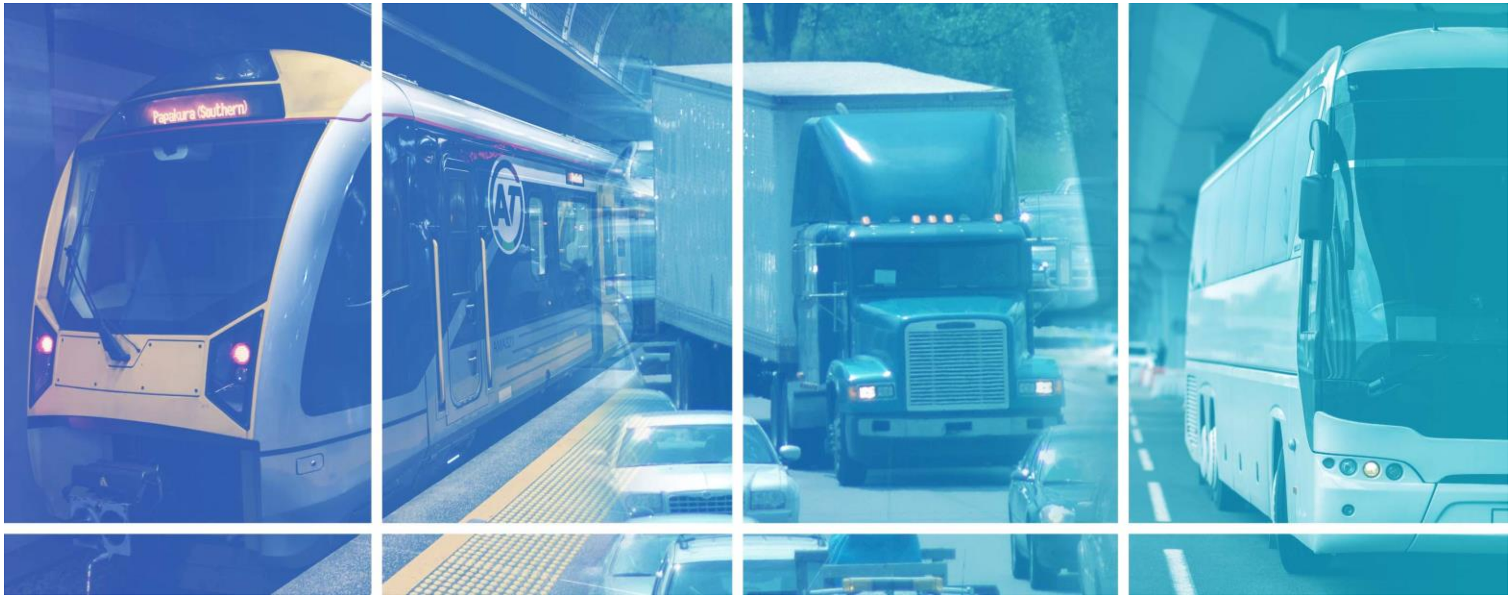
JLARC
JOINT LEGISLATIVE AUDIT
AND REVIEW COMMISSION

March 11, 2022



Transportation Infrastructure and Funding

Briefing to TSDAC

Joint Legislative Audit and Review Commission

- JLARC is a small, legislative branch agency
- Perform policy evaluation and agency oversight studies on behalf of the Virginia General Assembly
  - Nonpartisan, objective research
  - ~5 studies per year, plus other ongoing oversight duties
  - Study topics selected by legislature
  - Report findings to Commission of elected members representing both parties and chambers
  - All reports and briefings are public

Study mandate

- JLARC directed to perform review of
  - transportation funding sources
  - Virginia's highways and other surface transportation infrastructure
  - future trends and impacts, especially
    - changes in travel patterns
    - shift to fuel efficient and electric vehicles
    - state's preparedness to adapt to changes

Research activities

Interviews and survey

- State, regional, and local transportation organizations
- Commonwealth Transportation Board (survey, meetings)
- Associations and subject-matter experts

Data analysis

- Historical and projected transportation revenues
- Condition of road and transit infrastructure
- Distribution of funds under main transportation programs

Document review

- Tax structure in Virginia and other states, including user fees
- Virginia laws and transportation plans, policies, procedures

In brief

Recent legislative changes increased transportation revenues and help address funding concerns.

State's intermodal planning process effectively examines long-term trends and identifies most major transportation needs.

Virginia transit agencies may not have enough funds to keep pace with capital needs, and many agencies may need to reduce services if ridership does not recover to pre-pandemic levels.

Changes are needed to MERIT operating and capital funding programs to better account for services and investments that improve transit access

In this presentation

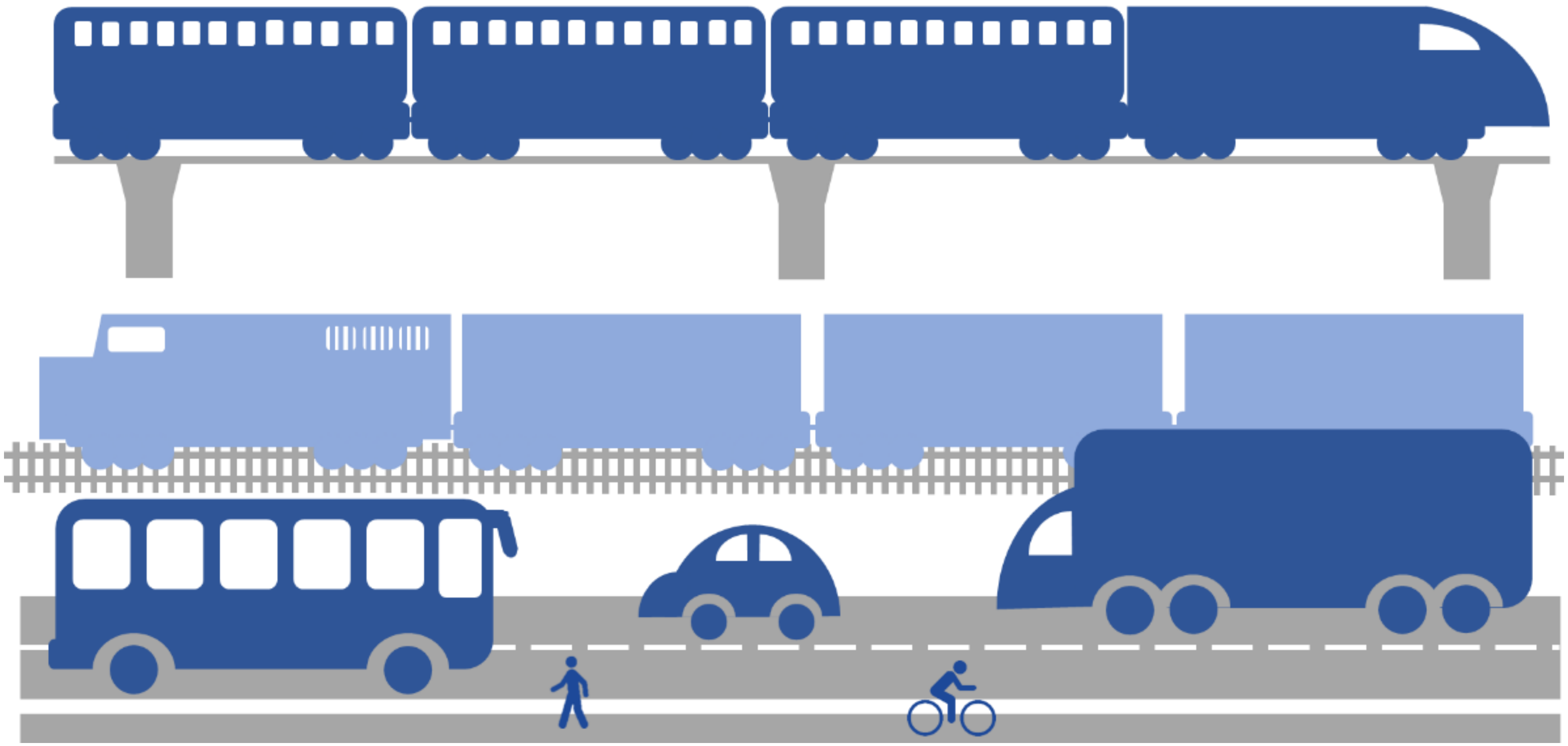
Background

Transportation revenue

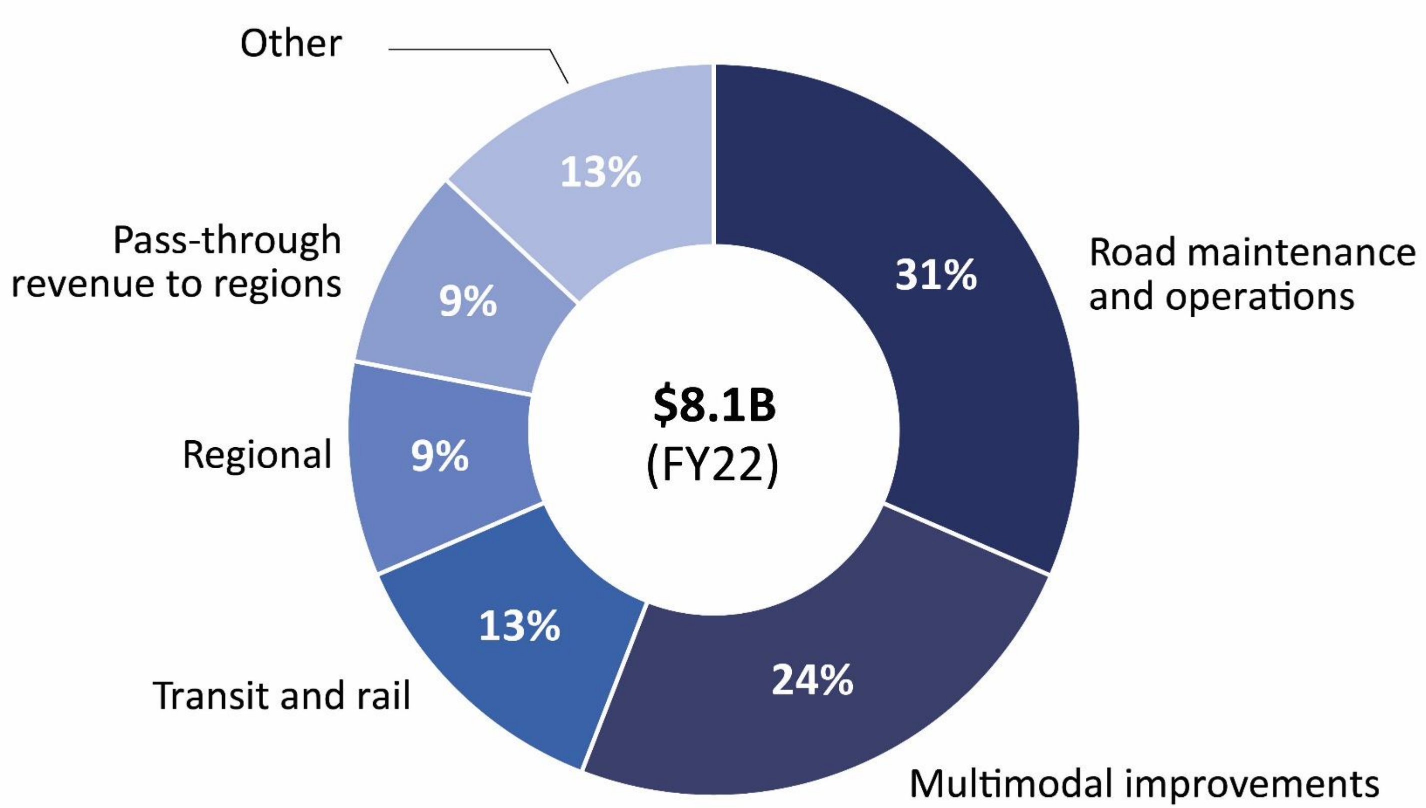
Multimodal improvement planning and funding

Transit condition and funding

Virginia has a multimodal surface transportation system



Majority of $8.1B budget is for road maintenance and operations, multimodal improvements



Other includes debt service (5%), toll operations and other programs (4%), administrative and support services (4%), and various other small categories (1%).

Transportation revenues are distributed through several funding programs

STATE TRANSPORTATION REVENUES

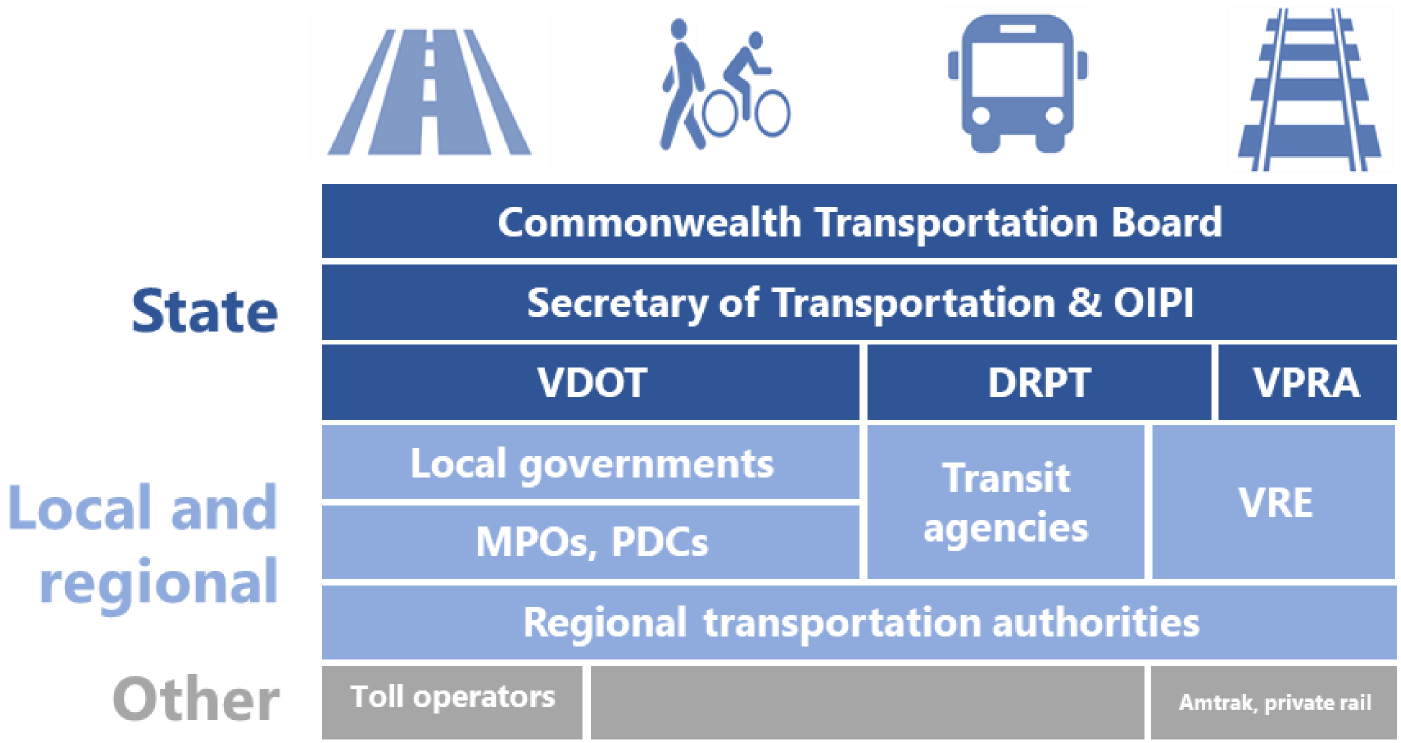
“OFF THE TOP” PROGRAMS
- Special Structures
- Route 58
- Northern Virginia

HIGHWAY MAINTENANCE & OPERATING FUND (51%)
- VDOT Highway Maintenance & Operations Program
- Maintenance payments to localities
- VDOT administration
- Transfers to other agencies

TRANSPORTATION TRUST FUND (49%)
- Smart Scale
- State of Good Repair
- Interstate Operations & Enhancements
- Highway Safety
- Revenue Sharing
- Transit
- Rail
- Other*

*Includes funding for debt service, federal matches, DMV, Port of Virginia, airports, space, planning, & management. $20M in state recordation taxes for Hampton Roads Transit not shown as does not flow to the CTF.

State, local, regional, and private entities are responsible for the transportation system



OIPI = Office of Intermodal Planning & Investment

In this presentation

Background

Transportation revenue

Multimodal improvement planning and funding

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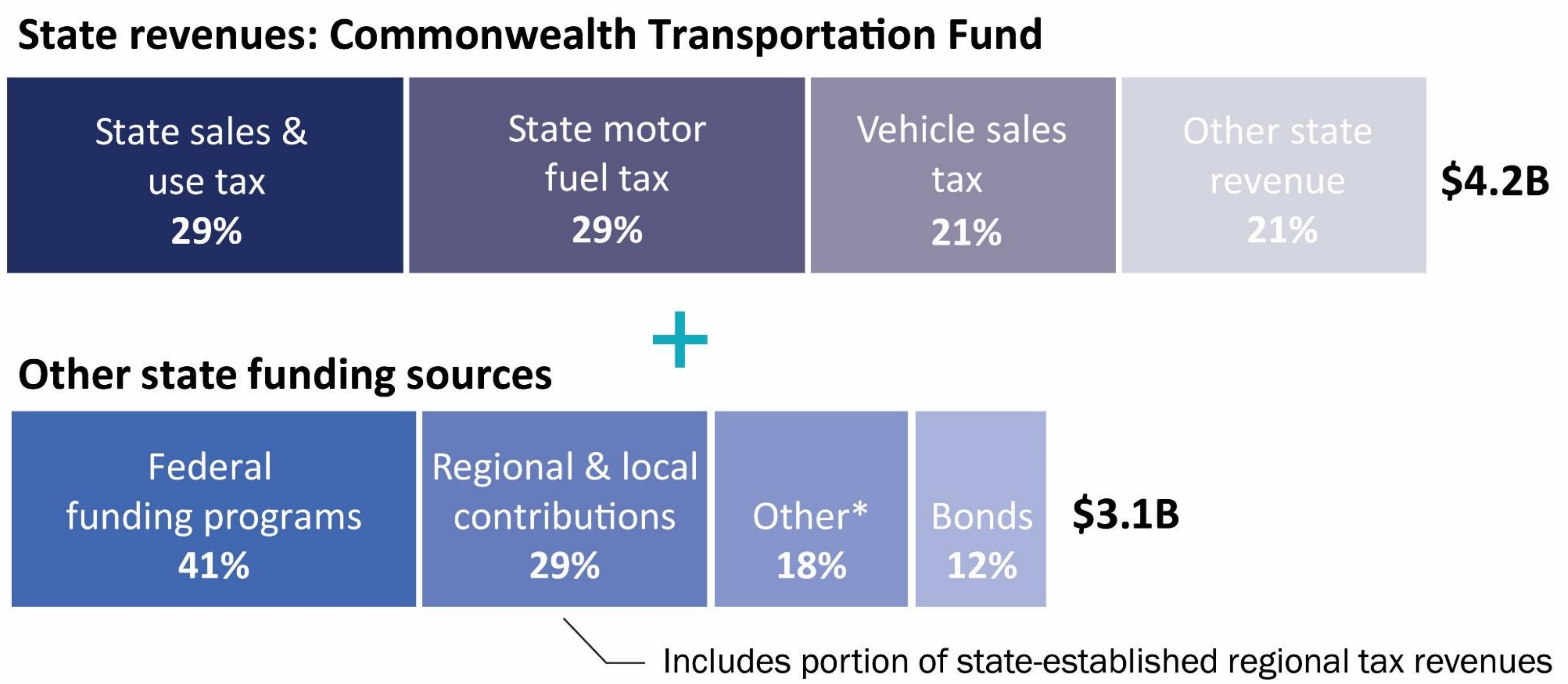
Virginia's transportation revenues come from several state and other sources (FY22)



"Other" includes mostly regional fuel taxes dedicated to Smart Scale

Finding

Recent legislative changes increased transportation revenues and help address near- and longer-term funding concerns.

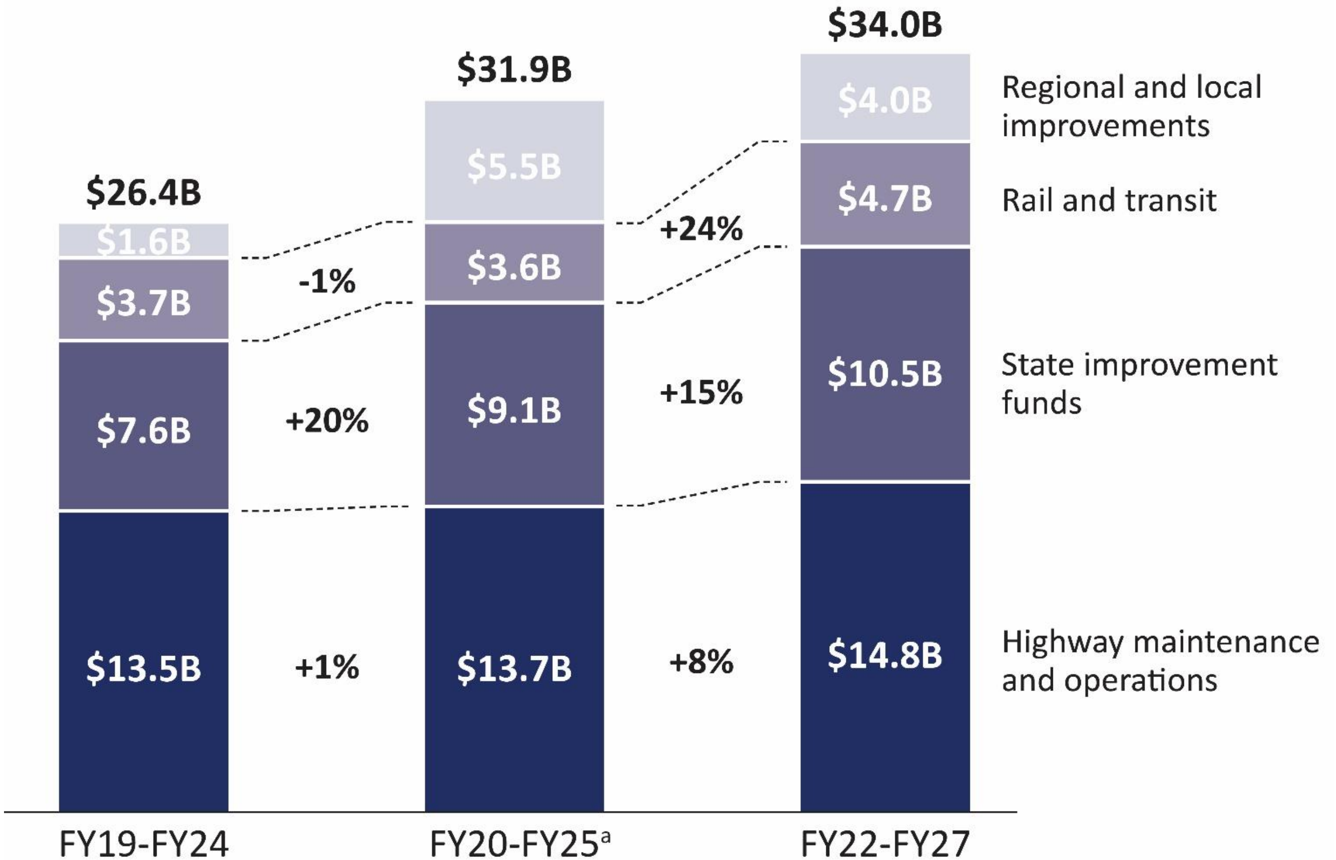
Prior to 2020, transportation system needs were projected to outpace revenue

- Road and transit maintenance needs projected to exceed allocated funds by ≈$300M per year
- Funding awarded under the state's main improvement funding program declined by $160M from FY17 to FY19
- Fuel tax revenues flat and projected to decline over the long term

2020 General Assembly took several actions to address near- and long-term revenue concerns

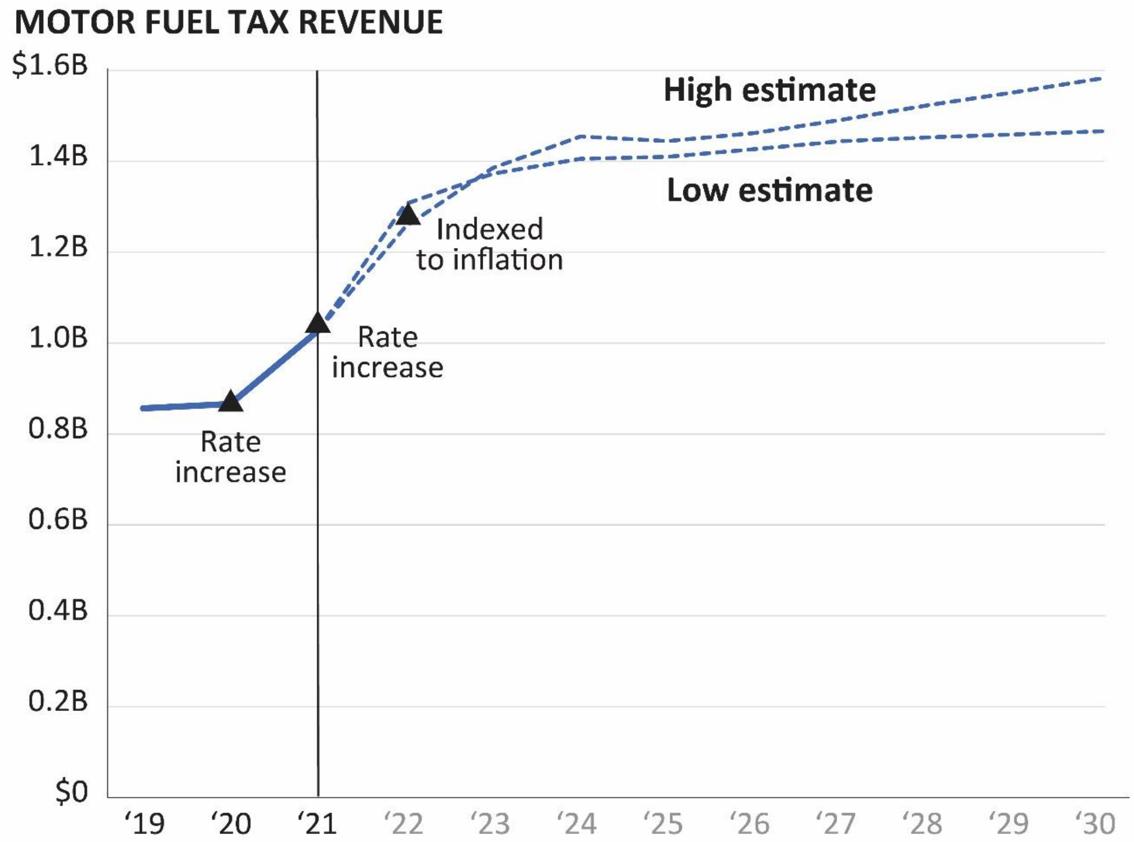
- 2020 omnibus transportation legislation
  - increased state fuel taxes
  - expanded regional fuel taxes
  - indexed fuel taxes to inflation
  - created new user fees
- Addressed gaps in road maintenance budget, reversed decline in funding for multimodal improvements
- Built on several other revenue changes made over past decade (2019, 2018, 2013)

State revenue allocations projected to increase by $3.6 billion (16 percent) during six-year period



Note: There was no FY21–FY26 plan because of the COVID-19 pandemic. Graphic does not show change in regional and local improvement funds.

Fuel tax changes likely offset any revenue lost from declining fuel consumption over next decade



High and low estimates assume varying fuel supply, demand, and prices and also take into account current forecasts of the adoption of electric and fuel efficient vehicles and some policy assumptions.

Virginia implemented new user fees that could eventually replace fuel taxes

- Highway user fee
  - Annual flat fee charged to vehicle owners based on fuel efficiency
  - Generated $43M in FY21 but could potentially generate up to $700M by 2040
- Mileage based user fee
  - Variable fee charged based on actual road use
  - Voluntary alternative to highway user fee, starting FY23
  - Second or third generation program could replace fuel tax

In this presentation

Background

Transportation revenue

Road condition and maintenance funding

Multimodal improvement planning and funding

Transit condition and funding

Virginia's surface transportation system has performance challenges

- Congestion and reliability problems on major interstate corridors and in urban areas
- Safety issues on urban and rural roads
- Shifting to alternatives to single occupancy vehicles
  - Transit, rail, bike/pedestrian
- Continued planning and investment is needed to improve system and address problems

Finding

State's VTrans planning process effectively identifies long-term trends and identifies most major transportation needs.

State effectively identifies long-term trends

- State's VTrans planning process identifies long-term trends and potential transportation impacts in four categories:
  - Technological advancements
  - Climate patterns
  - Socio-demographic changes
  - Consumption patterns
- State already taking action to adapt to some trends

State effectively identifies most of its major transportation needs

- CTB has established needs categories related to safety, congestion, economic development, and access
- State's VTrans planning process uses extensive data analysis and stakeholder engagement to identify needs
- Takes a multimodal perspective

Smart Scale is an objective, apolitical process for funding multimodal improvement projects

- Smart Scale is state's main discretionary program for funding transportation system improvements
  - $1.4 billion awarded in last round
- Scores projects using clear criteria & objective measures
- Funding outcomes appear equitable across regions
- Projects of widely varying size receive funding ($44K–$300M)
- Encourages projects to include transit & bike/ped elements, but potentially under used for transit-only projects

In this presentation

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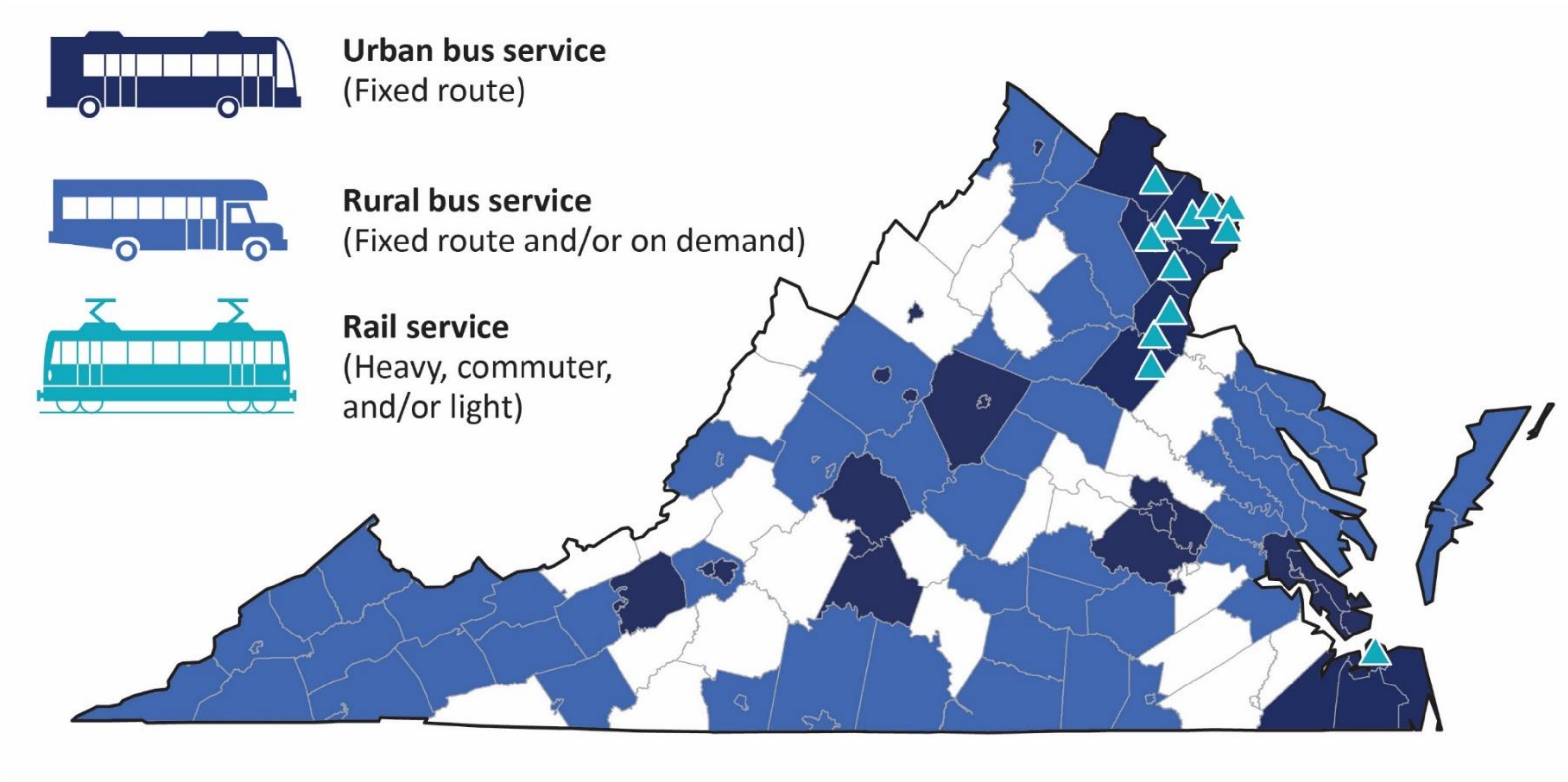
Transit condition and funding

Transit services in Virginia are provided by 40 local or regional agencies across the state



State assistance is a significant revenue source for transit agencies

- State provided $758M to transit in FY22, which pays for
  - 8% of WMATA (“Metro”) operating and capital budgets*
  - 20% of other transit agency operating budgets and over 50% of their capital budgets
- State funding for *most* transit agencies flows through the MERIT operating and capital programs

WMATA = Washington Metropolitan Area Transit Authority

* A portion of state contributions to WMATA flow through localities, so cannot readily determine what portions of state versus local contributions originate with the state.

State recently increased funding it provides to transit agencies

- WMATA funding increased by ~$160M (75%) in 2018[a]
- MERIT transit agency funding by ~$35M (25%) in 2020

	Budgeted ($,M)			Projected ($,M)				
MERIT program	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Operating	$95	$97	$103	$104	$101	$105	$108	$109
Capital	77[b]	39	109[b]	68	68	70	73	74

▲ **2020 legislation funding increase begins**

[a] A portion of state contributions to WMATA flow through localities, so cannot readily determine what portions of state versus local contributions originate with the state.

[b] FY20 and FY22 capital assistance amounts were unusually high because of the allotment of carry over funding from previous years and, for FY22, other one-time funding. The amount of additional FY22 funding from carry over and other sources was $22.6 million.

Finding

Transit agencies have sufficient operating funds in near term, but longer-term sustainability is uncertain if ridership does not return to near pre-pandemic levels.

Fare revenues have declined by 57 percent from pre-pandemic levels, mostly due to lost ridership

	Share of budget		
Funding source	Pre-pandemic (FY20)	Current (FY22)	Percent change
Local funds	44%	50%	+ 14%
State MERIT operating program	18	18	0
Federal operating assistance	12	20	+ 67
Fare revenues	21	9	– 57
Other	5	3	– 40

Note: Funding shown here is for all Virginia transit agencies except for WMATA, which is not included.

Lost fare revenues from lower ridership could eventually lead to service reductions

- Represents 11% funding loss across all agencies (excluding WMATA)
  - $56 million total lost
  - Agency impact ranges from $1,000s to $25 million at VRE
- Agencies using federal relief funds to close budget gaps
- Many agencies will use up relief funds by end of FY22 or FY23 and will have to reduce services if ridership has not largely recovered

VRE = Virginia Railway Express

MERIT operating program will need to account for long-term ridership changes while avoiding harm

- MERIT operating funds distributed by formula that relies partly on ridership (30% of base funding calculation)
- Some transit agencies have experienced much greater ridership losses than others, and lower ridership levels are likely to continue over long term, to some extent
- State should not "subsidize" agencies with greatest ridership losses at expense of others, but…
- State should not reduce its funding assistance in a way that causes further harm to these agencies

Recommendation

DRPT should monitor pandemic ridership recovery at transit agencies and develop options for changing the MERIT operating program formula.

Finding

MERIT operating program formula does not account for transit services that are intended to improve access.

Improved access is on of the main goals of the state, transit agencies

- Access is one of the CTB’s state transportation goals
- General Assembly has recently…
  - required large transit agencies to develop strategic plans looking at, among other things, improving access (2018)
  - directed DRPT to study ways of improving access (2020)
  - created TRIP to provide grants for access improvement initiatives (2020)
- Transit agencies also indicated promoting access is one of their priorities

MERIT operating formula does not consider performance measures related to access

- MERIT formula adjusts funding +/- based on performance
- Current performance measures only consider efficiency and cost effectiveness
  - Ridership per vehicle mile & vehicle hour
  - Cost per vehicle mile, vehicle hour & rider
- Transit agencies operate low volume local services as way to improve system access, especially in low income areas
  - Agencies were concerned current formula penalizes them for these services because services are not efficient nor cost effective

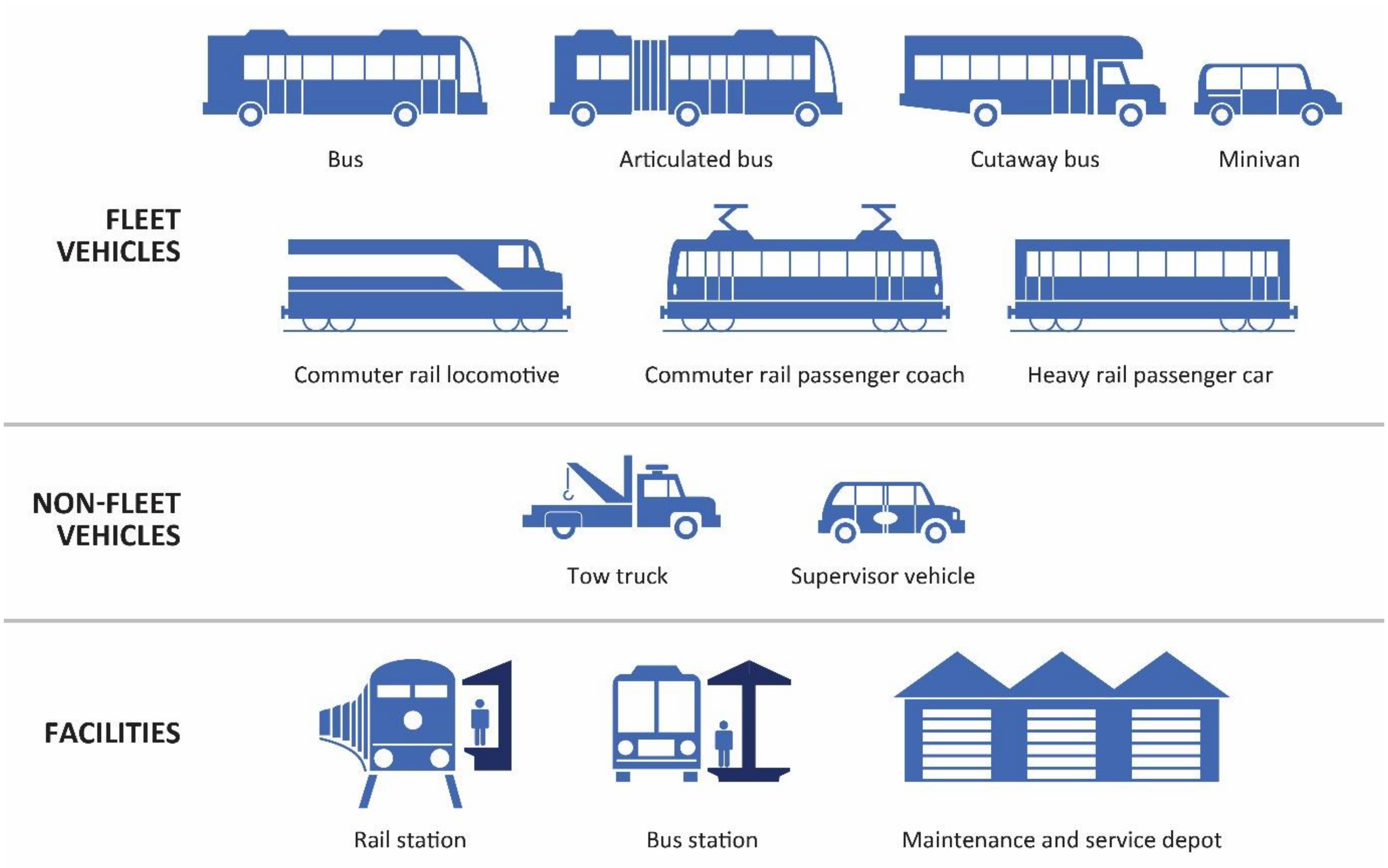
Recommendation

DRPT should review MERIT operating performance measures to determine how they could be changed to recognize or promote transit access.

Finding

Virginia transit assets are generally well maintained, but state capital assistance to transit agencies may not be enough to keep pace with expected capital needs.

Transit agencies maintain variety of assets



Virginia transit agency assets are reported to be in better condition than U.S. transit assets

% of assets in good repair

	Fleet vehicles	Non-fleet vehicles	Facilities	Rail infrastructure
Virginia Tier I agencies	93%	69%	92%	98%
Virginia Tier II agencies	81	80	93	-
All U.S. transit agencies	80	63	88	94

Tier I transit agencies operate more than 100 vehicles (Metro, GRTC, HRT, Fairfax Connector, Omniride, VRE). Tier II are smaller agencies that operate 100 or fewer vehicles (34 agencies).

State capital assistance to transit agencies may not be enough to meet needs

- Transit agencies need to replace fleet vehicles and make system enhancements
- State provides agencies with capital assistance through MERIT funding program (except for WMATA)
- Despite 2020 increase, MERIT capital assistance projected to be less than needed over next five years (FY23–27)
  - $52M shortfall for asset replacement
  - $174M shortfall for minor and major enhancements

Note: Capital funding provided to WMATA from Virginia, Maryland, D.C., and federal government is reportedly sufficient to meet the needs in the agency's 10-year capital plan.

Recommendation

CTB should direct $39.8M in FY21 transportation revenue surplus funds to the MERIT capital program.

CTB could direct a portion of any FY22 revenue surplus to the MERIT program. (This option is contingent on there being a FY22 surplus and a continuing need.)

Finding

MERIT capital program could better account for passenger amenities that improve transit access.

Large transit agencies report need for more passenger amenities to improve access

- Amenities on fixed-route services (shelters, benches) improve access, encourage use, and respect passengers
- Several transit agencies reported their systems lack amenities on many routes

  "We have people standing in ditches waiting for buses."
- Extent of problems unknown, but new transit strategic plan requirement could help agencies better understand
- Other access improvements (sidewalks, crossings) also needed, but responsibility rests with state and localities

Passenger amenity projects do not score well under MERIT capital program criteria

- Amenity projects generally considered minor enhancements
- Projects can score well on two of the four criteria
  - Accessibility and/or customer experience ✓
  - Safety and security ✓
  - Operating efficiency ✗
  - Frequency, travel time, and/or reliability ✗

Recommendation

DRPT should review criteria for scoring minor enhancements under the MERIT capital program to determine how criteria could be changed to make passenger amenity projects more competitive.

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Appendix: MERIT operating program formula