

Virginia Department of Rail & Public Transportation

Revenue Estimation and Transit Resource Allocation Planning

*Revenue Advisory Board /
TSDAC Joint Meeting
May 26, 2017*



OBJECTIVES

- **Address the questions asked during the last Revenue Advisory Board / Transit Service Delivery Advisory Committee Joint Meeting (April 28th)**
 - Revisions highlighted in Yellow

QUESTIONS

- 1. What does the Retail Sales and Use Tax in WMATA jurisdictions raise when Loudoun County is included beginning in 2022?**
- 2. When will the Richmond region be eligible for regional funding?**
- 3. What would real estate taxes raise statewide at various incremental rates?**
- 4. What would a package with higher statewide real estate taxes and implementation of a floor to the regional Fuel Sales Tax raise?**

1. UPDATED ESTIMATION SUMMARY - NORTHERN VIRGINIA

Northern Virginia sources ranked by average annual revenue raised

Northern Virginia Sources	Existing Regional Tax Rate	Increased Tax Rate	Growth Rate	Average Annual Revenue Estimated
Retail Sales and Use Tax – NoVA	0.7% ¹	0.50%	2.64%	\$204.4m
Retail Sales and Use Tax – WMATA Jurisdictions ²	0.7% ¹	0.50%	2.62% ²	\$155.7m
Fuel Sales Tax Increase after Floor Implementation	2.1%	1.2%	EIA Forecast	\$30.6m
Fuel Sales Tax Floor Implementation	2.1% ³	Floor	EIA Forecast	\$25.1m
Utility Bill Fees	-	\$12/yr	1.32%/1.66% ⁴	\$12.0m
Real Estate Transfer Tax	\$0.15/\$100 ⁵	\$0.02/\$100	0.83%	\$6.1m

1: Tax rates for retail sales tax are as follows:

- 0.7% is the NoVA Regional rate
- Effective rate statewide: 5.3%
- Effective rate in NoVA and Hampton Roads: 6%

2: Rate increase for WMATA jurisdictions only. Loudoun County is included starting 2022. Growth rate for WMATA jurisdictions is slightly lower than for NoVA as a whole.

3: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

4: Residential Growth Rate/Commercial Growth rate

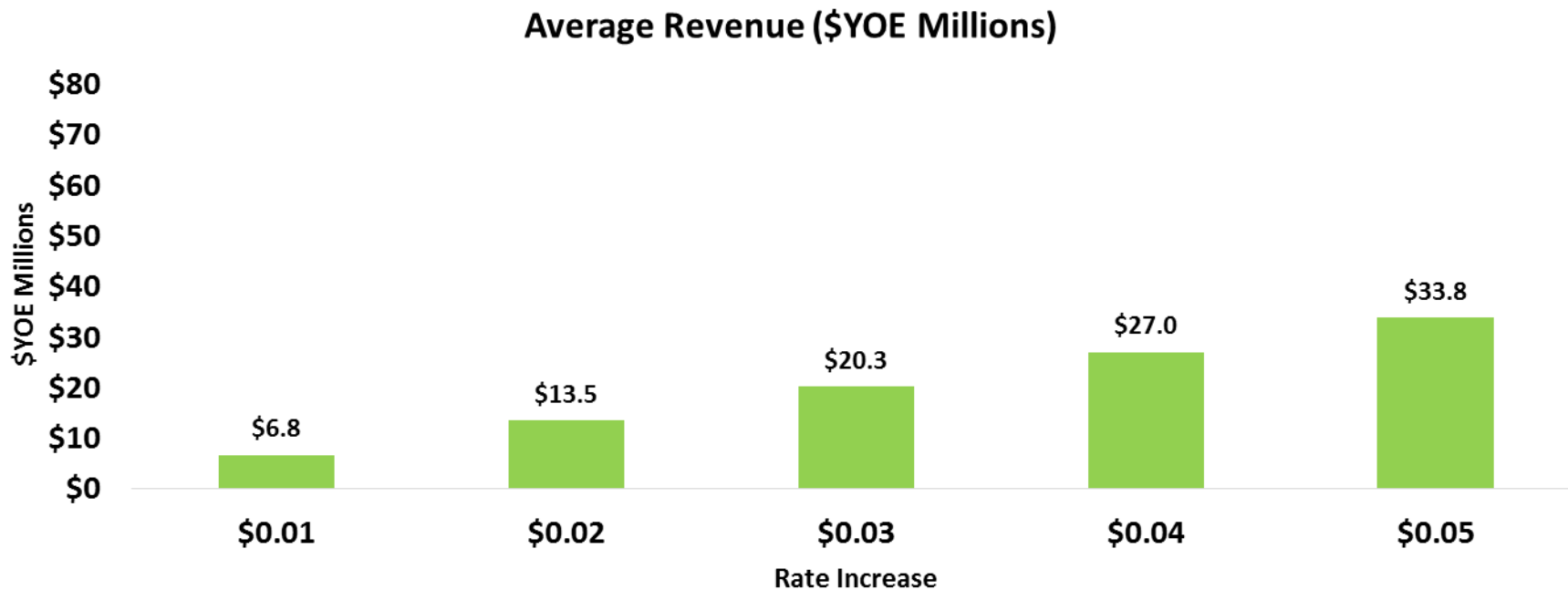
5: \$0.15/\$100 is NoVA Congestion Relief Fee, coupled with the statewide rate of \$0.10/\$100, the effective rate is \$0.25/\$100 in NoVA

2. POPULATION THRESHOLD FOR REGIONAL FUEL SALES TAX

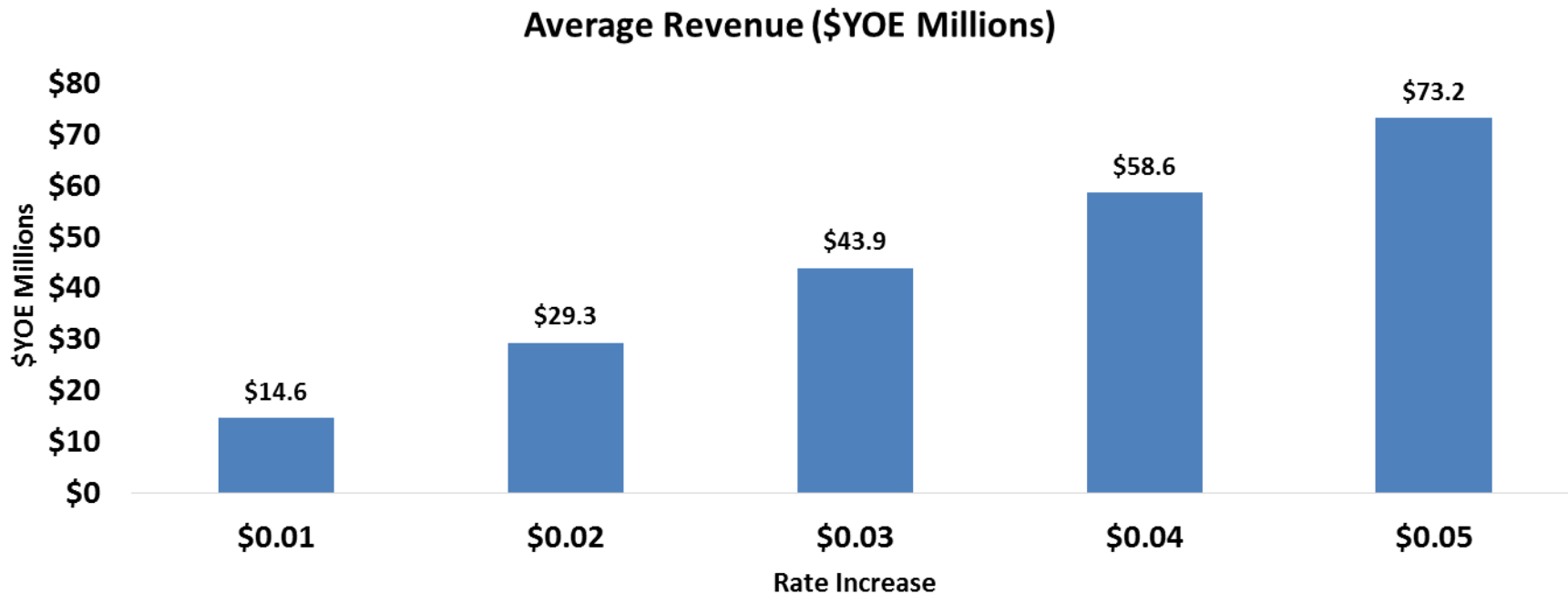
- **Planning District criteria for regional fuel sales tax (2.1%) (§ 58.1-2295.):**
 - Population between 1.5 and 2 million in the most recent United States Census
 - Motor vehicles registered between 1.2 and 1.7 million
 - Total transit ridership between 15 and 50 million riders per year across all transit systems within the Planning District

- **The Richmond district is unlikely to reach the population threshold in the 2020 and 2030 United States Census:**
 - Using the region's population growth rate between 2000 and 2010, population is estimated at:
 - 2020: 1.2m
 - 2030: 1.4m

3. REAL ESTATE TRANSFER TAX – ESTIMATED REVENUES



3. DEED AND MORTGAGE RECORDATION TAX – ESTIMATED REVENUES



4. PACKAGE 4 – INCREASE STATE REVENUES WITH FLOOR FOR REGIONAL FUEL SALES TAX

	Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	New Transit Capital Share	Average Annual Revenue Estimated*
State	Deed and Mortgage Recordation Tax	\$0.25/\$100	\$0.01/\$100	\$0.03/\$100	\$0.04/\$100	\$43.9m
	Real Estate Transfer Tax	\$0.05/\$100	-	\$0.04/\$100	\$0.04/\$100	\$27.0m
	Priority Transportation Fund	-	20-40% of 1/3 of revenues	-	Net Revenue after Debt Svc.	\$67.4m ¹
	State Subtotal					\$91.2m²
Regional	NoVA – Fuel Sales Tax Floor Implementation	2.1% ³	-	Floor	-	\$25.1m
	HR – Fuel Sales Tax Floor Implementation	2.1% ³	-	Floor	-	\$17.3m
	Regional Subtotal					\$42.4m
	Total					\$133.6m²

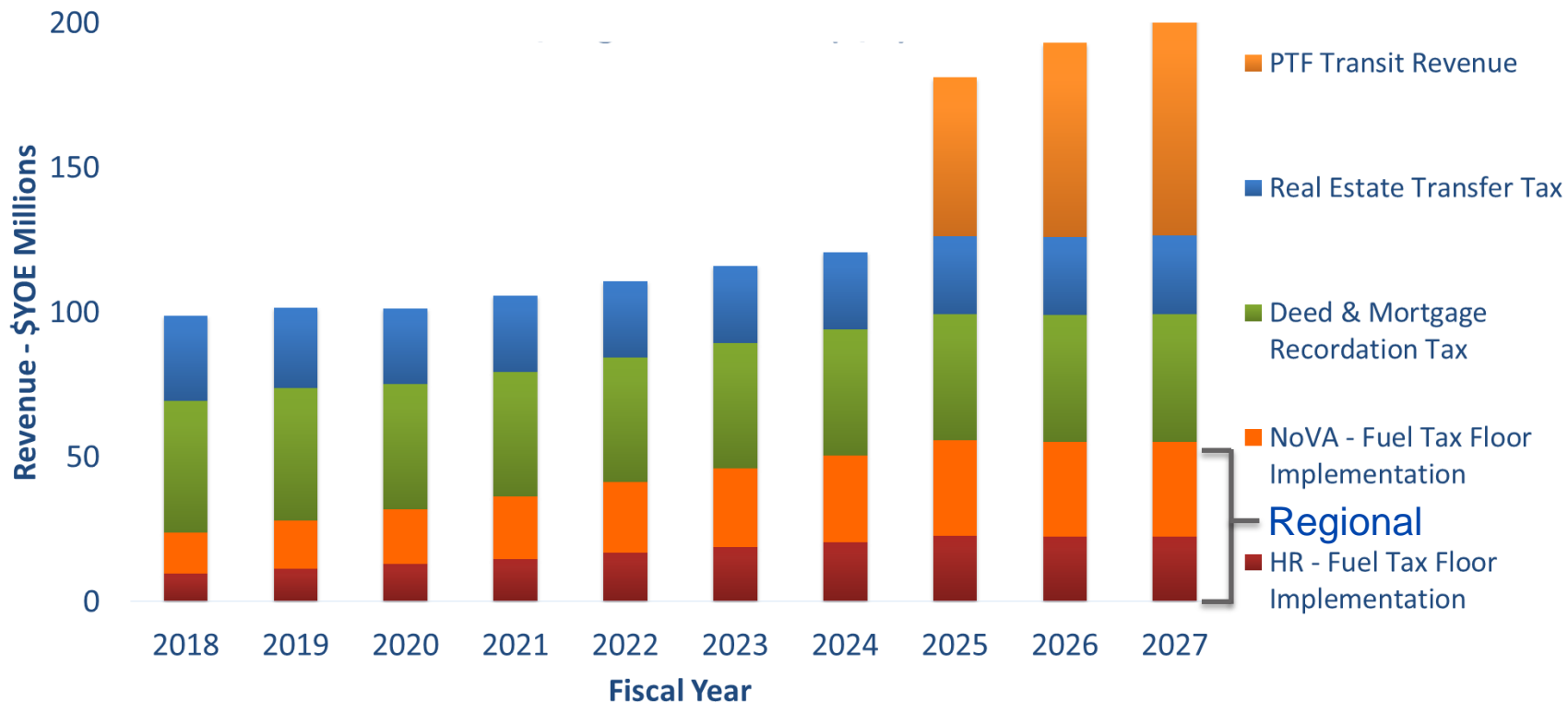
1: Average for PTF is from FY25-27

2: Average Annual Total Revenue Estimated includes partial average from PTF

3: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

*FY18-FY27. Estimates: WSP

4. PACKAGE 4 – INCREASE STATE REVENUES WITH FLOOR FOR REGIONAL FUEL SALES TAX



APPENDIX

KEY QUESTIONS

→ How much funding?

- *Estimate State Transit Capital Assistance Needs*

→ What funding sources?

- *Examine Funding Options, including Revenue Estimation*

→ Which projects?

- *Develop Project Prioritization Approach*

→ How much for each project?

- *Developed Prioritized Funding Allocation Method*

REVENUE ESTIMATION

ACRONYMS

- **CIP – Capital Improvement Plan**
- **FY – Fiscal Year**
- **PRIIA – Passenger Rail Investment Imp**
- **SGR – State of Good Repair**
- **SYIP – Six Year Improvement Plan**
- **WMATA – Washington Metropolitan Area Transit Authority**

REVENUE ESTIMATION: KEY QUESTIONS

→ **What revenues need to be raised?**

- Address funds sunsetting in FY19 and FY20
- Support reasonably-projected growth in capital investments

→ **What are the different revenue options?**

- How much do they raise?
- How can they be packaged?

→ **How to allocate regionally-raised funds?**

REVENUE ESTIMATION METHODOLOGY

- **Time Period:** FY 2018 through FY 2027
- **Unit:** Year-of-Expenditure (YOE) dollars (inclusive of inflation)
- **Data Sources:**
 - Virginia Department of Taxation
 - Northern Virginia Transportation Authority
 - Hampton Roads Transportation Accountability Commission
 - Hampton Roads Transit
 - U.S. Census
 - U.S. Bureau of Labor Statistics
 - U.S. Energy Information Administration (EIA)
- **Growth rates:** Compound Annual Growth Rates (CAGRs) based on FY2018-2022 forecasts used to extend estimates through 2027
- **Revenue Increases:** 5-15% on existing rates, dedicated to transit capital

UPDATED PRINCIPLES FOR SELECTING REVENUE SOURCES

Based on Revenue Advisory Board feedback:

- 1. Focus on transit capital funding**
- 2. Pursue a package of multiple revenue sources**
- 3. Consider both statewide and regional sources (spent in region collected)**
- 4. Ramp up revenues gradually to address future needs**
- 5. Focus on revenue sources for which a rate increase is most feasible**
- 6. Prepare a range of options for General Assembly consideration**



UPDATED APPROACH TO DEFINE FUNDING PACKAGES

- **Separately address regional and statewide needs**

- **Adjust funding packages to reflect Capital Program Prioritization Methods:**
 - Allocate state funding to the best-ranking projects
 - Keep steady state participation rates throughout the period
 - Need for steady and growing revenue streams

ESTIMATION SUMMARY - STATE

State sources ranked by average annual revenue raised

State Sources	Existing State Tax Rate	Increased Tax Rate	Growth Rate	Average Annual Revenue Estimated
Retail Sales Tax	4.3% ¹	0.25%	1.03%	\$338.1m
Motor Vehicle Sales and Use Tax	4.15%	0.50%	1.05%	\$119.3m
Gas and Diesel Fuel Sales Tax	5.1%/6% ²	0.50%	0.89% ³	\$85.7m
Deed & Mortgage Recordation Tax	\$0.25/\$100 ⁴	\$0.05/\$100	0.50% ⁵	\$73.2m
Insurance Premium Tax	2.25%	0.25%	5.53%	\$70.0m
Priority Transportation Fund	-	Net Revenue after Debt Service	-	\$67.4m ⁶
Motor Vehicle License Fee	\$40.75	\$5.00	0.00%	\$36.7m
Internet Sales Tax	-	0.25%	6.07% ⁷	\$24.1m
Real Estate Transfer Tax	\$0.05/\$100 ⁸	\$0.01/\$100	0.50% ⁵	\$6.8m

1: 4.3% is the state rate, effective total rate is 5.3% statewide, and 6% in NoVA and Hampton Roads; tax rate is 2.5% statewide for food

2: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

3: Growth rate from the state forecast on the gas tax. Base price from EIA.

4: Effective rate is \$0.33 /\$100 of deed and mortgage value for most jurisdictions (option of 1/3 additional local rate)

5: Conservative 0.5% growth used to replace negative observed CAGRs

6: Average for PTF is from FY25-27

7: Only 2014-2018 data available, CAGR based on that time series

8: Effective rate is \$0.10/\$100 of deed value (5 cents state rate, 5 cents local rate). Additional \$0.15/\$100 congestion relief fee in NoVA.

ESTIMATION SUMMARY - NORTHERN VIRGINIA

Northern Virginia sources ranked by average annual revenue raised

Northern Virginia Sources	Existing Regional Tax Rate	Increased Tax Rate	Growth Rate	Average Annual Revenue Estimated
Retail Sales and Use Tax – NoVA	0.7% ¹	0.50%	2.64%	\$204.4m
Retail Sales and Use Tax – WMATA Jurisdictions ²	0.7% ¹	0.50%	2.62% ²	\$155.7m
Fuel Sales Tax Increase after Floor Implementation	2.1%	1.2%	EIA Forecast	\$30.6m
Fuel Sales Tax Floor Implementation	2.1% ³	Floor	EIA Forecast	\$25.1m
Utility Bill Fees	-	\$12/yr	1.32%/1.66% ⁴	\$12.0m
Real Estate Transfer Tax	\$0.15/\$100 ⁵	\$0.02/\$100	0.83%	\$6.1m

1: Tax rates for retail sales tax are as follows:

- 0.7% is the NoVA Regional rate
- Effective rate statewide: 5.3%
- Effective rate in NoVA and Hampton Roads: 6%

2: Rate increase for WMATA jurisdictions only. Loudoun County is included starting 2022. Growth rate for WMATA jurisdictions is slightly lower than for NoVA as a whole.

3: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

4: Residential Growth Rate/Commercial Growth rate

5: \$0.15/\$100 is NoVA Congestion Relief Fee, coupled with the statewide rate of \$0.10/\$100, the effective rate is \$0.25/\$100 in NoVA

ESTIMATION SUMMARY – HAMPTON ROADS

Hampton Roads sources ranked by average annual revenue raised

Hampton Roads Sources	Existing Regional Tax Rate	Increased Tax Rate	Growth Rate	Average Annual Revenue Estimated
Retail Sales and Use Tax	0.7% ^{1,2}	0.15%	1.03%	\$23.6m
Fuel Sales Tax Increase after Floor Implementation	2.1%	1.2%	EIA Forecast	\$21.1m
Fuel Sales Tax Floor Implementation	2.1% ³	Floor	EIA Forecast	\$17.3m
Utility Bill Fees	-	\$12/yr	0.5%/0.5%	\$6.5m
Real Estate Transfer Tax	-	\$0.02/\$100	1.00%	\$1.4m

1: Hampton Roads Transit provided revenue estimates for Retail Sales and Use Tax and Real Estate Transfer Tax.

2: Tax rates for retail sales tax are as follows:

- 0.7% is the Hampton Roads Regional rate
- Effective rate statewide: 5.3%
- Effective rate in NoVA and Hampton Roads: 6%
- Tax rate is 2.5% statewide for food

3: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

POPULATION THRESHOLD FOR REGIONAL FUEL SALES TAX

- **Planning District criteria for regional fuel sales tax (2.1%) (§ 58.1-2295.):**
 - Population between 1.5 and 2 million in the most recent United States Census
 - Motor vehicles registered between 1.2 and 1.7 million
 - Total transit ridership between 15 and 50 million riders per year across all transit systems within the Planning District

- **The Richmond district is unlikely to reach the population threshold in the 2020 and 2030 United States Census:**
 - Using the region's population growth rate between 2000 and 2010, population is estimated at:
 - 2020: 1.2m
 - 2030: 1.4m

ILLUSTRATIVE FUNDING PACKAGES

→ Package 1 – Increase Existing Statewide Revenues

- Increase current statewide rates for selected revenues sources
- Ramp up share of Priority Transportation Fund starting 2025

→ Package 2 – Single Source

- Increase current rates for a single source:
 - Retail Sales and Use Tax
 - Fuel Sales Tax

→ Package 3 – Increase Existing State & Regional Revenues

- Increase current rates for selected state and regional sources:
 - Northern Virginia
 - Hampton Roads
- Ramp up share of Priority Transportation Fund starting 2025

→ Package 4 – Increase State Revenues and Floor to the Regional Fuel Sales Tax

- Increase current rates for selected state sources
- Implement a floor to the fuel sales tax in Northern Virginia and Hampton Roads
- Ramp up share of Priority Transportation Fund starting 2025

PACKAGE 1 – INCREASE EXISTING STATEWIDE REVENUES

→ Ramp up share of Priority Transportation Fund starting 2025

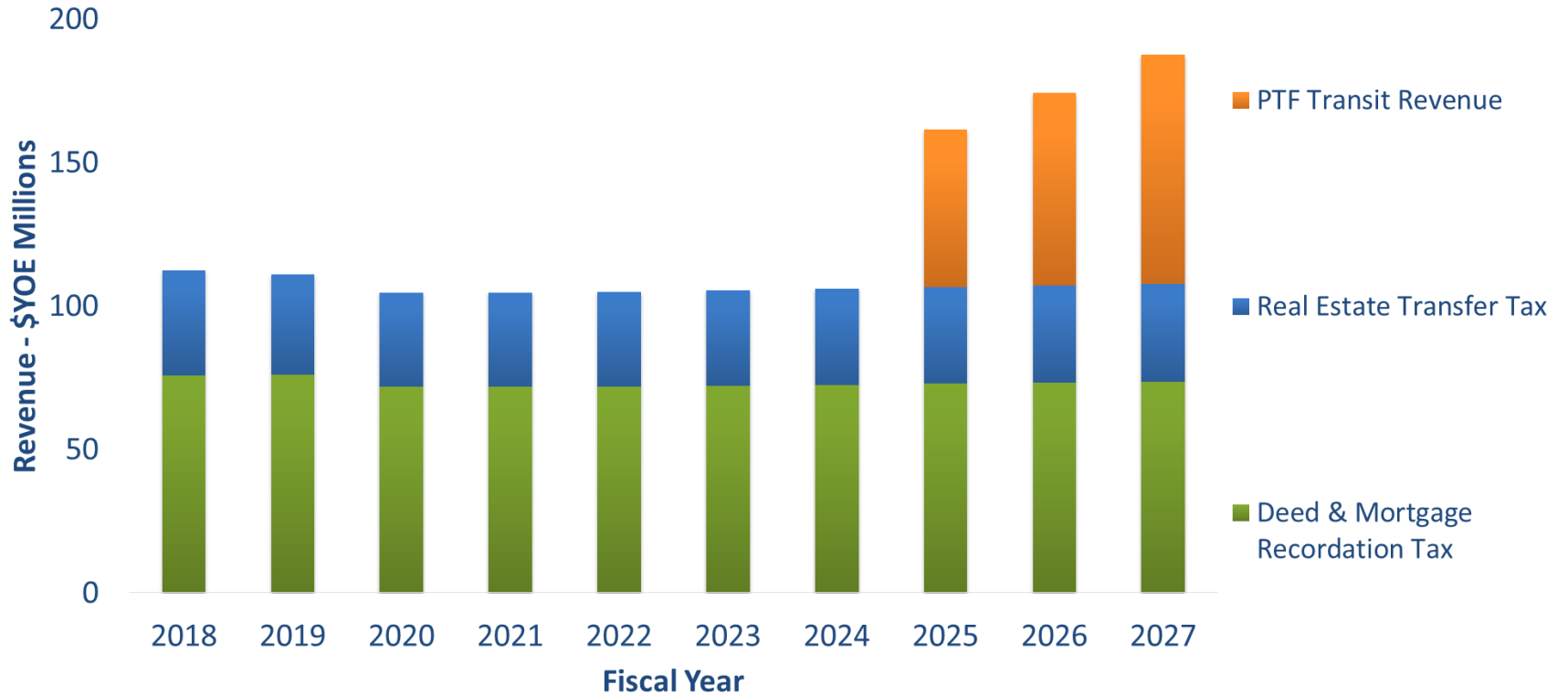
Source	Existing State Rate	Existing Transit Capital Share	Increase to State Rate	New Transit Capital Share	Average Annual Revenue Estimated*
Deed & Mortgage Recordation Tax	\$0.25/\$100	\$0.01/\$100	\$0.05/\$100	\$0.06/\$100	\$73.2m
Priority Transportation Fund	-	20-40% of 1/3 of revenues	-	Net Revenue after Debt Service	\$67.4m ¹
Real Estate Transfer Tax	\$0.05/\$100	-	\$0.05/\$100	\$0.05/\$100	\$33.8m
Average Annual Total Revenue Estimated					\$127.2m²

1: Average for PTF is from FY25-27

2: Average Annual Total Revenue Estimated includes partial average from PTF (FY25-27)

*FY18-FY27. Estimates: WSP

PACKAGE 1 – INCREASE EXISTING STATEWIDE REVENUES



Average Annual Revenue: \$127.2m

Average Annual Total Revenue Estimated includes partial average from PTF

PACKAGE 2 – SINGLE SOURCE

Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	Average Annual Revenue Estimated*
Retail Sales and Use Tax (non-food only)	4.3% ¹	0.04%	0.14%	\$157.3m

-OR-

Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	Average Annual Revenue Estimated*
Fuel Sales Tax	5.1%/6.0% ²	0.18%	0.9%	\$154.2m

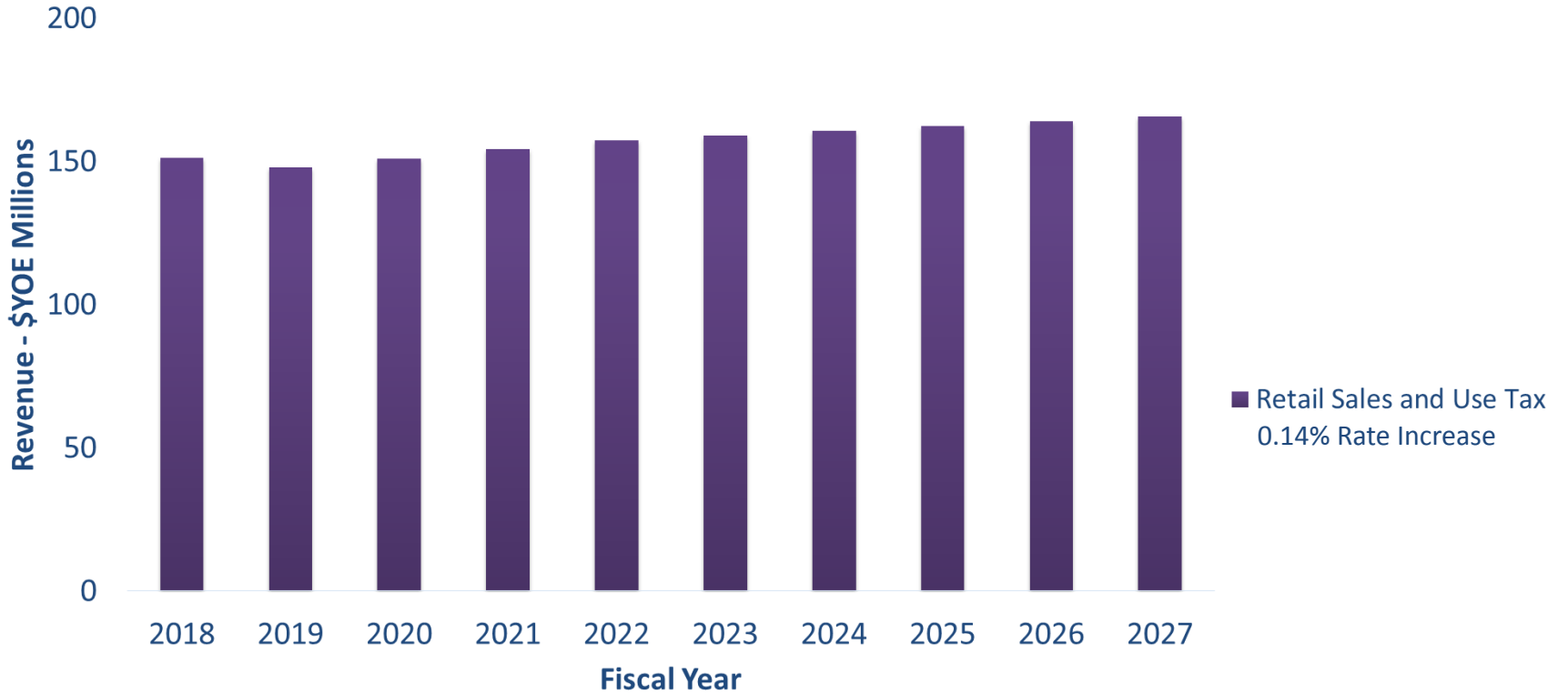
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2: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

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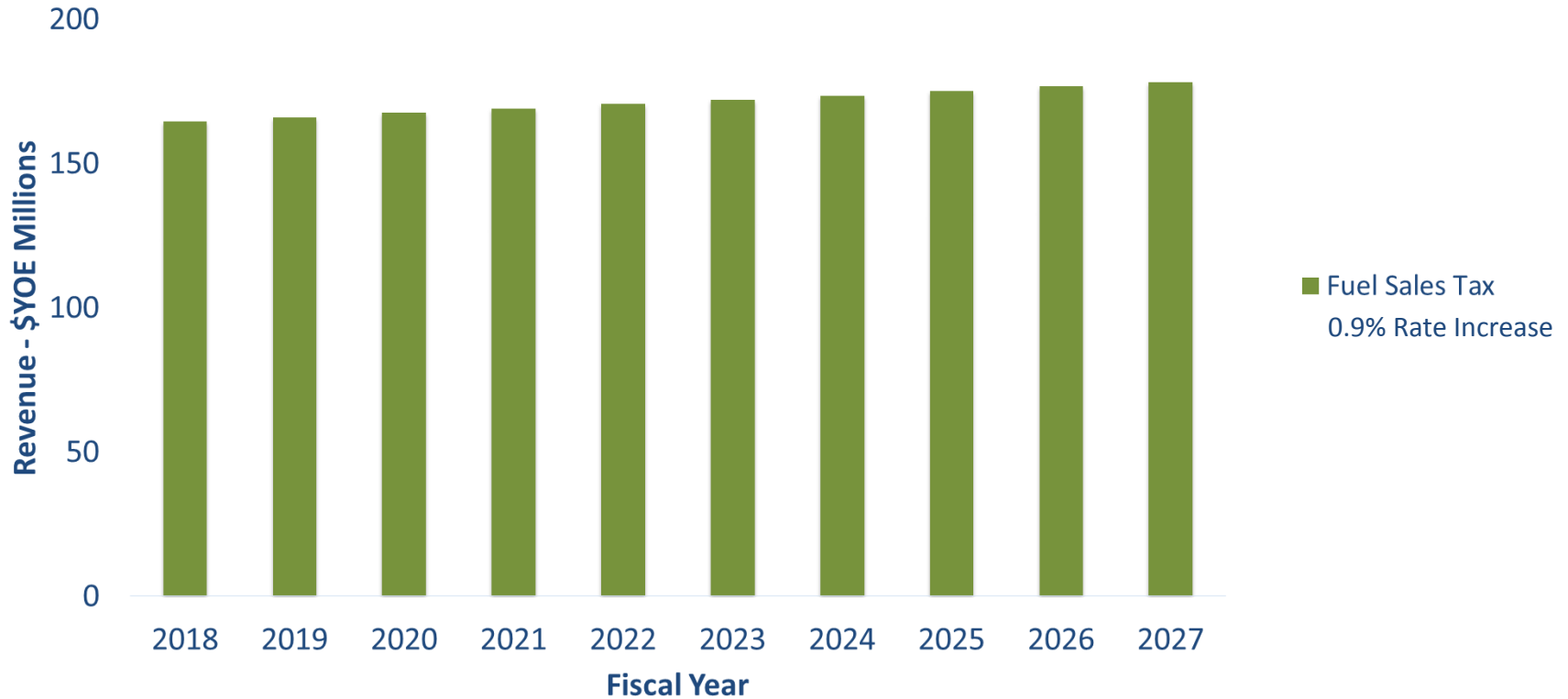


PACKAGE 2 – RETAIL SALES TAX (NON-FOOD) ONLY



Average Annual Revenue: \$157.3m

PACKAGE 2 – FUEL SALES TAX ONLY



Average Annual Revenue: \$154.21m

PACKAGE 3 – INCREASE EXISTING STATE & REGIONAL REVENUES

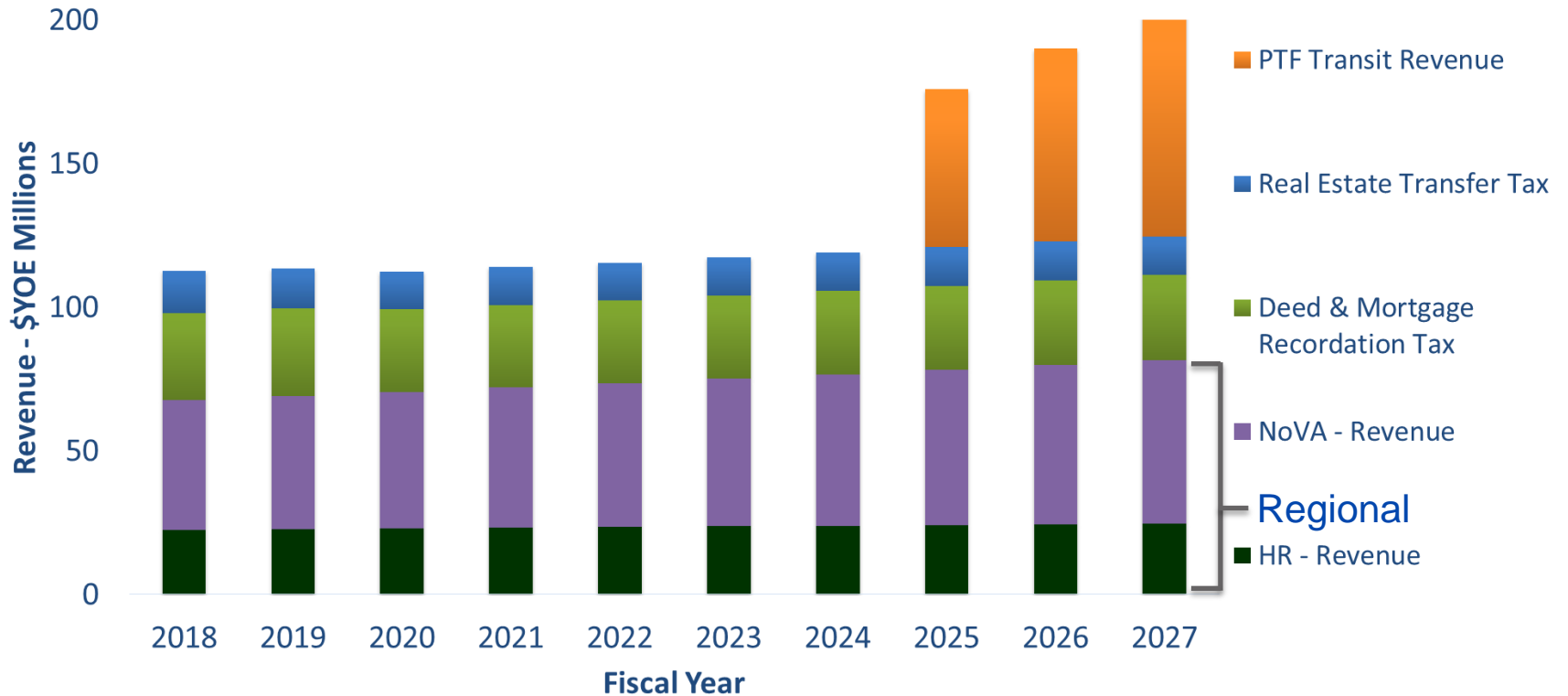
	Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	New Transit Capital Share	Average Annual Revenue Estimated*
State	Deed and Mortgage Recordation Tax	\$0.25/\$100	\$0.01/\$100	\$0.02/\$100	\$0.03/\$100	\$29.3m
	Real Estate Transfer Tax	\$0.05/\$100	-	\$0.02/\$100	\$0.02/\$100	\$13.5m
	Priority Transportation Fund	-	20-40% of 1/3 of revenues	-	Net Revenue after Debt Svc.	\$67.4m ¹
	State Subtotal					\$63.0m²
Regional	NoVA	Multiple options: Discussion in next slide				~\$50m
	HR	Multiple options (Fuel Sales Tax, Retail Sales and Use Tax...)				~\$25m
	Regional Subtotal					~\$75m
	Total					\$138.0m²

1: Average for PTF is from FY25-27

2: Average Annual Total Revenue Estimated includes partial average from PTF

*FY18-FY27. Estimates: WSP

PACKAGE 3 – INCREASE EXISTING STATE & REGIONAL REVENUES



Average Annual Revenue: \$138m



REGIONAL REVENUE OPTIONS: FUEL SALES TAX

→ Fuel Sales Tax in Northern Virginia and Hampton Roads:

- Floor to the Fuel Sales Tax; Enable Tax for Transit in Hampton Roads
- Floor Fuel Sales Tax + Fuel Sales Tax Rate Increase

Source	Existing Rate	Increase to Rate	Average Annual Revenue Estimated*
NoVA ¹ – Fuel Sales Tax Increase after Floor Implementation	2.1% ²	1.2%	\$30.6m
NoVA ¹ – Fuel Sales Tax Floor Implementation	2.1% ²	Floor	\$25.1m
NoVA¹ – Total			\$55.7m
HR – Fuel Sales Tax Increase after Floor Implementation	2.1% ²	1.2%	\$21.1m
HR - Fuel Sales Tax Floor Implementation	2.1% ²	Floor	\$17.3m
HR – Total			\$38.4m

1: NoVA: all Northern Virginia jurisdictions.

2: 5.1% for gasoline; 6% for diesel state rate. Effective total rate 7.2%/8.1% in NoVA and Hampton Roads.

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REGIONAL REVENUE OPTIONS: RETAIL SALES AND USE TAX

→ Retail Sales and Use Tax in Northern Virginia and Hampton Roads:

- Fund \$50m of NoVA transit capital needs
- Enable Tax for Transit in Hampton Roads to fund ~\$25m transit capital needs

Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	Average Annual Revenue Estimated*
NoVA – WMATA Jurisdictions – Retail Sales and Use Tax	0.7% ¹	-	0.15%	\$46.7m ²
Hampton Roads – Retail Sales and Use Tax	0.7% ¹	-	0.15%	\$23.6m

1: 4.3% is the state rate, effective total rate is 5.3% statewide, and 6% in NoVA and Hampton Roads; tax rate is 2.5% statewide for food

2: Loudoun County is included starting 2022. Growth rate for WMATA jurisdictions is slightly lower than for NoVA as a whole.

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REGIONAL REVENUE ALLOCATION FOR NORTHERN VIRGINIA

- **WMATA may require alternate funding allocation method**
 - WMATA capital programming is not driven by Virginia's funding allocation approach

- **Approaches:**
 - **Dedicated sales tax funding WMATA needs**
 - Estimated at \$500m across MD/DC/VA on average over the next 10 years
 - 0.5% sales tax in WMATA jurisdictions raises \$155m annually
 - **New regional sources raising \$50m**
 - Funds raised by sales tax and/or fuel sales tax

PACKAGE 4 – INCREASE STATE REVENUES WITH FLOOR FOR REGIONAL FUEL SALES TAX

	Source	Existing Rate	Existing Transit Capital Share	Increase to Rate	New Transit Capital Share	Average Annual Revenue Estimated*
State	Deed and Mortgage Recordation Tax	\$0.25/\$100	\$0.01/\$100	\$0.03/\$100	\$0.04/\$100	\$43.9m
	Real Estate Transfer Tax	\$0.05/\$100	-	\$0.04/\$100	\$0.04/\$100	\$27.0m
	Priority Transportation Fund	-	20-40% of 1/3 of revenues	-	Net Revenue after Debt Svc.	\$67.4m ¹
	State Subtotal					\$91.2m²
Regional	NoVA – Fuel Sales Tax Floor Implementation	2.1% ³	-	Floor	-	\$25.1m
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	Regional Subtotal					\$42.4m
	Total					\$133.6m²

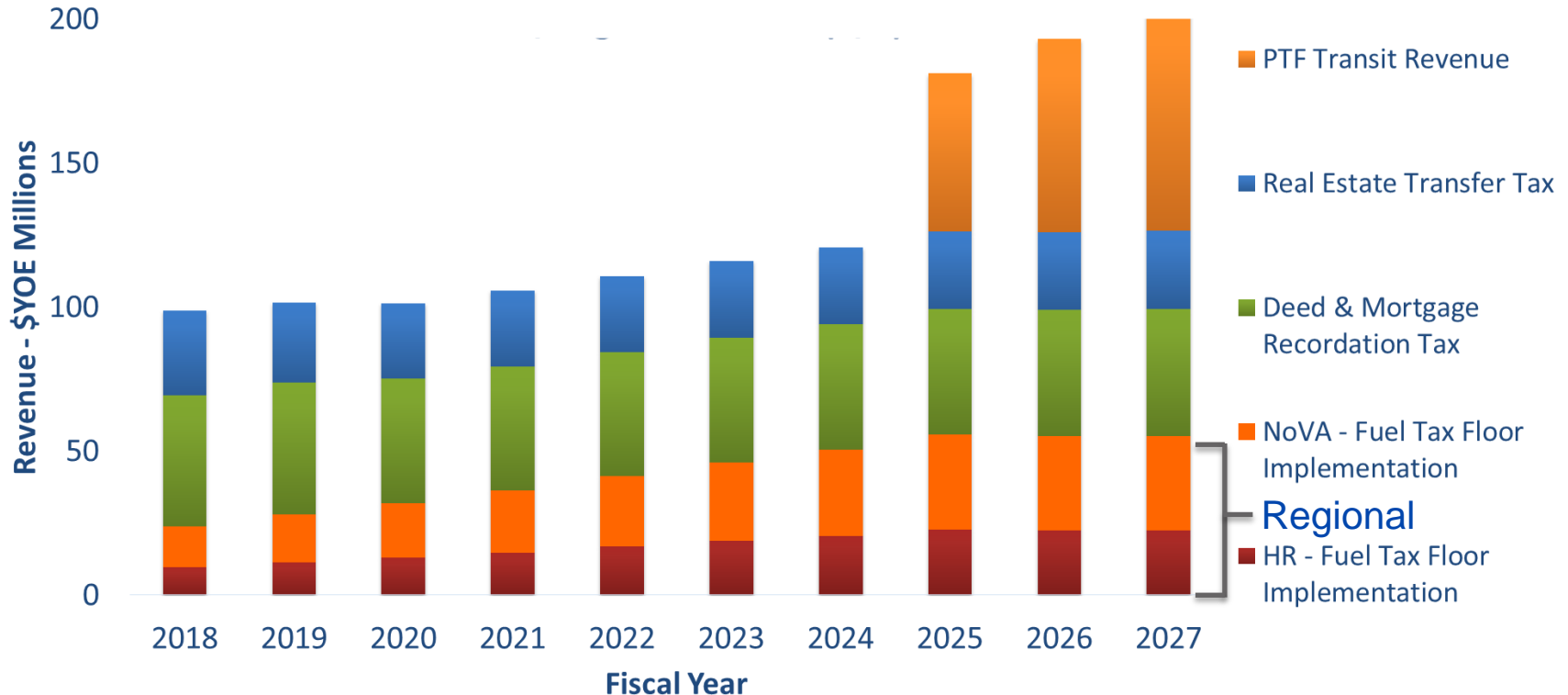
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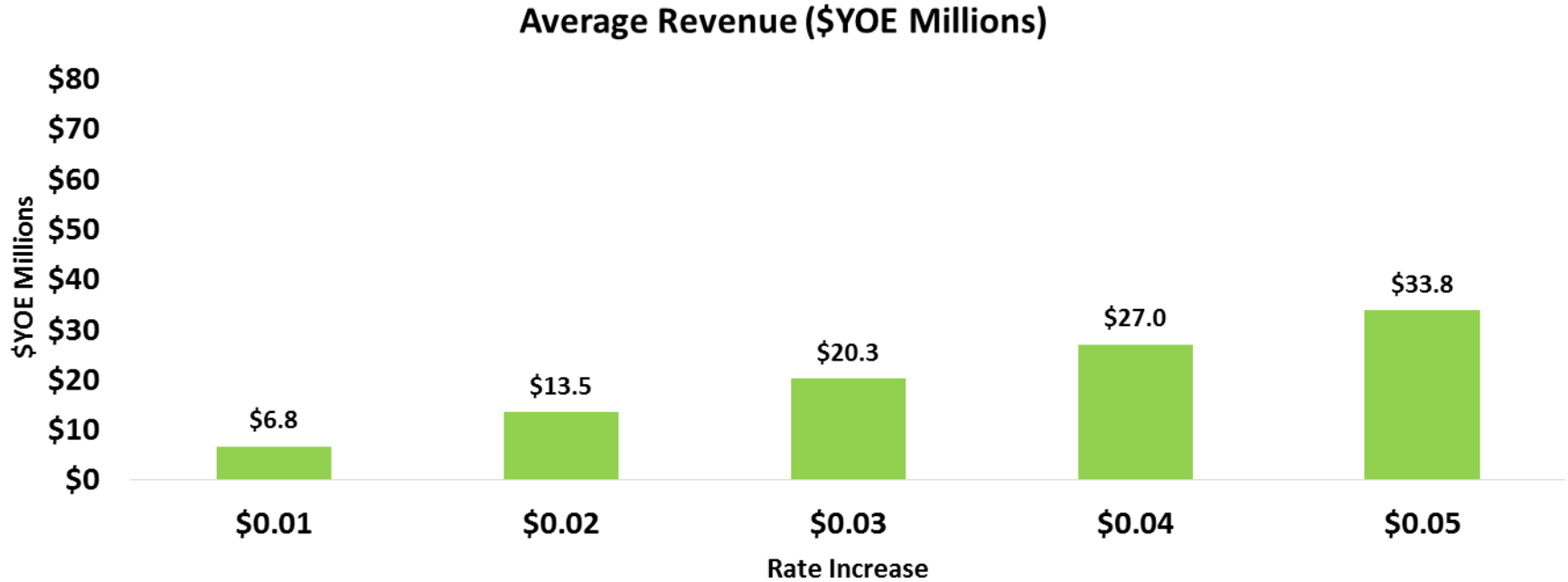
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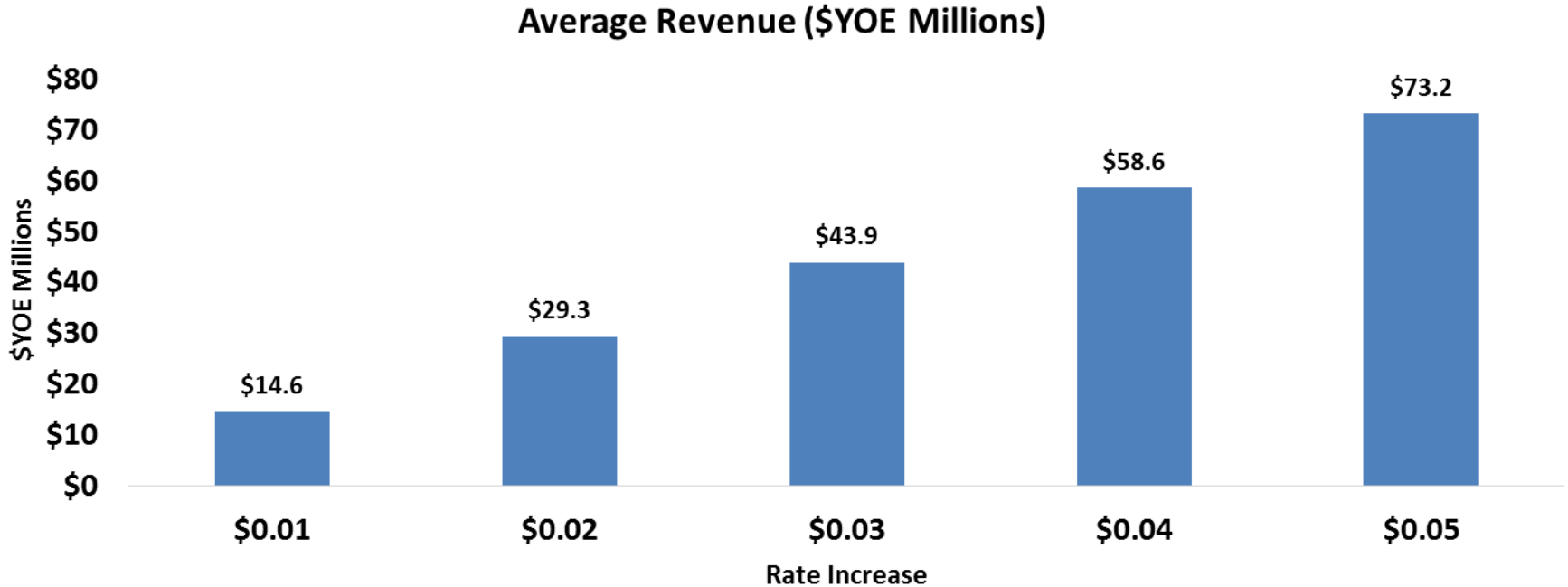
PACKAGE 4 – INCREASE STATE REVENUES WITH FLOOR FOR REGIONAL FUEL SALES TAX



REAL ESTATE TRANSFER TAX – ESTIMATED REVENUES



DEED AND MORTGAGE RECORDATION TAX – ESTIMATED REVENUES



POTENTIAL REVENUE STRATEGIES

- **Transit Capital funding needs may be met through a number of approaches including:**
 - Increasing existing state rates
 - Increasing both state and regional rates

- **Regional revenue sources can be sized to specific needs, such as WMATA in NoVA**

- **Adding a floor to the regional Fuel Sales Tax could contribute to fund higher transit needs:**
 - In NoVA
 - Potentially in Hampton Roads, where Fuel Sales Tax revenues are currently dedicated to highways