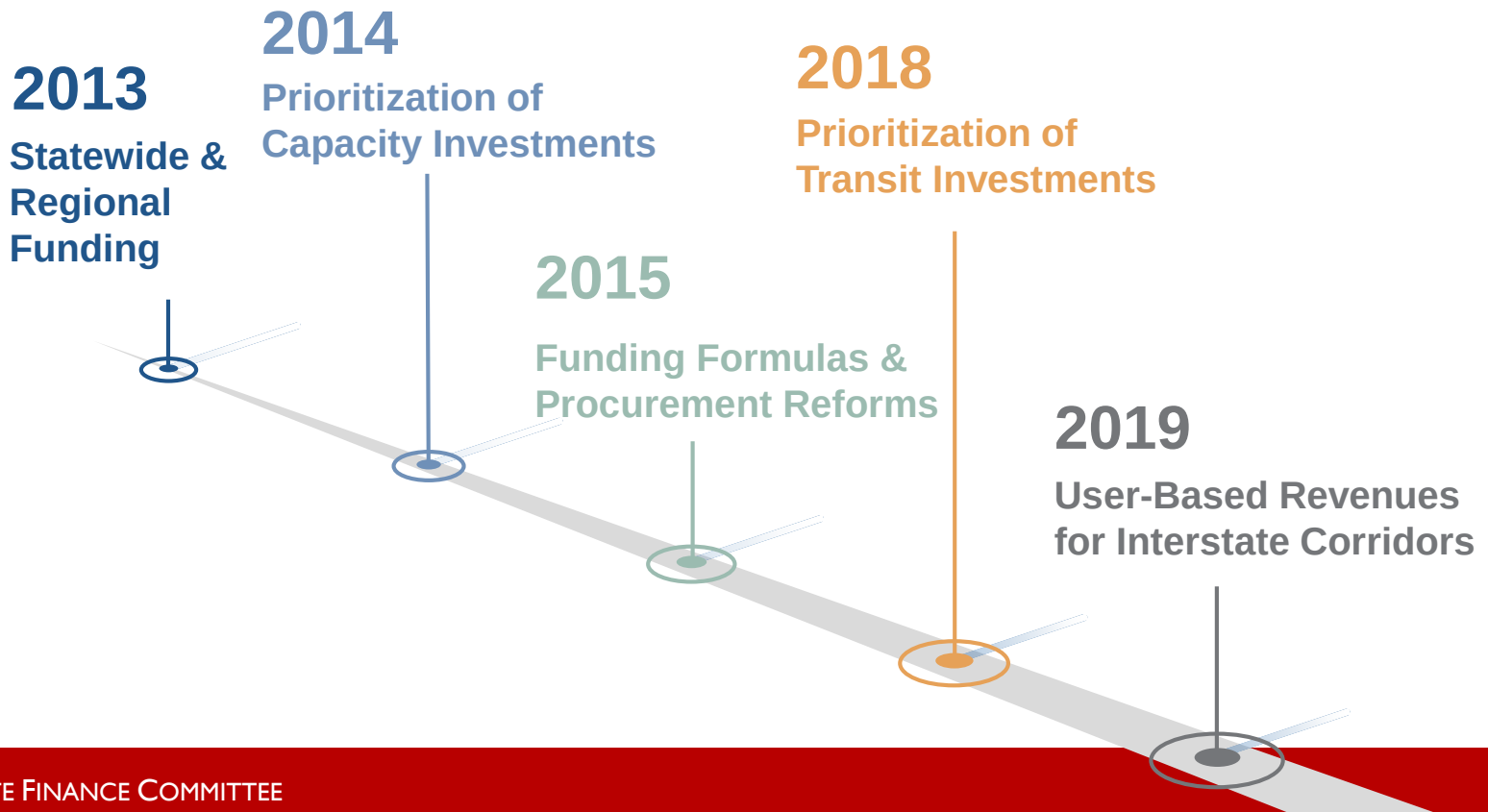
***Note:** **(a)** Positions for authorities are not included in the Appropriation Act.*

Majority of Spending is on Maintenance

- Similar to prior revenue challenges, increasing maintenance costs will decrease funding available for other investments.
  - Transfers from construction to maintenance program are more than $100 million annually.
- Special structures remain a funding challenge given higher costs relative to traffic volume.
  - Estimated cost of $2.5 billion.
  - Request for Information issued for the rehabilitation, maintenance, and potential replacement of 17 moveable bridges and structures.
- 2019 General Assembly directed VDOT review of maintenance spending in order to identify cost effective practices.
  - Report to General Assembly due in December 2019.



Long-term Legislative Initiatives Fundamentally Reformed Transportation Programs



Enhanced Statewide & Regional Funding Reduced Reliance on Debt Financed Improvements

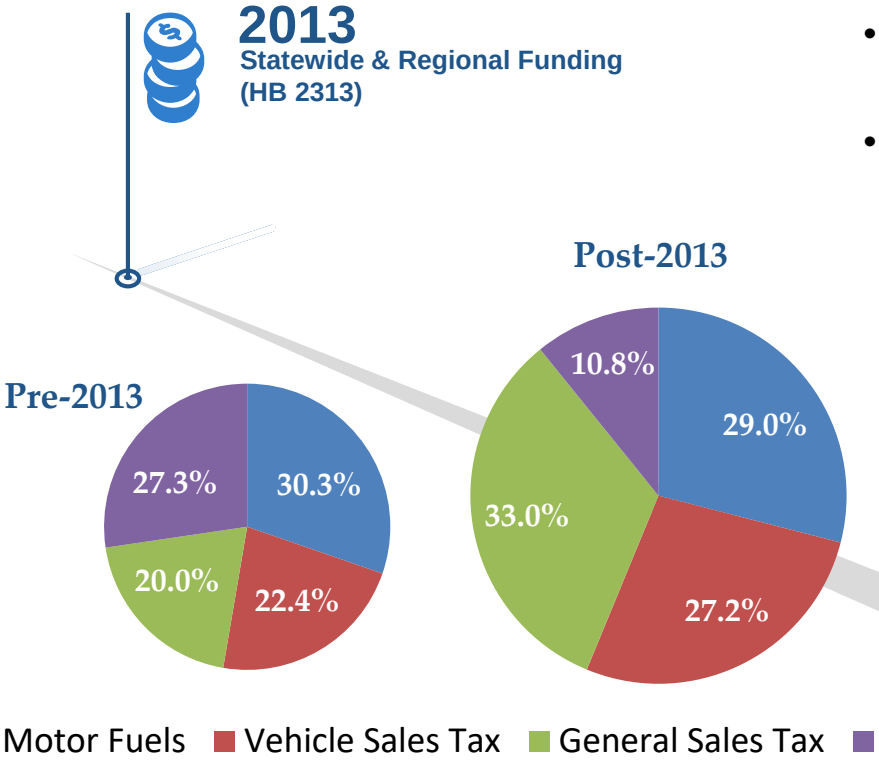
2013
Statewide & Regional Funding (HB 2313)

~$600 million annually

- Increased Statewide Sales & Use Tax by 0.3 percent.
  - **Established Regional Sales Tax of 0.7 percent.**
- Increased Motor Vehicle Sales Tax to 4.15 percent.
- Converted Motor Fuels Tax from excise to sales tax.
  - **Effective decrease from 17.5 to 16.2 cents per gallon.**
- Increased Alt. Fuel Vehicle Registration fee to $64.
- Established Dedicated Regional Funding Sources in Northern Virginia and Hampton Roads.
  - **Expanded to I-81 Corridor in 2019.**

Region	Regional Funding Sources
Northern Virginia	Regional Gas & Sales Tax, Transient Occupancy Tax, Grantor's Tax
Hampton Roads	Regional Gas & Sales Tax
I-81 Corridor	Regional Gas Tax

Statewide Funding Model Shifted Majority of State Transportation Revenues to Sales Taxes



- General and motor vehicle sales taxes now account for 60% of state generated transportation revenues.
- Sales tax collections – approximately 17% of general fund revenues and one-third of state transportation revenues - have increased 8.0% through November, ahead of the annual estimate of 4.2 %.
  - Substantial growth of online retailers following 2019 legislation has resulted in additional revenues.
  - Sensitivity of sales tax revenues to general economic conditions increases the difficulty of forecasting Commonwealth Transportation Fund revenues.

Outcome-Based Metrics for Project Prioritization Rank Overall Project Benefits Relative to Cost

SMART SCALE — Funding the Right Transportation Projects in Virginia

System **M**anagement & **A**llocation of **R**esources for **T**ransportation

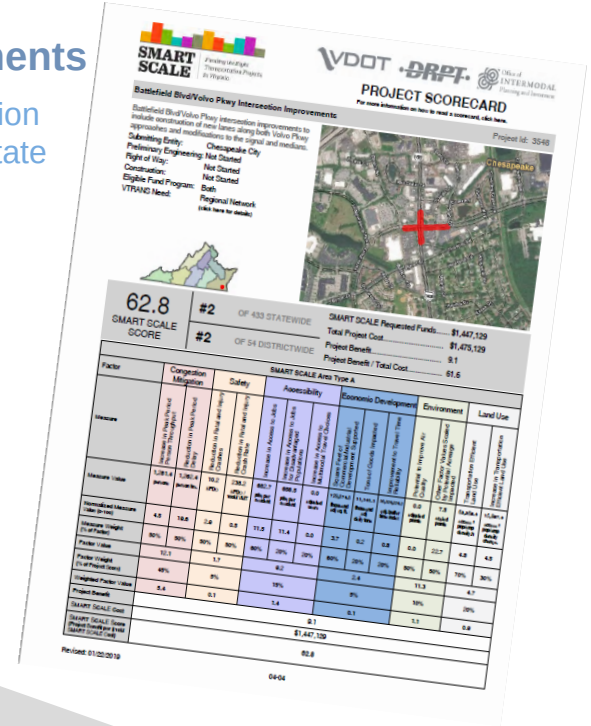
Safety, **C**ongestion, **A**ccessibility, **L**and use, **E**conomic Development & Environment

2014

Prioritization of Capacity Investments

Established metric-driven process for selection of capacity enhancing projects at both the state and district level.

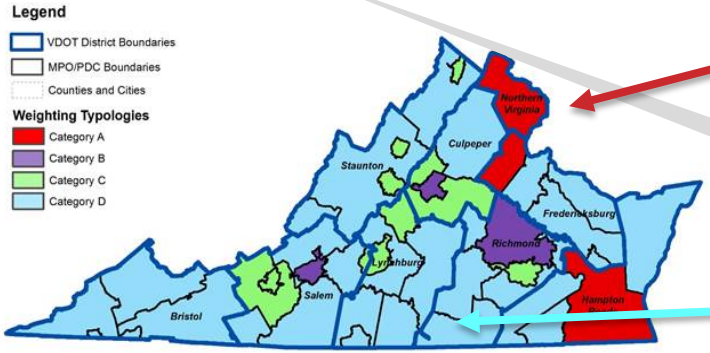
Does Not Apply to All Types of Project Funding



Project Selection is Driven by Regional Priorities

SMART SCALE
Funding the Right Transportation Projects in Virginia

2014
Prioritization of Capacity Investments



Factor	Congestion Mitigation	Economic Development	Accessibility	Safety	Environmental Quality	Land Use
Category A	45%	5%	15%	5%	10%	20%
Category B	15%	20%	25%	20%	10%	10%
Category C	15%	25%	25%	25%	10%	-
Category D	10%	35%	15%	30%	10 %	-

Despite Improvements to Project Selection Process, Identified Needs Outpace Available Funding

	Round 1 (2015)	Round 2 (2016)	Round 3 (2018)	Trend
Projects Submitted	321	436	433	↑
Funding Requested	$7.2B	$9.7B	$7.4B	↔
Available Funding	$1.4B	$1.0B	$0.8B	↓

Changes to Funding Formula Increased Focus on Asset Management and Increased Autonomy of Commonwealth Transportation Board

2015
Funding Formula & Procurement Reforms

- Repealed and replaced Primary, Secondary and Urban programs.
  - 45% - State of Good Repair (district caps 17.5%)
  - 27.5% - High Priority Projects Program
  - 27.5% - Construction District Grant Program
- Expanded prioritization process to Highway Maintenance and State of Good Repair programs.
- Increased independence of Commonwealth Transportation Board.

- Recapitalized Virginia Transportation Infrastructure Bank & Transportation Partnership Opportunity Fund.
  - Supports investment in project start-up costs and economic development opportunities.
- Increased investments for transit capital.

Changes to Procurement Processes Are Designed to Balance Risk Profile and Ensure Best Value for Money

2015
Funding Formula & Procurement Reforms

- Established standards for Finding of Public Interest and requires certification that negotiated terms are consistent with the Finding prior to signing of a Comprehensive Agreement.
  - Assignment of risks, liabilities, and responsibilities to be handled by the private and public sectors.
  - Requires VDOT to establish a process to identify high risk projects and mitigate potential risks.
  - Benefit of using P3 over conventional procurement options.
  - Advisory Committee must determine a P3 procurement is in the public interest prior to initiating procurement.
- Prohibits a Comprehensive Agreement unless the Secretary certifies that risks, liabilities, and permitting responsibilities have not materially changed during negotiations.

Transit Reforms Focused on Dedicated Revenue for Transit Capital and Increased Capacity

2018

Prioritization of Transit Investments

- Established dedicated funding stream for both transit and commuter rail.
- Provided $154 million annually in dedicated to the WMATA Capital Fund.
  - Redirected regional TOT and Grantors Tax.
- Established a “floor” of regional gas tax consistent with state.
- Dedicated Funding for Commuter Rail Operating and Capital.
  - $15.0 million annually to VRE.
- Requires prioritization process for transit operating and capital investments.

Corridor-Specific Funding Model Allocates Revenue Based on Truck Volume Relative to All Traffic

2019

Corridor-Specific Funding Models

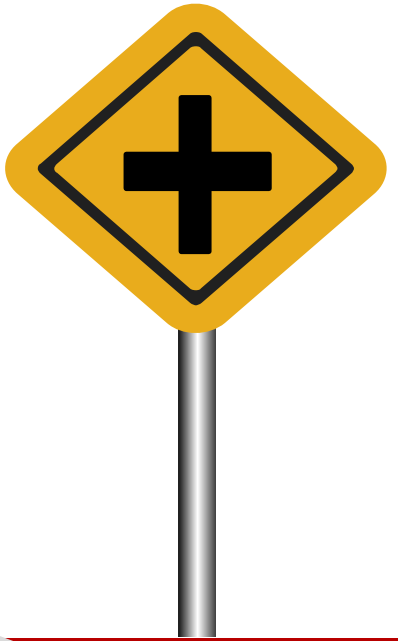
- Established Regional Funding for Interstate 81.
- Established the Statewide Interstate Improvement Fund.
- Increased and Indexed road tax to fuel economy.
- Creates framework for VMT fuel consumption by heavy freight vehicles along interstate corridors.
- Long range improvement plans for each interstate corridor.

~$150 million in new I-81 corridor revenues

~$2.0 billion in identified needs

2020: Transportation Funding at a Crossroads

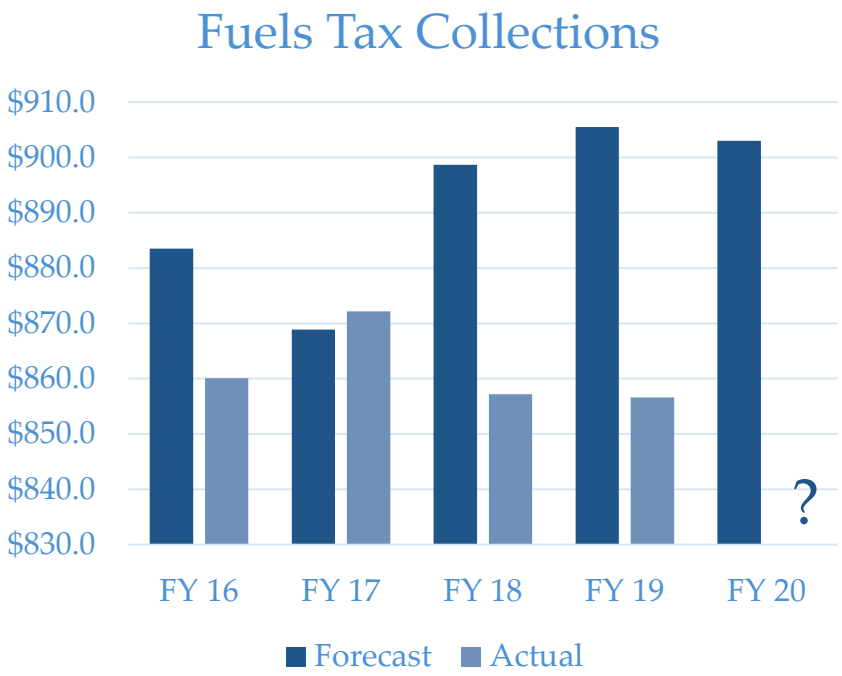
- Previous policy decisions had a positive impact on programmatic expenditures but sustainability of funding streams continues to be challenging.
  - Indirect user taxes are largest revenue sources.
  - Regional motor fuels taxes not imposed in all regions.
  - Increased fuel efficiency and use of hybrid vehicles.
  - Increased use of on-demand transportation services.
- 2019 Appropriations Act directed evaluation of potential options to provide a sustainable funding stream for transportation infrastructure.
  - Report is due on December 10, 2019.



Transportation Workgroup Report Plans to Address Funding Challenges

- Increasing Fuel Efficiency
  - Increasing adoption of hybrid and electric vehicles are forecasted to reduce revenues from fuel taxes by 35 percent by 2030 due to increased fleet fuel efficiency and electric vehicle adoption.
- Reliance on Sales Tax
  - General need to expand base to consumption of services consistent with consumer behaviors.
- Cyclical Motor Vehicle Sales
- Increasing Demand for Mobility as a Service
- Maintaining Economic Competitiveness
  - Congestion costs have a state economic impact of approximately $6.4 billion.
  - Capital Investments in Ports, Airport, Commercial Aerospace grow statewide economy.
- Reducing Greenhouse Gas Emissions

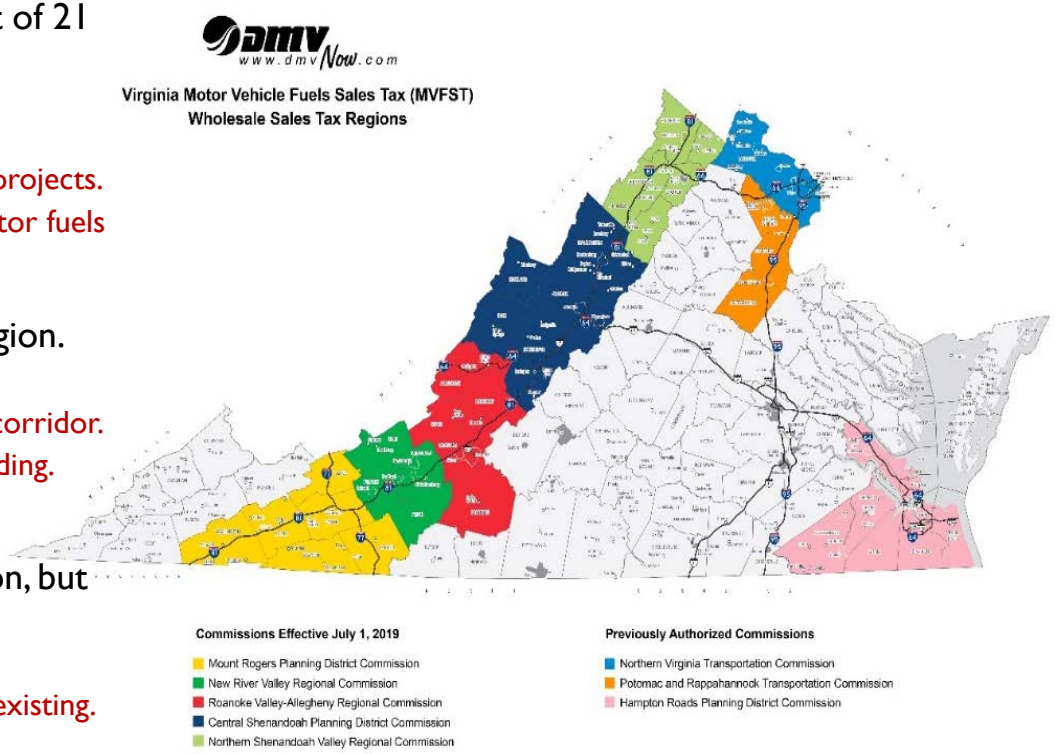
Fuels Tax Collections Lag Forecast



- Between 2016 and 2018, driving has increased and fuel tax collections have decreased at the same time.
  - Vehicle miles traveled ("VMT") increased 3.2 percent.
  - Motor Fuels tax collections decreased 0.4 percent.
  - Would have resulted in approximately $31.3 million if kept pace with VMT.

Regional Motor Fuels Taxes Face Similar Challenges

- Regional motor fuels taxes are imposed on eight of 21 planning districts.
  - 2.1 percent wholesale fuels tax is imposed by the Commonwealth.
  - Allocated to regional authorities or for authorized projects.
  - In FY 20, approximately $200 million in regional motor fuels tax revenues will be collected.
- Use of local transportation revenue varies by region.
  - No transit spending in Hampton Roads.
  - Only on interstate capacity projects along the I-81 corridor.
  - Can support debt authorization from dedicated funding.
- Expanding to all VDOT districts with deposit to Construction District Grant Program is an option, but has some challenges.
  - Richmond, Lynchburg Culpeper – no overlap.
  - Fredericksburg, Bristol, Salem – some overlap with existing.
  - NoVa, Hampton Roads – already fully embraced.



Gas Tax Revenue Declines Driven by Increases in Fuel Efficiency

Toyota Camry			
Model Year	**MPG**	**Tax Paid**	**Change**
2000	23	$ 81.70	
2009	25	$ 75.17	(8%)
2019	34	$ 55.27	(32%)
2019 Hybrid	52	$ 36.14	(56%)

Chevy Malibu			
Model Year	**MPG**	**Tax Paid**	**Change**
2000	22	$ 85.42	
2009	23	$ 81.70	(4%)
2019	29	$ 64.80	(24%)

Hyundai Sonata			
Model Year	**MPG**	**Tax Paid**	**Change**
2000	21	$ 89.49	
2009	24	$ 78.30	(13%)
2019	28	$ 66.32	(26%)
2019 Hybrid	52	$ 44.74	(50%)

Ford F-150 (2WD)			
Model Year	**MPG**	**Tax Paid**	**Change**
2000	16	$ 120.46	
2009	17	$ 110.54	(8%)
2019	20	$ 93.96	(22%)

Source: Office of the Secretary of Transportation.

Many States Use Variable Fuel Taxes to Address Increasing Fuel Efficiency

Inflation-based Index		
State	Gas Tax + Fees (cpg)	Index Type
Alabama	21.21	National Hwy CCI
California	55.18	State Inflation
Florida	37.99	Consumer Price Index
Georgia	35.28	Fuel Efficiency + CPI
Indiana	42.90	State Inflation
Maryland	35.30	Gasoline Prices + CPI
Michigan	42.86	State Inflation Rate
North Carolina	36.45	Population Growth + CPI
Rhode Island	34.00	Consumer Price Index
Utah	30.01	Gasoline Prices + CPI

Price-based Index		
State	Gas Tax + Fees (cpg)	Index Type
Arkansas	21.80	Gas Prices
Connecticut	36.85	Gas Prices
Hawaii	46.76	General Sales Tax
Illinois	36.87	General Sales Tax
Kentucky	26.00	Gas Prices
Nebraska	30.50	Gas Prices + State Spend
New Jersey	41.40	Gas Prices
New York	45.35	Gas Prices
Pennsylvania	58.70	Gas Prices
Vermont	30.46	Gas Prices
Virginia	21.95	Gas Prices
West Virginia	35.70	Gas Prices

Source(s): KPMG Analysis, National Conference of State Legislatures.

States With Transportation Service Taxes

Fees on Total Trip Cost

Entity	Type	Amount
Alabama	Variable	1%
District of Columbia	Variable	6%
Nevada	Variable	3%
Rhode Island	Variable	7%
South Carolina	Variable	1%
South Dakota	Variable	4.5%
Wyoming	Variable	4%
Connecticut	Fixed	$0.25 / ride
Maryland	Fixed	$0.25 / per ride
Massachusetts	Fixed	$0.20 / ride
California	Both	$0.10 / ride
New Jersey	Fixed	$0.50 / ride

Source(s): National Conference of State Legislatures, KPMG Analysis.

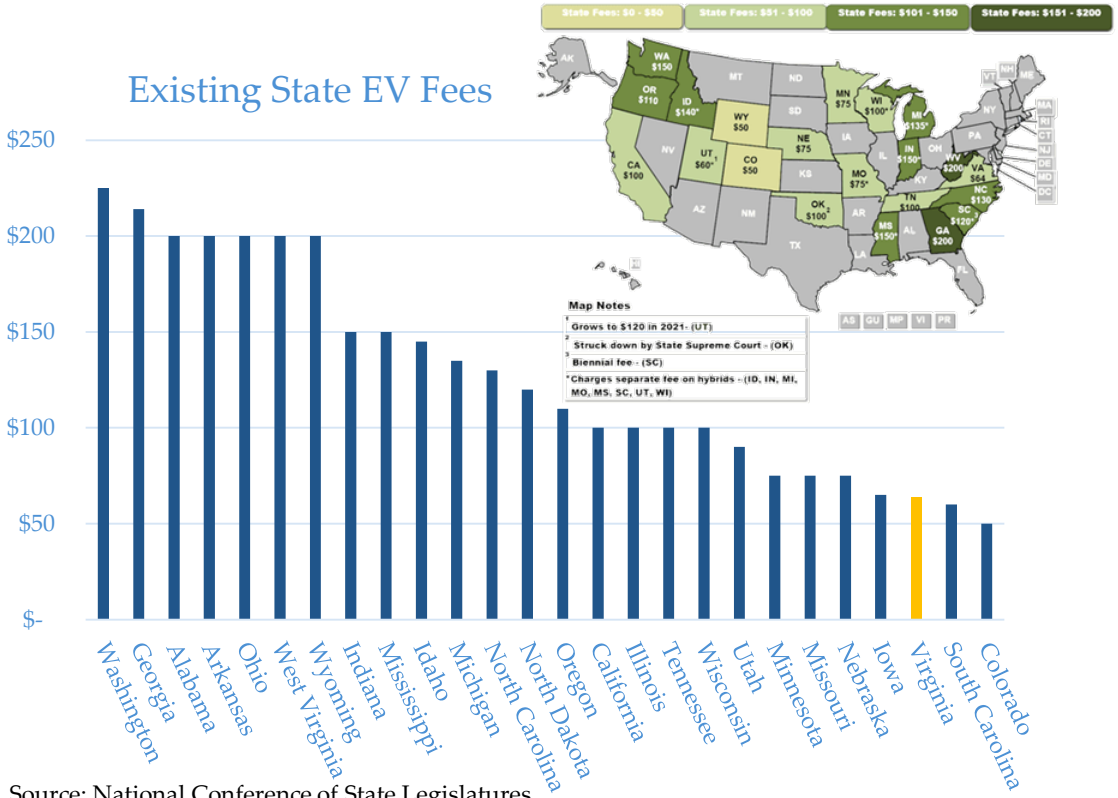
Fees on Operator

Entity	Type	Amount
Arkansas	Fixed	$15,000 / year
Colorado	Fixed	$111,250 / year
Kentucky	Variable	$280 / vehicle
California	Both	0.25% Gross Receipts

- At least 12 states and the District of Columbia assess some form of levy on transportation network company services. Allocation of these revenues includes:
  - Returned to localities (Alabama)
  - Dedicated to transportation or transit programs
  - Dedicated to specific functions (i.e. wheelchair-accessible vehicle access)
  - General Fund

Vehicle Registration Fees Capture User Value

- Virginia's electric vehicle ("EV") registration fee was increased to $64 in 2013 and expanded the fee to include hybrid vehicles.
  - Provisions related to hybrid vehicles were repealed in 2014.
- Today 26 states impose EV registration fees.
  - Virginia is third lowest.
- Oregon tiered registration fee with respect to fuel economy.



Source: National Conference of State Legislatures.

The More Things Change, The More They Stay the Same

- New revenue sources – primarily increased sales taxes – generate more than $600 million in new revenue to transportation programs.
  - Expiration of bond revenues reduced available transportation revenues by almost $500 million.
- Some projects may never score highly on SMART Scale.
- Limited funding mechanisms to address high-cost, low-volume special structures.
- SMART Scale Project requests exceed available construction funds by more than $7 : $1.
- Maintenance program needs require transfers from construction program.
  - Virginia maintains statewide and regional roads as well as local roads in the counties.
- Federal funding is again in the Continuing Resolution cycle.
- Separation of responsibility for funding and land-use decisions creates unique challenges.

The Song Remains the Same

- While considerable changes to Virginia's transportation programs have been implemented in the last decade, funding challenges persist.
  - Funding pressures continue to face transportation agencies.
  - Virginia has taken several precursor steps to more effectively capture user value (registration fees, road tax indexed to fuel economy, tolls).
- Progress that has been made to date should continue to provide integrity and accountability in project selection.
- Emerging technologies – autonomous vehicles, ridesharing, eCommerce – and evolving federal funding roles will require long-range thinking on how programs are funded.