



# VRE OPERATIONS BOARD MEETING

June 16, 2023

*The meeting will  
begin at 9 a.m.*

Meeting materials are available at  
[vre.org/about/board/board-agenda-minutes/2023/June](https://vre.org/about/board/board-agenda-minutes/2023/June)

# PLEDGE OF ALLEGIANCE



# ROLL CALL



Walter Alcorn  
Fairfax County



Sarah Bagley  
Alexandria



Andrea Bailey  
Prince William County



Meg Bohmke  
Stafford County



Margaret Franklin  
Prince William County



Deborah Frazier  
Spotsylvania County



Monica Gary  
Stafford County



Takis Karantonis  
Arlington County



Matt Kelly  
Fredericksburg



Jeanine Lawson  
Prince William County



Mike McLaughlin  
Commonwealth of Virginia



Alanna Mensing  
Manassas Park



Ralph Smith  
Manassas



Dan Storck  
Fairfax County



James Walkinshaw  
Fairfax County



# SAFETY MOMENT





# APPROVAL OF AGENDA

1. Pledge of Allegiance
2. Roll Call
3. Safety Briefing
4. Approval of the Agenda
5. Approval of Minutes from the May 19, 2023 VRE Operations Board Meeting
6. Chair's Comments
7. Chief Executive Officer's Report
8. VRE Riders' and Public Comment
9. Consent Items
  - A. Authorization to Issue an Invitation for Bids for Window Gaskets for VRE Railcars
  - B. Authorization to Issue a Request for Proposals for Facility Security Services
10. Action Items
  - A. Authorization to Execute a Sole Source Contract for the Automated Fare Collections System Preventative and Remedial Maintenance, Software Support, Hosting Services, and Point-to-Point Encryption Technology
  - B. Recommend Approval and Authorize Submission of VRE Projects to NVT A for FY 2024-2029 Six-Year Program Funding Consideration
11. Information Items
  - A. Spending Authority Report
12. Closed Session
13. Operations Board Members' Time

# APPROVAL OF MINUTES

**May 19, 2023**

Meeting with YouTube Livestream

## **Members Present**

Sarah Bagley (NVTC) \*  
Andrea Bailey (PRTC)  
Meg Bohmke (PRTC)  
Katie Cristol (NVTC)  
Margaret Franklin (PRTC)  
Monica Gary (PRTC)  
Lori Hayes (PRTC) \*  
Jeanine Lawson (PRTC)  
Michael McLaughlin (VPRA)  
Ralph Smith (PRTC)  
James Walkinshaw (NVTC)

## **Members Absent**

Walter Alcorn (NVTC)  
Matt Kelly (PRTC)  
Alanna Mensing (PRTC)  
Dan Storck (NVTC)

\*Participated virtually

## **Jurisdiction**

City of Alexandria  
Prince William County  
Stafford County  
Arlington County  
Prince William County  
Stafford County  
Spotsylvania County  
Prince William County  
Commonwealth of Virginia  
City of Manassas  
Fairfax County

## **Jurisdiction**

Fairfax County  
City of Fredericksburg  
City of Manassas Park  
Fairfax County



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County



# CHAIR'S COMMENTS

- Welcome to the VRE Operations Board June meeting.
- A reminder that immediately following today's business meeting there will be a System Plan 2050 planning workshop, which will be livestreamed.
- I'd like to welcome Takis Karantonis to the Operations Board as the representative from Arlington County.
- Today marks the final Operations Board meeting for Fairfax County Supervisor Walter Alcorn, who has served with distinction since 2020. On behalf of the board, I'd like to thank him and present him with this plaque.



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County





# CEO REPORT

- **Performance**
- **Ridership**
- **Meet the Management**

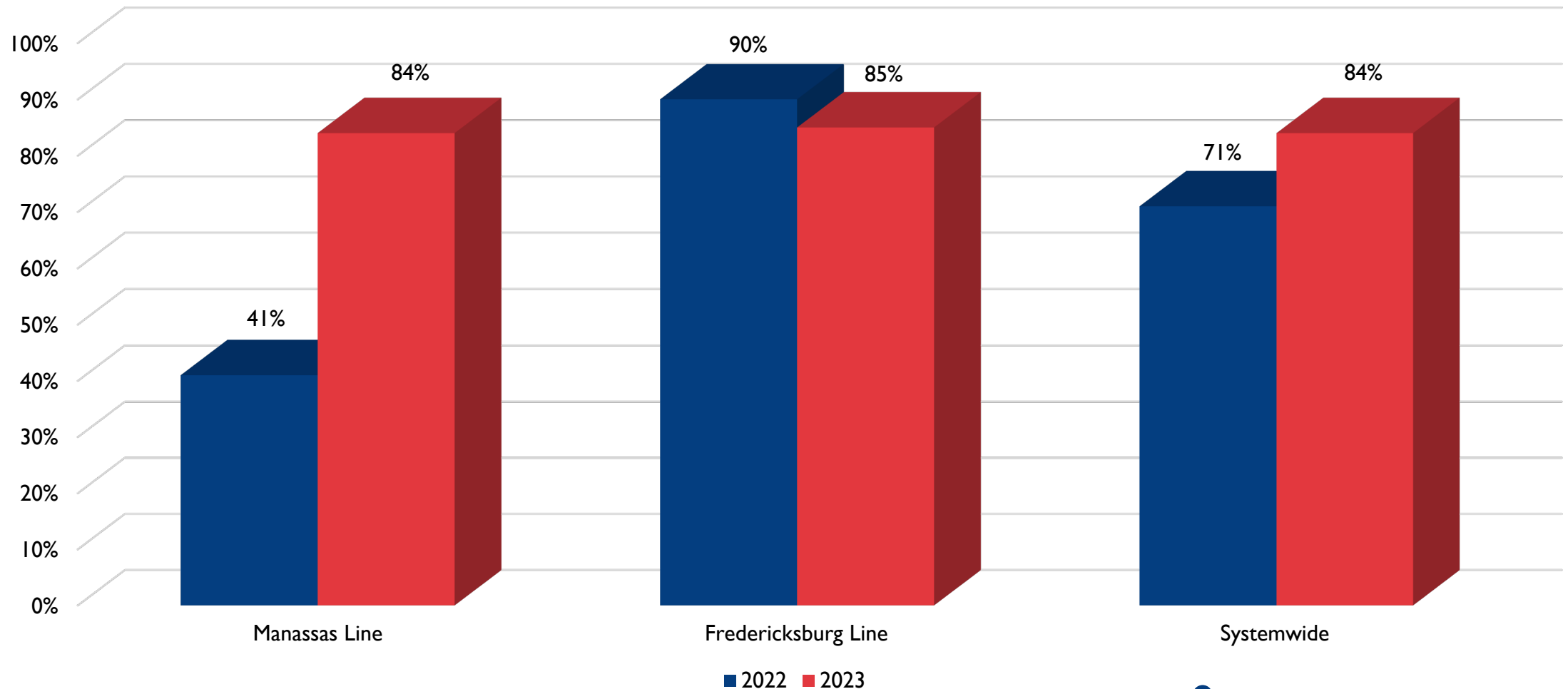


**Rich Dalton**  
VRE CEO



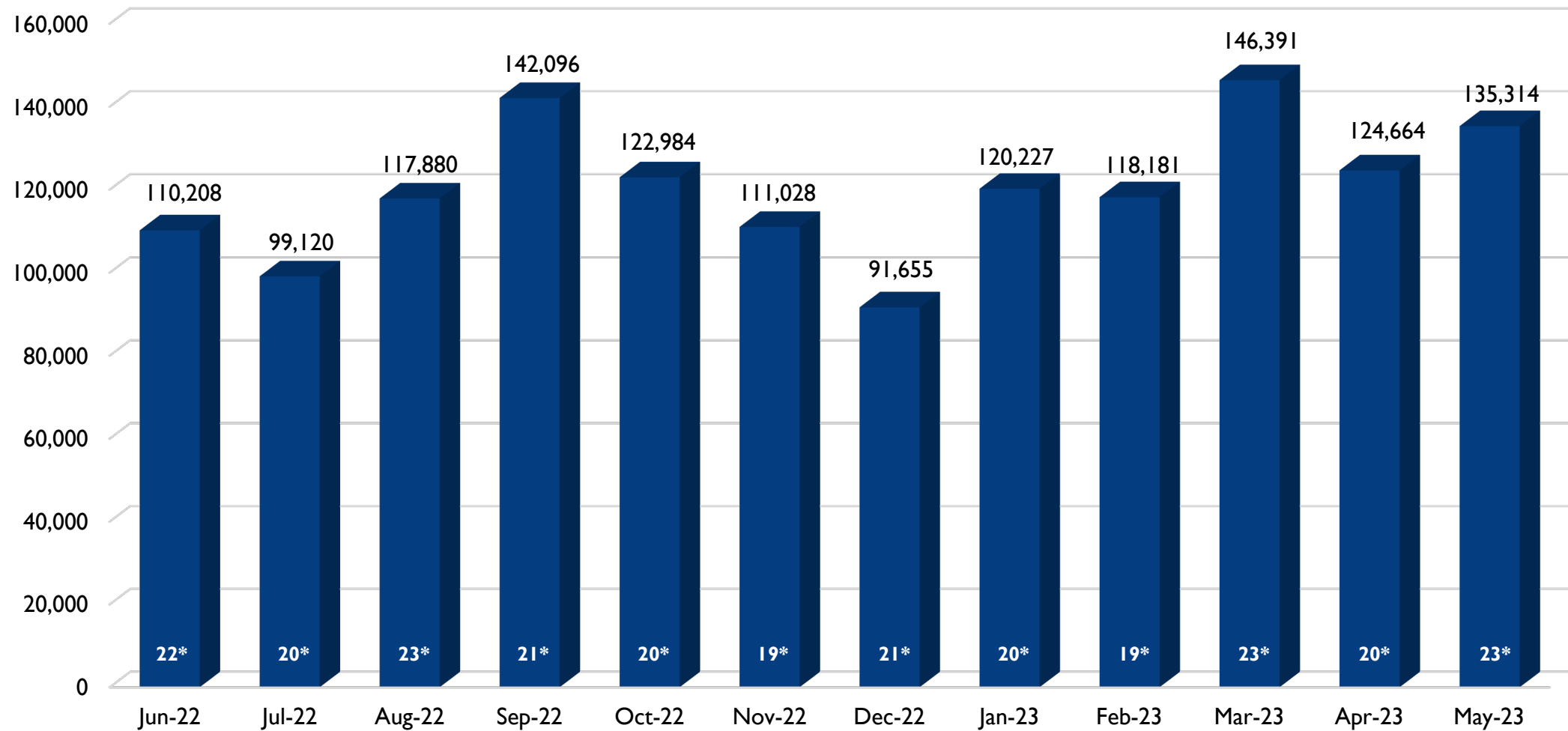
# CEO REPORT – ON-TIME PERFORMANCE

May Comparisons



# CEO REPORT – MONTHLY RIDERSHIP

Exclusive of Boardings at Alexandria and Crystal City



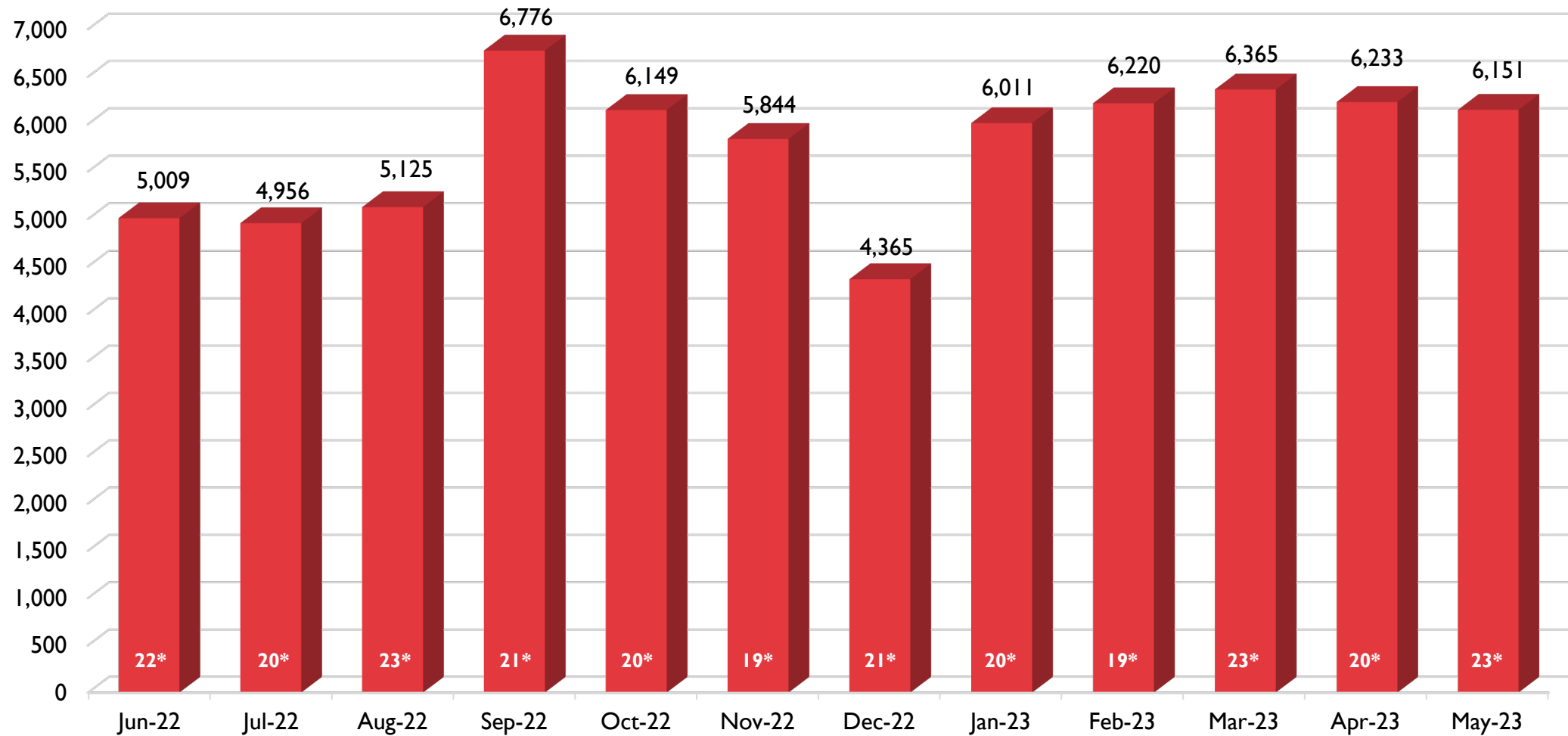
\*service days per month





# CEO REPORT – AVERAGE DAILY RIDERSHIP

Exclusive of Boardings at Alexandria and Crystal City



\*service days per month



# CEO REPORT – MEET THE MANAGEMENT

## Locations & Dates

Alexandria June 21

Franconia-Springfield July 12

Union Station July 19



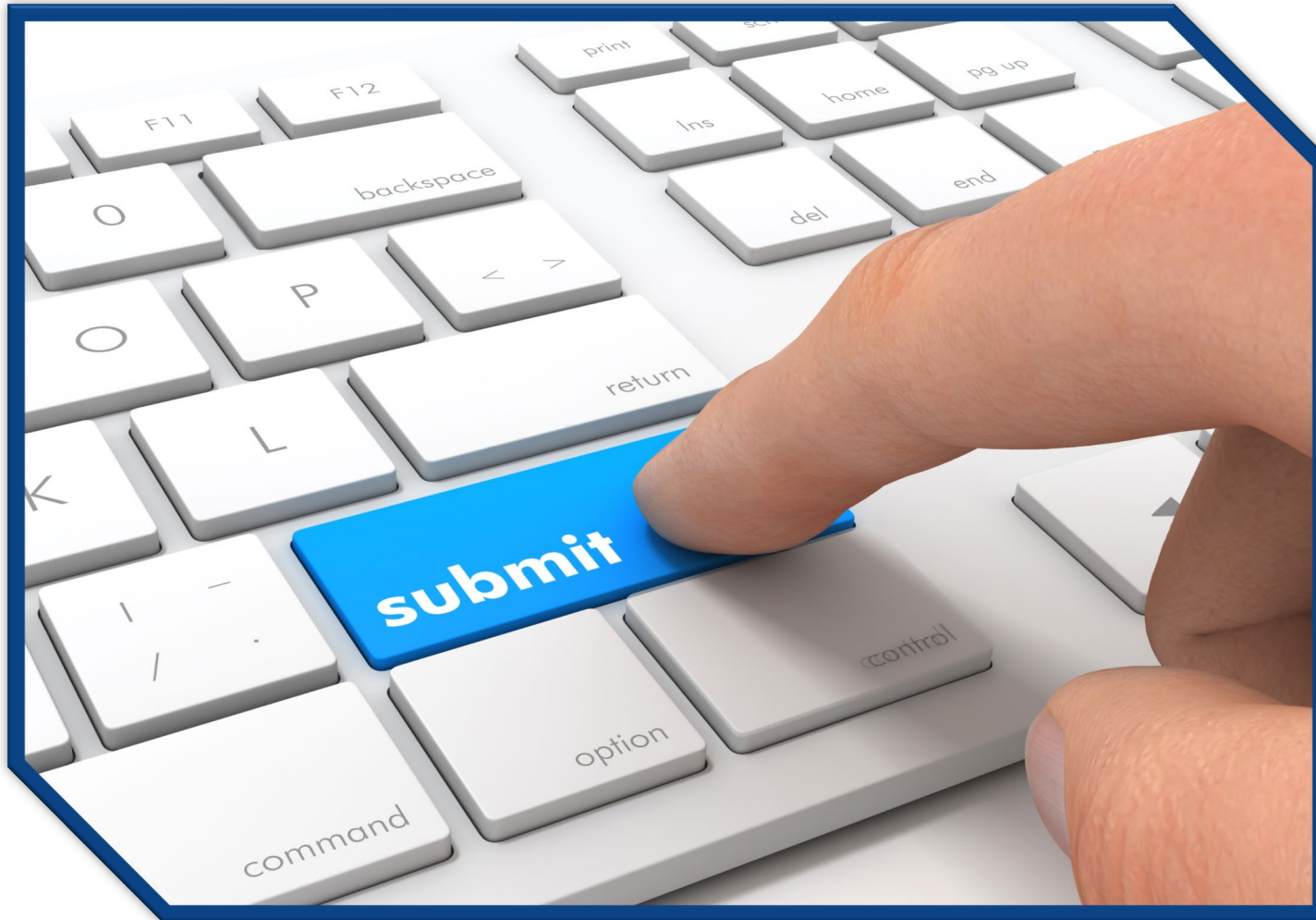


# CEO REPORT – COMMENTS





# VRE RIDERS' & PUBLIC COMMENT



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County

# CONSENT AGENDA

## Authorization to Issue an Invitation for Bids for Window Gaskets for VRE Railcars

### Recommendation:

The VRE Operations Board is asked to authorize the CEO to issue an invitation for bids to purchase window gaskets for VRE railcars. Between 2006 and 2014 VRE purchased 79 Gallery IV passenger railcars and 21 Gallery IV cab cars. Each Gallery IV car has on average 16 emergency windows and 29 non-emergency windows. Attaching each window to the car body are multiple window gaskets made primarily of rubber. Due to an average of 13 years' exposure to light, oxygen, and heat, the rubber in the gaskets has begun to deteriorate. Under VRE's Lifecycle Maintenance Program, these window gaskets have reached the end of their useful life and need replacement.

## Authorization to Issue a Request for Proposals for Facility Security Services

### Recommendation:

The VRE Operations Board is asked to authorize the CEO to issue a request for proposals for facility security services for a period of a base year and four option years. VRE utilizes a multi-pronged strategy to protect its assets and personnel. A critical facet of this strategy is armed security officers at the Crossroads and Broad Run Maintenance and Storage facilities, and other locations as determined by VRE. The final option year of the existing contract will expire in December 2023 and advance preparations to provide for a seamless transition to a new contract is necessary.



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County



**Rich Dalton**  
VRE CEO



# AUTHORIZATION TO EXECUTE A SOLE SOURCE CONTRACT FOR THE AUTOMATED FARE COLLECTIONS SYSTEM PREVENTATIVE AND REMEDIAL MAINTENANCE, SOFTWARE SUPPORT, HOSTING SERVICES, AND POINT-TO-POINT ENCRYPTION TECHNOLOGY

## Recommendation:

The VRE Operations Board is asked to authorize the CEO to execute a sole source contract with Scheidt and Bachmann USA, Inc. (S&B) of Lowell, Massachusetts, for preventive and remedial maintenance, software support and hosting, and a fully certified point-to-point encryption (P2PE) payment system for the automated fare collections system in the amount of \$5,360,115, plus a 10 percent contingency of \$536,012, for a total amount not to exceed \$5,896,127. The contract term includes a base year and three option years, with the CEO exercising the option years at his discretion.

## Summary:

This action provides for the continued support of the automated fare collections system through onsite technical support, software support, and hosting services. In addition, S&B is enhancing their proprietary fare collections system with the most advanced and secure payment system currently available by integrating P2PE directly with a credit card processor. The system better protects passengers' personally identifiable information, reduces VRE's scope in maintaining Payment Card Industry Data Security Standards compliance, and helps improve VRE's overall cybersecurity posture. As the original equipment manufacturer and system supplier, S&B is the only viable option for the combination of maintenance, software support, hosting and the fully certified P2PE system.



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County



**Rich Dalton**  
VRE CEO





# RECOMMEND APPROVAL AND AUTHORIZE SUBMISSION OF VRE PROJECTS TO NVTA FOR FY 2024-2029 SIX-YEAR PROGRAM FUNDING CONSIDERATION

## Recommendation:

The VRE Operations Board is asked to recommend the Commissions approve submission of the Alexandria Station, Backlick Road, and Franconia-Springfield Station Improvements and Broad Run Expansion projects to the Northern Virginia Transportation Authority (NVTA) for evaluation and funding consideration in its fiscal year (FY) 2024-2029 Six-Year Program (SYP); and authorize the CEO to submit the approved projects for funding, make any necessary corrections to project amounts or descriptions in the applications, and execute all project funding agreements that may result from consideration of the projects.

## Summary:

VRE has identified a group of capital improvements to support planned service enhancements identified in the VRE FY24-29 Capital Improvement Program that benefit regional travelers and contribute to congestion reduction by offering a high-capacity transit option as an alternative to single occupancy vehicles and increases VRE station and facility capacity. If authorized, VRE will apply for funding for these improvements from the NVTA FY24-29 SYP.



**James Walkinshaw**  
VRE Operations Board Chair  
Fairfax County



**Rich Dalton**  
VRE CEO



# SPENDING AUTHORITY REPORT

On September 18, 2020, the VRE Operations Board approved increasing the CEO's delegated spending authority from \$100,000 to \$200,000. It was resolved as part of that increased delegation that any purchase or contract award in the range of \$50,000 to \$200,000 would be communicated to the Board as an information item.

- On May 23, 2023, VRE issued a task order in the amount of \$143,800 to HDR Engineering, Inc. under the general engineering consulting services contract for pedestrian bridge, parking garage, and station inspection services. The scope of work for this task order requires HDR to inspect the pedestrian bridges at the Franconia-Springfield, Woodbridge, Rippon and Brooke stations and the garage structures at the Woodbridge and Manassas stations. HDR shall also be responsible for inspecting other station elements throughout the system to include platforms, canopies, stairs, ramps, roofs, railings, drainage elements, etc.
- On May 10, 2023, VRE issued a task order in the amount of \$157,659 to Fresh Air Duct Cleaning, LLC under the custodial and seasonal services for VRE facilities contract to paint the L'Enfant, Lorton, and Burke Centre stations.



**Rich Dalton**  
VRE CEO



# OPERATIONS BOARD MEMBERS' TIME



Walter Alcorn  
Fairfax County



Sarah Bagley  
Alexandria



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Prince William County



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Commonwealth of Virginia



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Manassas Park



Ralph Smith  
Manassas



Dan Storck  
Fairfax County



James Walkinshaw  
Fairfax County

**THE JUNE 16, 2023 MEETING OF THE VRE  
OPERATIONS BOARD HAS CONCLUDED**

**THE SYSTEM PLAN 2050 PLANNING WORKSHOP  
WILL BEGIN SHORTLY**



**VRE.ORG**





# Proposed Run-of-Show

## June 16 VRE Ops Board Workshop

9:00 AM	9:30 AM	0:30	Ops Board meeting
<b>Workshop</b>			
<b>09:30 AM</b>	<b>9:45 AM</b>	0:15	Setup for Workshop
<b>9:45 AM</b>	<b>10:00 AM</b>	0:15	Introduction/Opening Remarks
<b>10:00 AM</b>	<b>11:00 AM</b>	1:00	<b>Topic 1 – Survey Results</b>
10:00 AM	10:30 AM	0:30	Presentation
10:30 AM	11:00 AM	0:30	Discussion/Questions
<b>11:00 AM</b>	<b>11:10 AM</b>	0:10	Break
<b>11:10 AM</b>	<b>12:15 PM</b>	1:05	<b>Topic 2 – Travel Market and Ridership</b>
11:10 AM	11:50 PM	1:00	Presentation/Discussion
11:50 PM	12:15 PM	0:05	Questions
<b>12:15 PM</b>	<b>1:00 PM</b>	0:45	Lunch
<b>1:00 PM</b>	<b>2:15 PM</b>	1:15	<b>Topic 3 – 2030 Service Scenarios</b>
1:00 PM	1:45 PM	0:45	Presentation
1:45 PM	2:15 PM	0:30	Discussion/Questions
<b>2:15 PM</b>	<b>2:30 PM</b>	0:15	Wrap-up/Closing Remarks
		5:00	Running Time



# SYSTEM PLAN 2050 UPDATE

## Operations Board Workshop

June 16, 2023





# • OPENING REMARKS



# Today's Objectives



1. Update on System Plan progress
2. Solicit feedback from Board Members on analysis results
3. Discuss implications of market analysis and ridership projections on future service
4. Solicit feedback and seek direction on 2030 service scenario preference from Board
5. Provide guidance to staff on Plan next steps



# AGENDA

1. Board Member Survey Results
2. Topic 1: Survey Results
3. Topic 2: Travel Market Analysis and Ridership Projections
4. Topic 3: 2030 Service Scenarios
5. Where do we go from here?



# What you said: Operations Board Survey

## Opportunities

- Ridership
- Budget
- Stable funding
- Attracting *new* riders
- Change in work habits
- Connectivity

## Service

- Weekend service—what moves the needle?
- More varied service offering
- Expanded hours (span)
- Evening service

## Funding

- Need reliable source to expand
- State operating support
- VRE development rights
- Re-gain lost fuel tax revenue
- Funding with toll revenues
- Evaluate fare policies
- Increase in jurisdictional subsidy tied to ridership increases



# TOPIC I: SURVEY RESULTS



# Summary of Survey Efforts

## What is the purpose of this survey?

- To define current and future travel trends and ridership patterns
- Align VRE goals and future operating scenarios to public sentiments/trends

## Who did we survey?

1. General population
2. VRE member jurisdictions' staff and partner agencies
3. VRE riders

## What can we learn or have learned from the survey?

- VRE provides a vital service with ridership growth tied to regional travel demand
- Travel patterns have changed and reliable service paired with service all week and for longer periods during the day can drive ridership growth







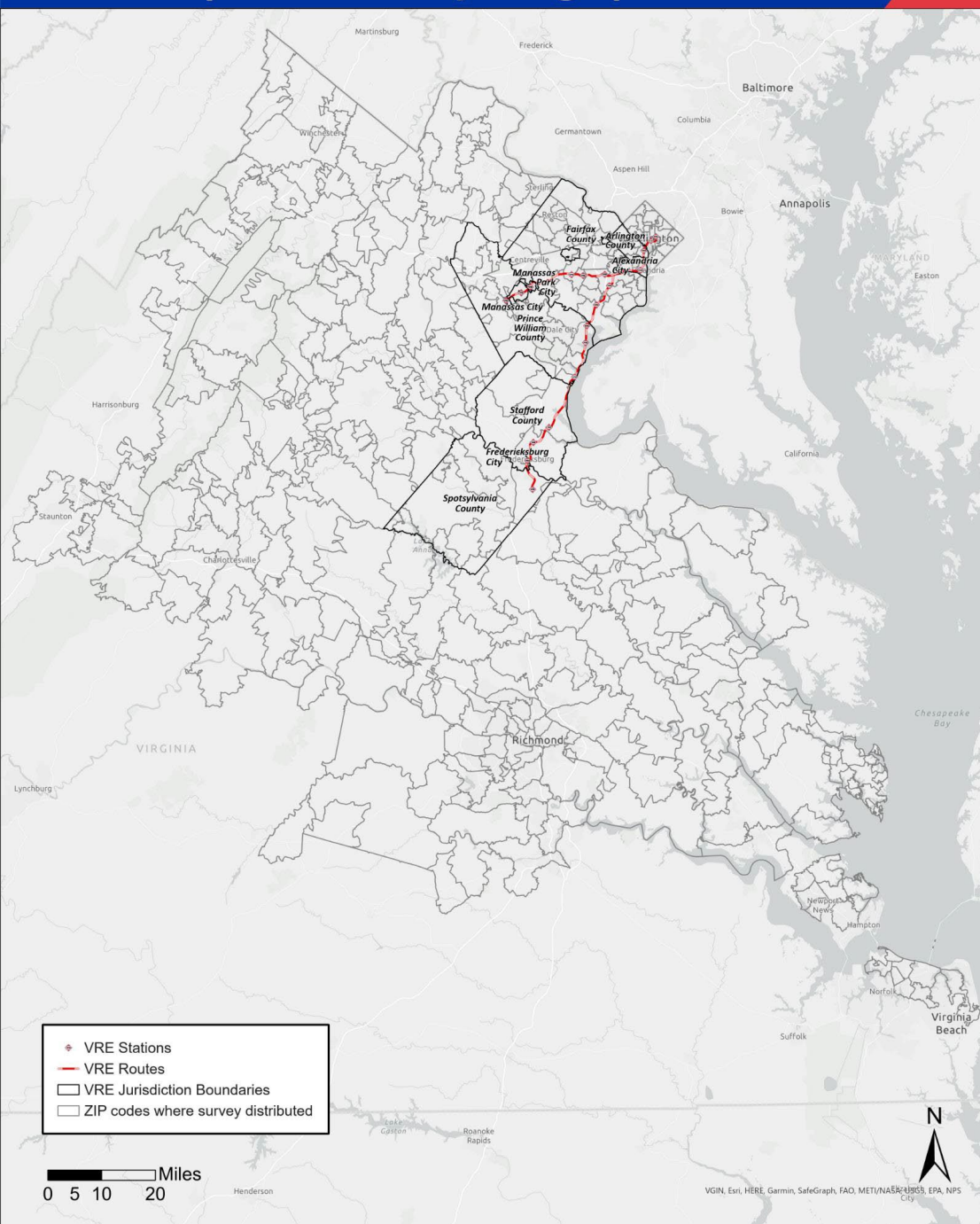
# GENERAL POPULATION SURVEY



# Survey Results Summary

- Comprehensive survey sent across the region to gauge usage and values on public transportation and transportation in general
- Key Takeaways:
  - Reliability is the most important factor, above speed and cost
  - Telework in the area remains high among current and lapsed transit riders
  - #1 reason given by lapsed VRE riders is that it is faster to drive
  - A significant segment of former VRE riders have recently left the workforce





## General Population Survey Distribution Reach

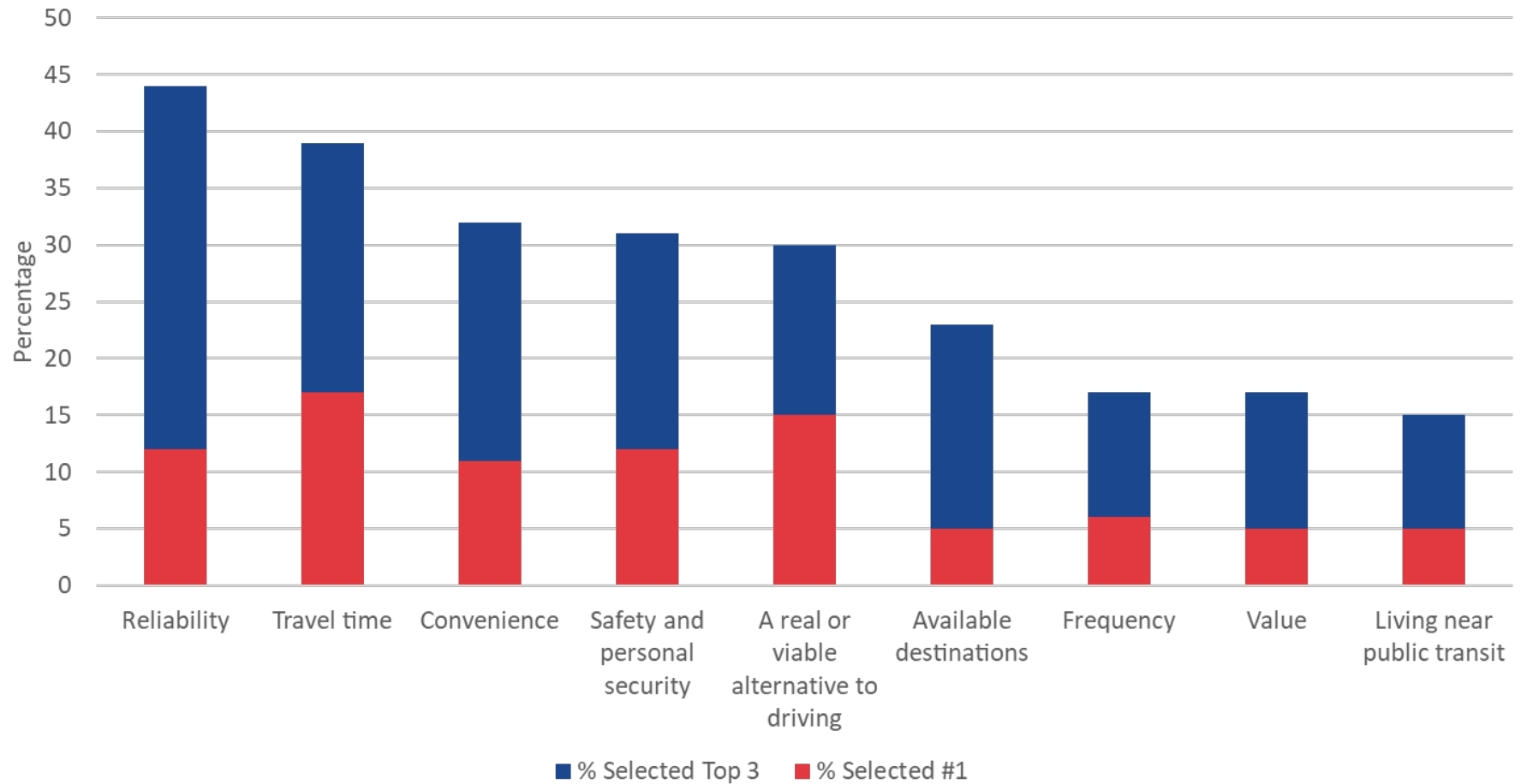
38,152 Surveys mailed across the region  
including member jurisdictions, D.C.,  
Charlottesville, Richmond and Tidewater

- 817 responses
- Statistically significant sample
- 95% confidence level

# The Region: Values when traveling

## Question:

What is most important to you when traveling in your area?



Base=Those answering  
Top mentions  
Multiple responses accepted  
N=816

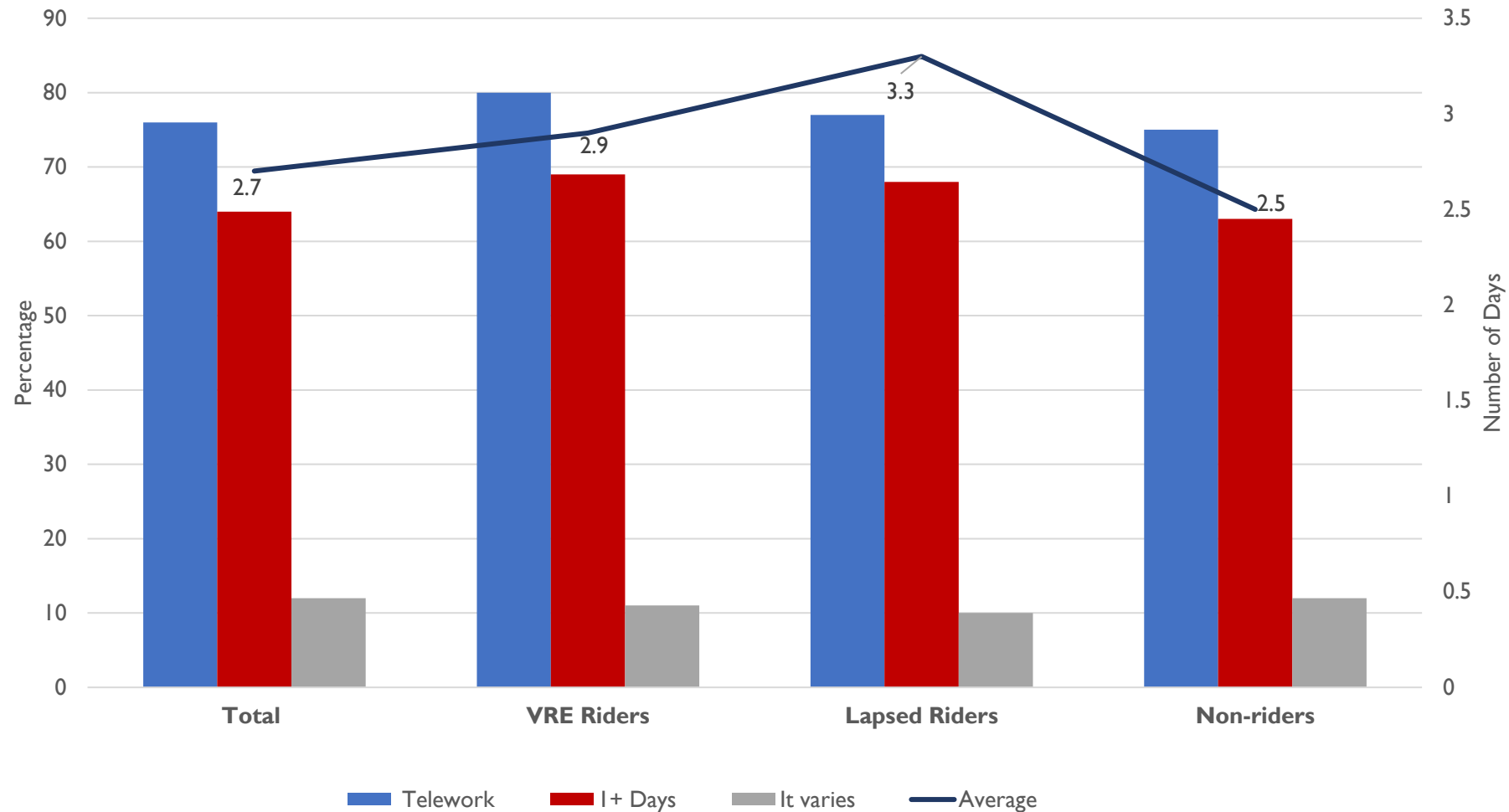
# The Region: What makes a mode of travel reliable/unreliable?

Q3: What makes a mode of transportation reliable or unreliable?	Total n=789
On-time performance/Knowing when it will leave and arrive/Adheres to a schedule	41%
Consistent service/Predictability/Dependable (not specific)	17%
Frequent service/Short wait times/Available every 10-15 minutes	17%
Accessibility/Available during the times that I need it	12%
No breakdowns/Equipment in working order	12%
Safety/Security (not specific)	12%
A good/well maintained car	10%





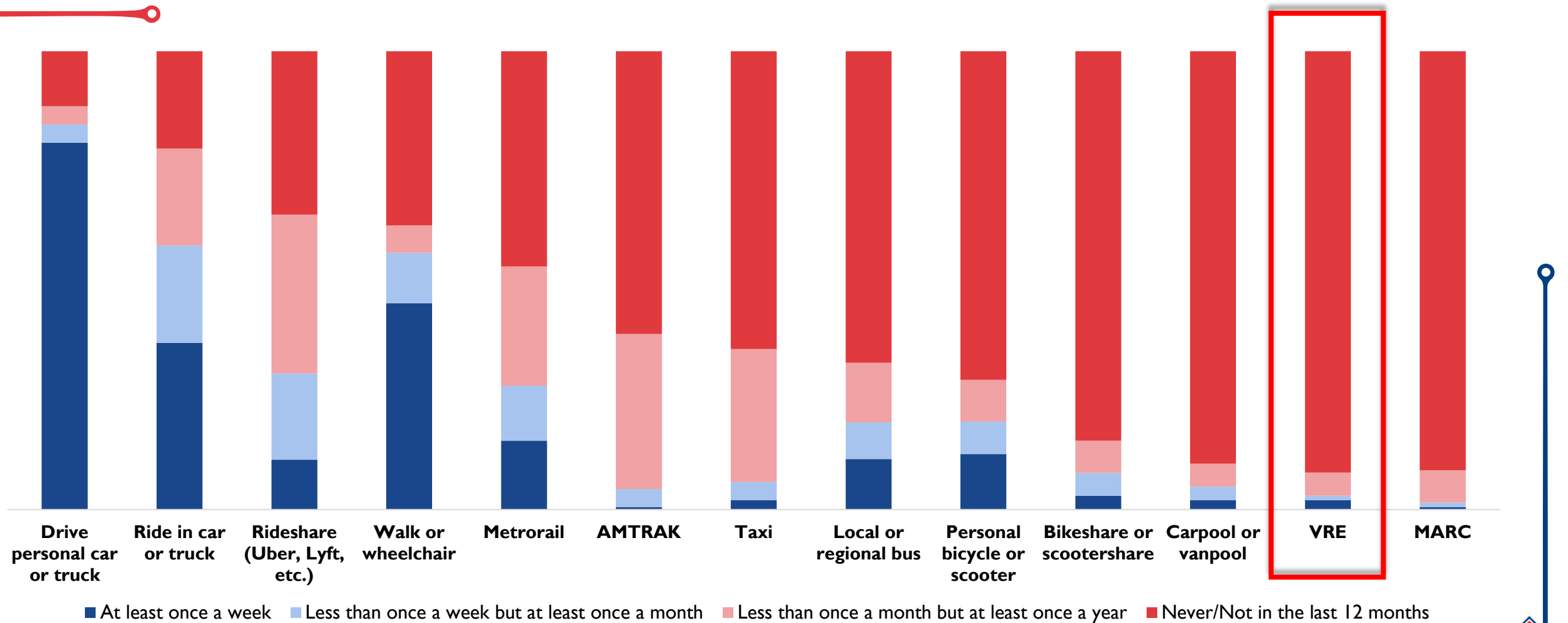
# The Region: How often people telework



Base=Those employed and answering  
Base=Those who telework and answering



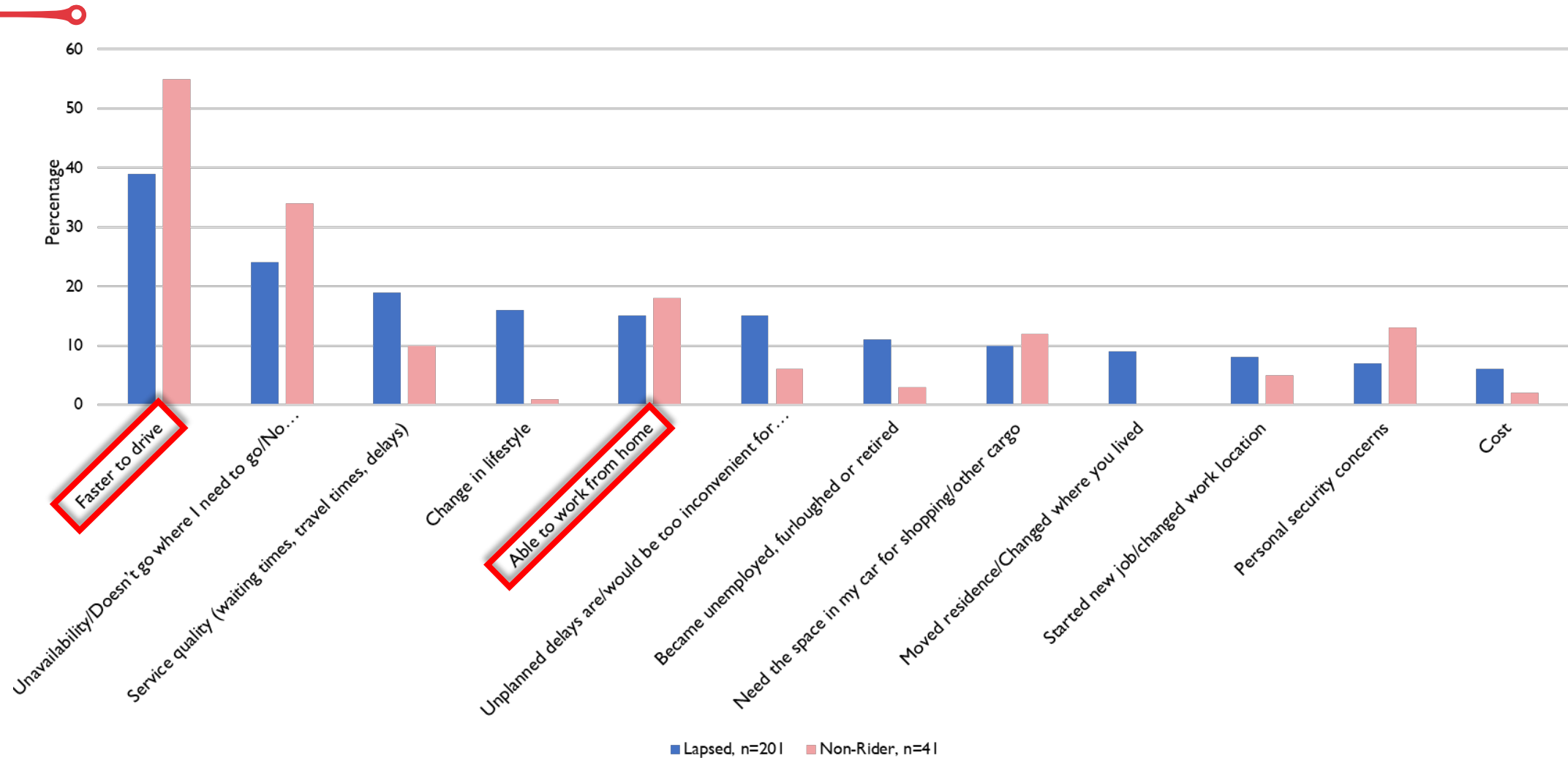
# How often do you use...?



Base=Those answering  
n=816-817  
Segments 5% and under not labeled



# VRE Riders: Why do you no longer ride?



Base: Lapsed VRE riders and answering  
Base=Those who are aware of VRE but have never ridden and answering  
Top mentions





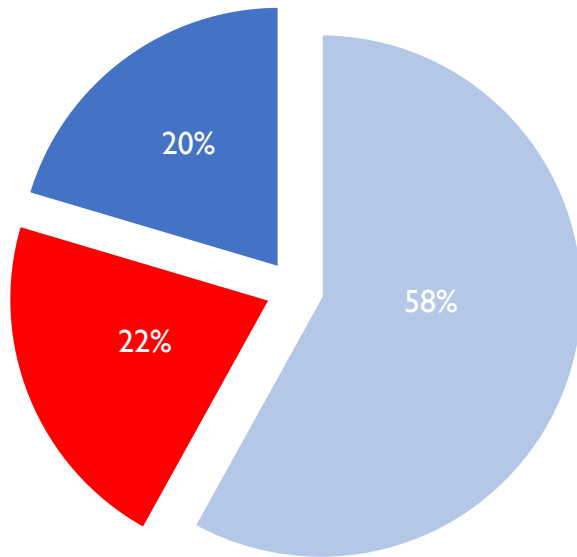
# VRE RIDER SURVEY

Spring 2023 Customer Survey



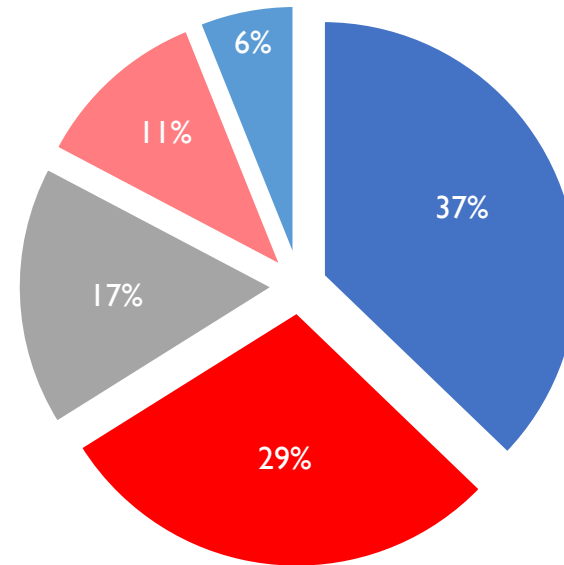
# VRE Rider Survey Results

If VRE adds more service to your line, how would you prefer service be added?



■ More Express ■ Even Mix of Local and Express ■ More Local

On weekdays, what would you prefer?  
Select all that apply.



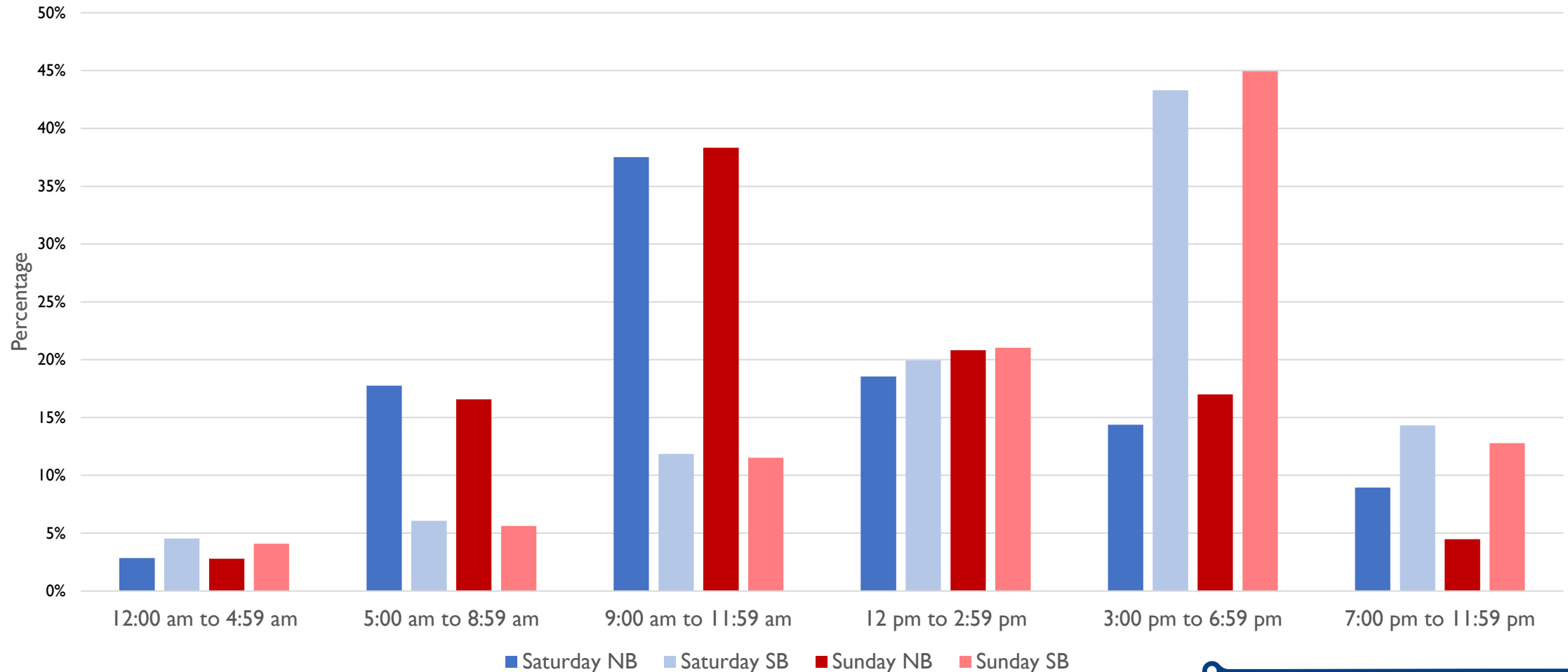
■ More trains to DC in AM and to VA in PM  
■ More trains later in the day  
■ More trains earlier in the morning

■ More trains in the middle of the day  
■ Same number of trains as today in same service window



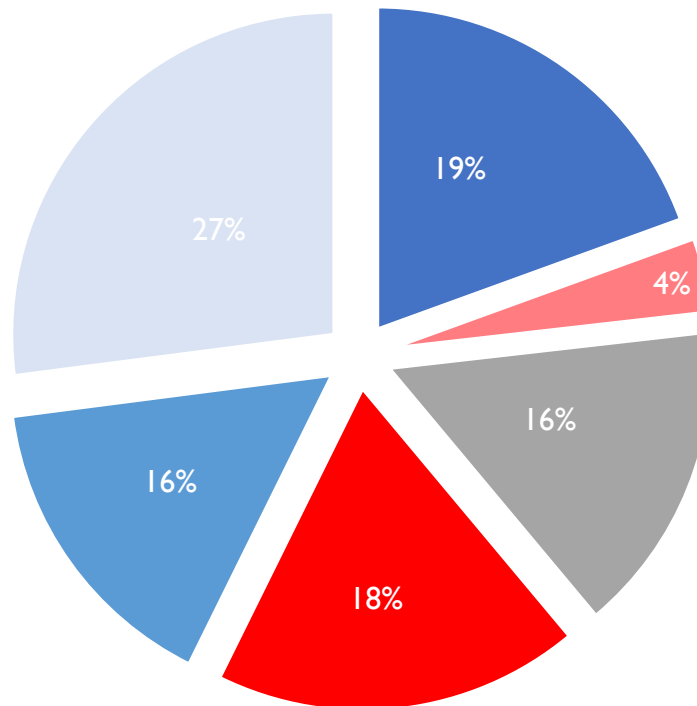
# VRE Rider Survey Results

If VRE provided weekend service, when would you want weekend trains to run? Select all that apply.



# VRE Rider Survey Results

If VRE provided riders with the ability to travel to/from VRE stations on bus service using the same ticket, effectively increasing the number of VRE round-trip options, when would you use this bus option? Select all that apply.

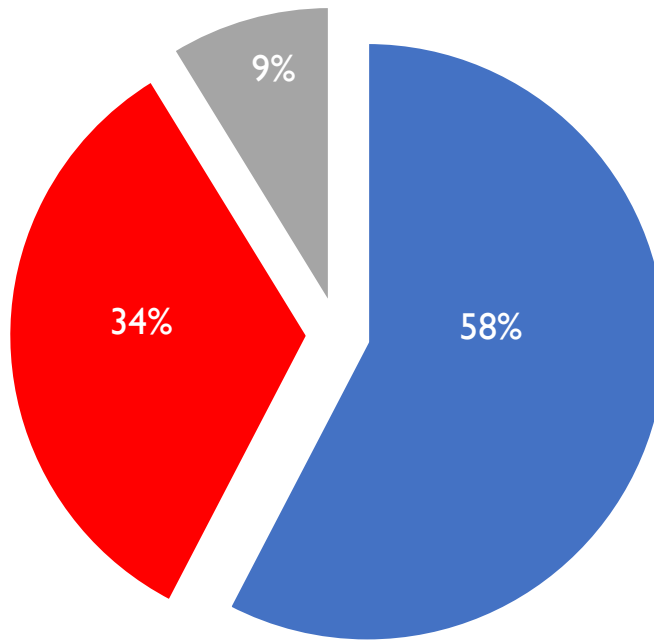


- Weekdays Only
- Weekends Only
- Weekdays and Weekends
- Only for Special events/emergencies
- Only at times when no trains operated
- I would only take the train



# VRE Rider Survey Results

In the future, if your VRE ticket allowed you to ride Amtrak for no additional cost what would you prefer? Select one.



- VRE provides local and express, Amtrak supplements
- VRE provides local, Amtrak provides express
- VRE provides local and express, Amtrak is not option for VRE ticket holders







# JURISDICTION AND PARTNER OUTREACH

# Feedback Summary

	Current Ridership Numbers	Stable Funding	Improved Reliability	Enhanced Connections to Stations	Express Service (Shorter Trips)	Expanded Service Area	Match Service Levels to Demand / Forecasts	Expanded Weekday Service Options (Non- Peak, Reverse Service)	Weekend Service
Member Jurisdiction Transportation Staff	✓	✓		✓	✓	✓	✓	✓	✓
Non-Member Jurisdictions				✓	✓	✓		✓	✓
Partner Agencies	✓			✓		✓	✓	✓	✓
VRE Board Members	✓	✓					✓	✓	
General Public		✓	✓		✓				
Current VRE Riders					✓			✓	✓
Lapsed VRE Riders			✓		✓				

# Summary: What did we hear?



- **Travel time and reliability** are the two most important deciding factors for the public when making transportation choices
- **Telework rates** in the area continue to be higher than pre-Pandemic averages: 2.9 days per week for current VRE riders and 3.3 days per week for former riders
- **The perception and/or reality that it's faster to drive** than take transit is a real barrier to use
- **Attrition from employment** has had a significant impact on VRE ridership
- **Most regional travelers do not use VRE**





• QUESTIONS?





# TOPIC 2: TRAVEL MARKET ANALYSIS AND RIDERSHIP PROJECTIONS



# Introduction

## Market Analysis and Ridership Projections

### What we considered

- Regional and national ridership trends
- Regional population and employment growth
- Travel patterns across the VRE service region
- Future assumptions for telework rates and growth





# TRAVEL MARKET ANALYSIS



# Driving Forces for VRE Ridership

- **What we can control:**

- Levels of service
- Quality of transit service\*
- Fares
- Integrated services (partnerships with other transit operators)

- **What we react to:**

- Competitive modes (auto operating cost and congestion)
- Highway congestion mitigation projects (i.e., toll lanes, widenings, etc.)
- Land use/urban form
- Socioeconomic characteristics
- Telework—federal workforce decisions
- Pandemic





# Transit Ridership Trend: National & VRE

**National 70% Recovery**

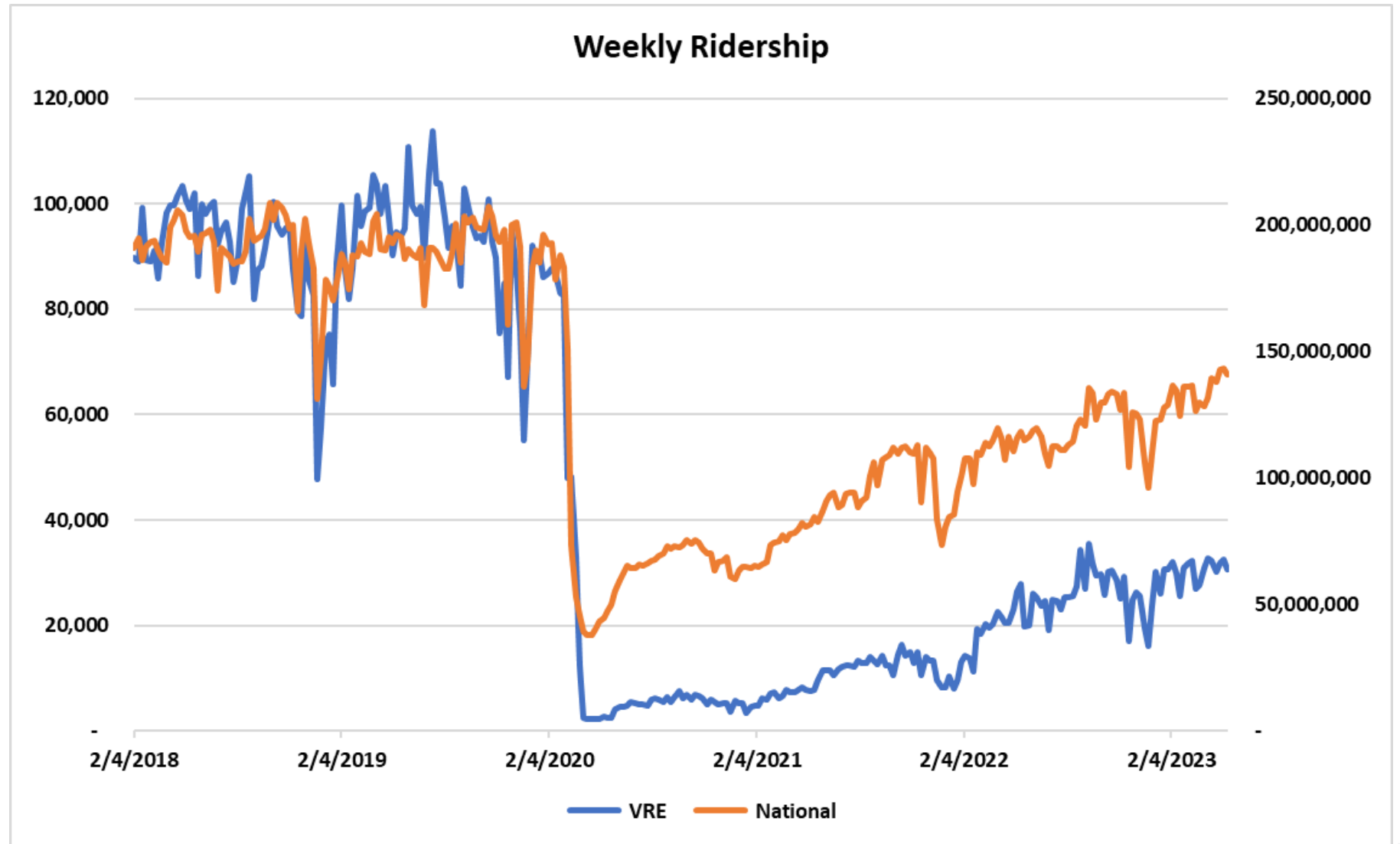
**VRE 30+% Recovery**

MARC: 35%

Metrorail: 44%

National Commuter Rail: 57%

Metrobus: 80%

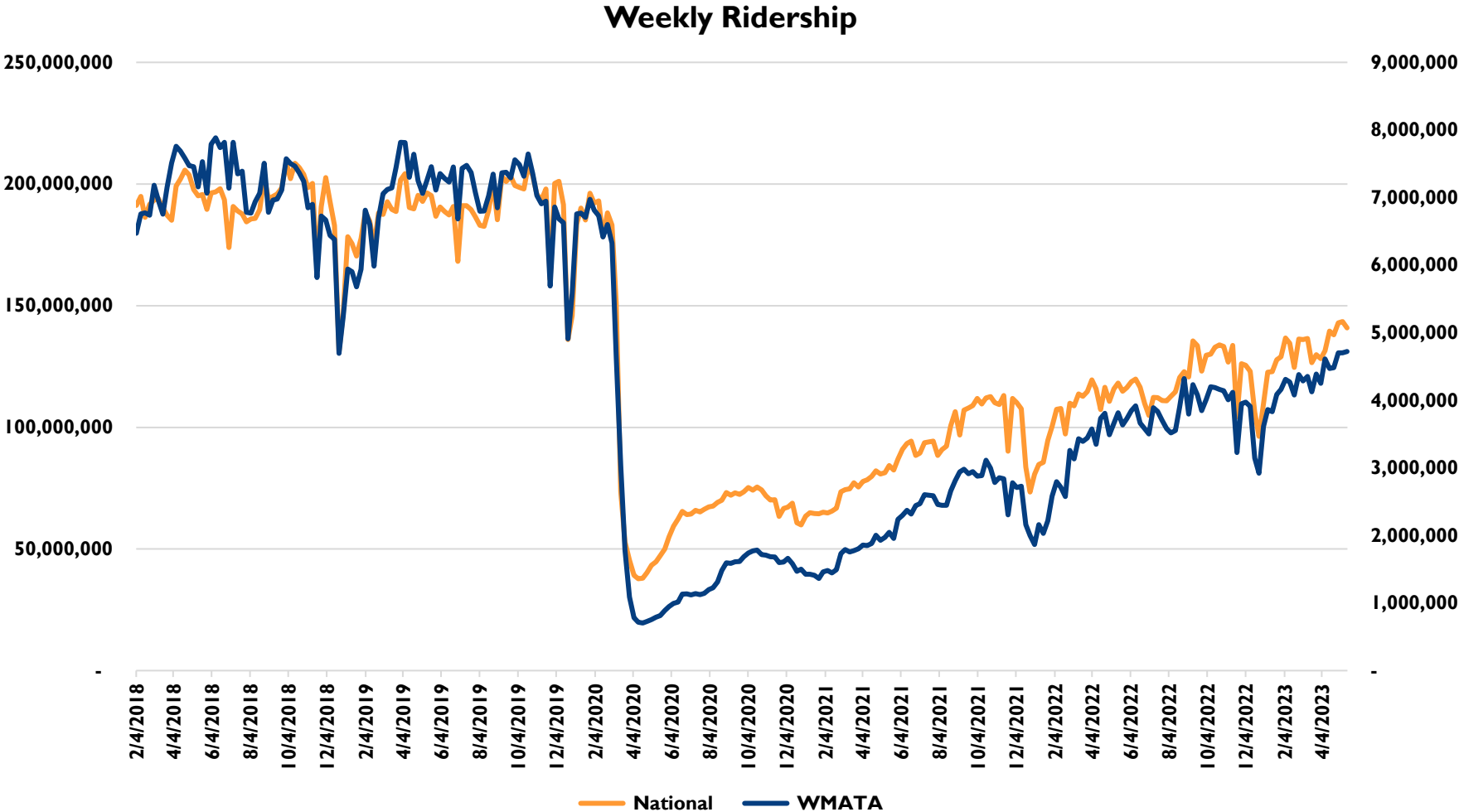


Source: APTA, 2023. NTD, 2023



# Transit Ridership Trend: National & Regional

National 70% Recovery  
WMATA 60-70% Recovery  
Metrorail Only: 44%

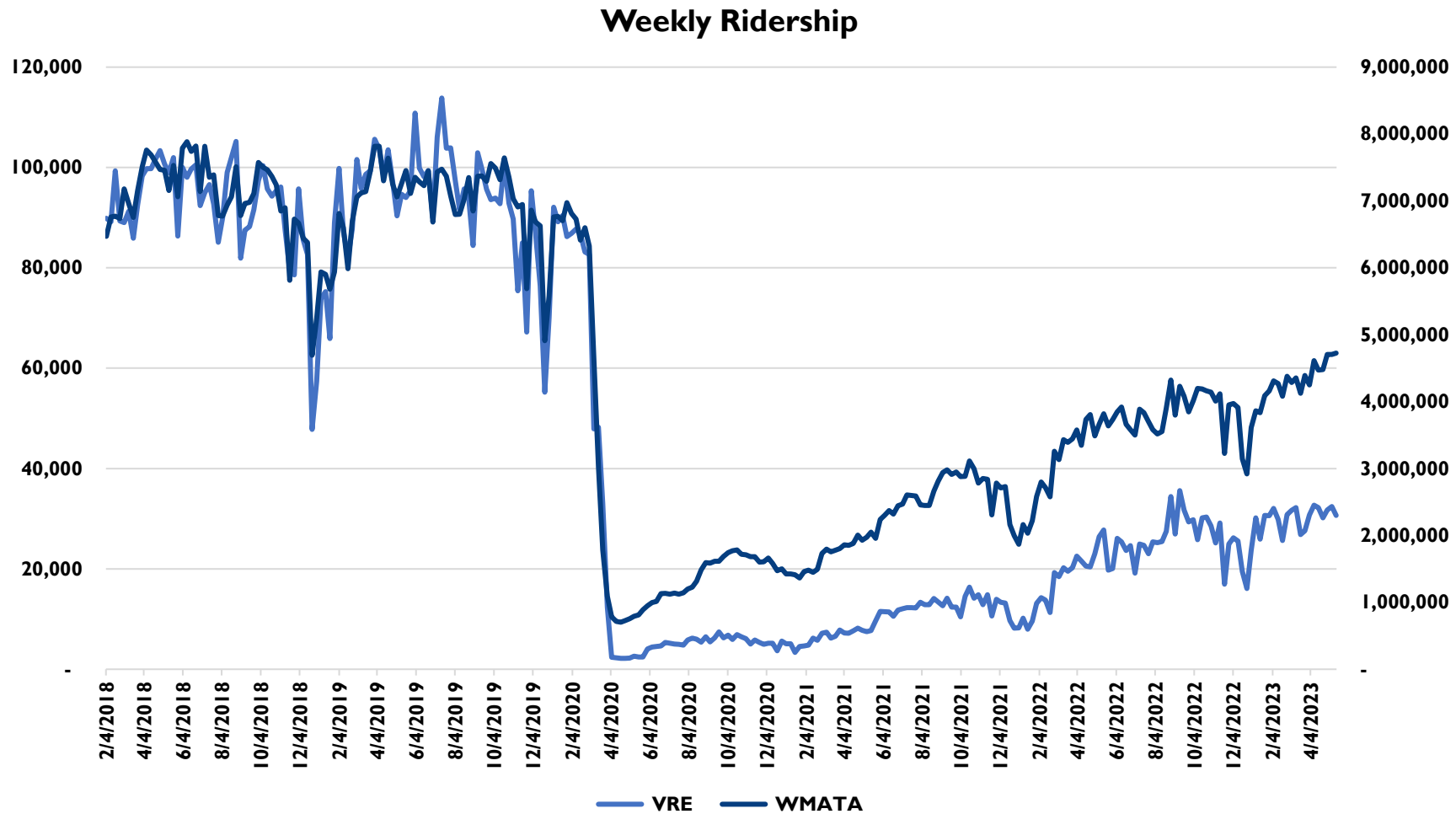


Source: APTA, 2023



# Regional Transit Ridership Trend

**WMATA 60%+ Recovery**  
**VRE 30%+ Recovery**



Source: APTA, 2023



# Travel Market Assessment

## Population and Employment Growth

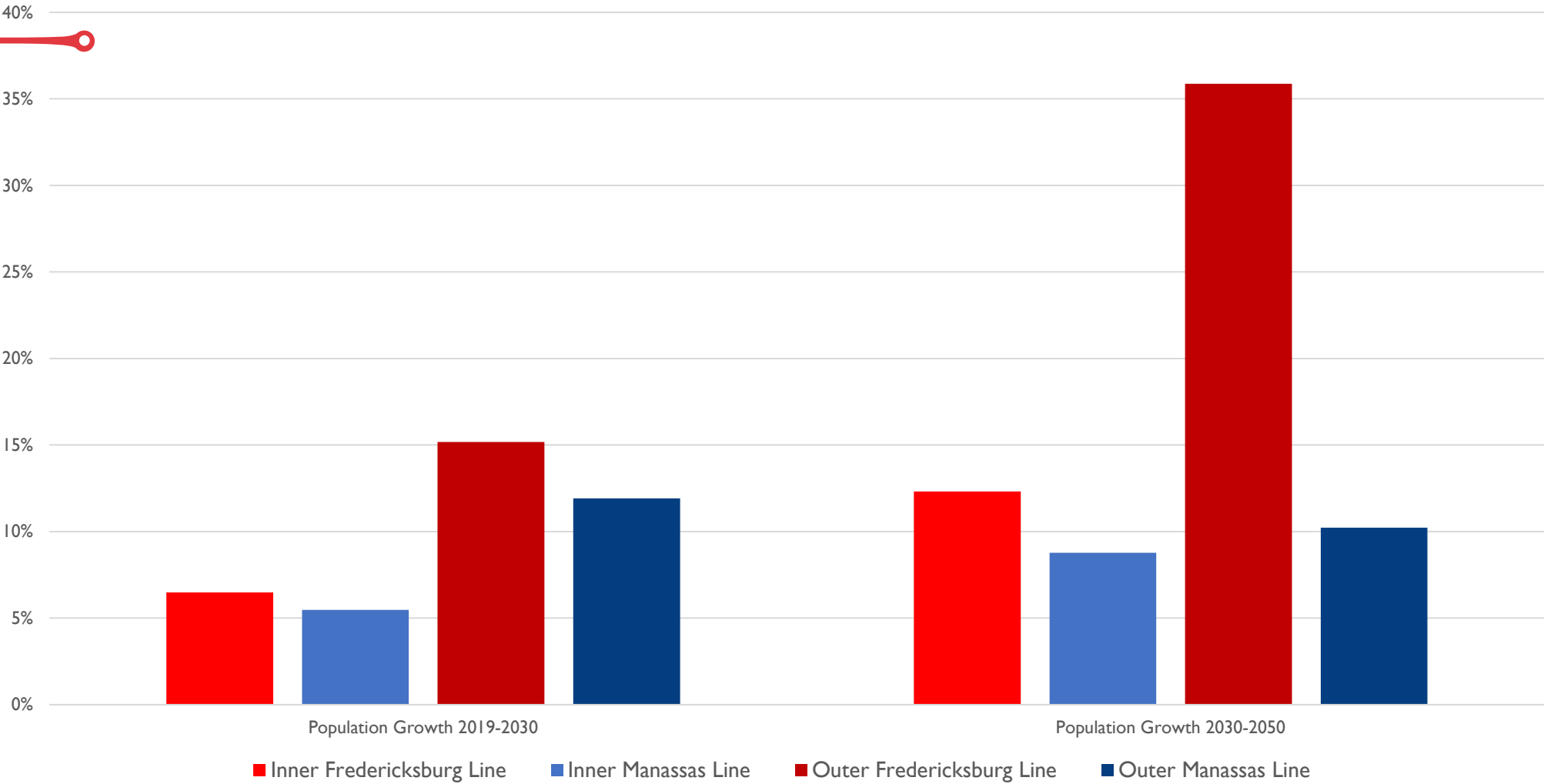
- Highest rates of regional population growth to 2030 and 2050 will be around VRE outer stations' service areas<sup>1</sup>
- Employment densities in 2030 and 2050 will increase primarily along high frequency transit corridors
- Highest areas of employment growth served by VRE:
  - Crystal City
  - D.C. Core
  - Fairfax County - Springfield/Belvoir North area

1: FBG Line Outer Stations: Spotsylvania, Fredericksburg, Leeland Road, Brooke, MSS Line Outer Stations: Broad Run, Manassas, Manassas Park  
2: FBG Line Inner Stations: Quantico, Rippon, Woodbridge, Lorton, Franconia, MSS Line Inner Stations: Burke Centre, Rolling Rd., Backlick Rd.





# Population Growth Projections



1: FBG Line Outer Stations: Spotsylvania, Fredericksburg, Leeland Road, Brooke, MSS Line Outer Stations: Broad Run, Manassas, Manassas Park  
2: FBG Line Inner Stations: Quantico, Rippon, Woodbridge, Lorton, Franconia, MSS Line Inner Stations: Burke Centre, Rolling Rd., Backlick Rd.



# Travel Market Assessment

## Geographic Travel Patterns

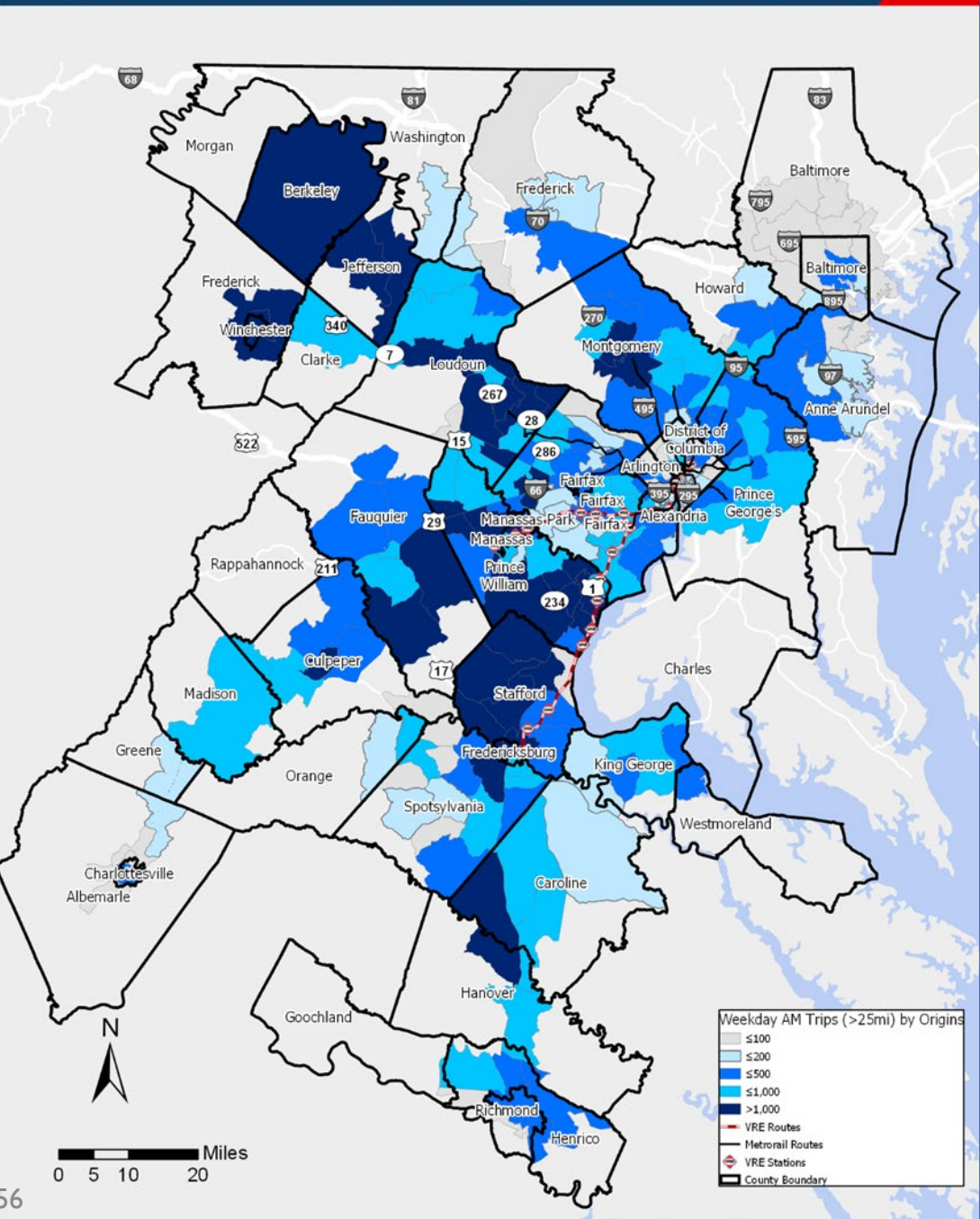
- VRE service provides the most travel time advantage for longer trips
- Most of long-distance trip making is originating in areas far from VRE stations
- Significant number of trips begin or end beyond VRE's termini

### O-D pairs with the highest level of +25-mile trip demand

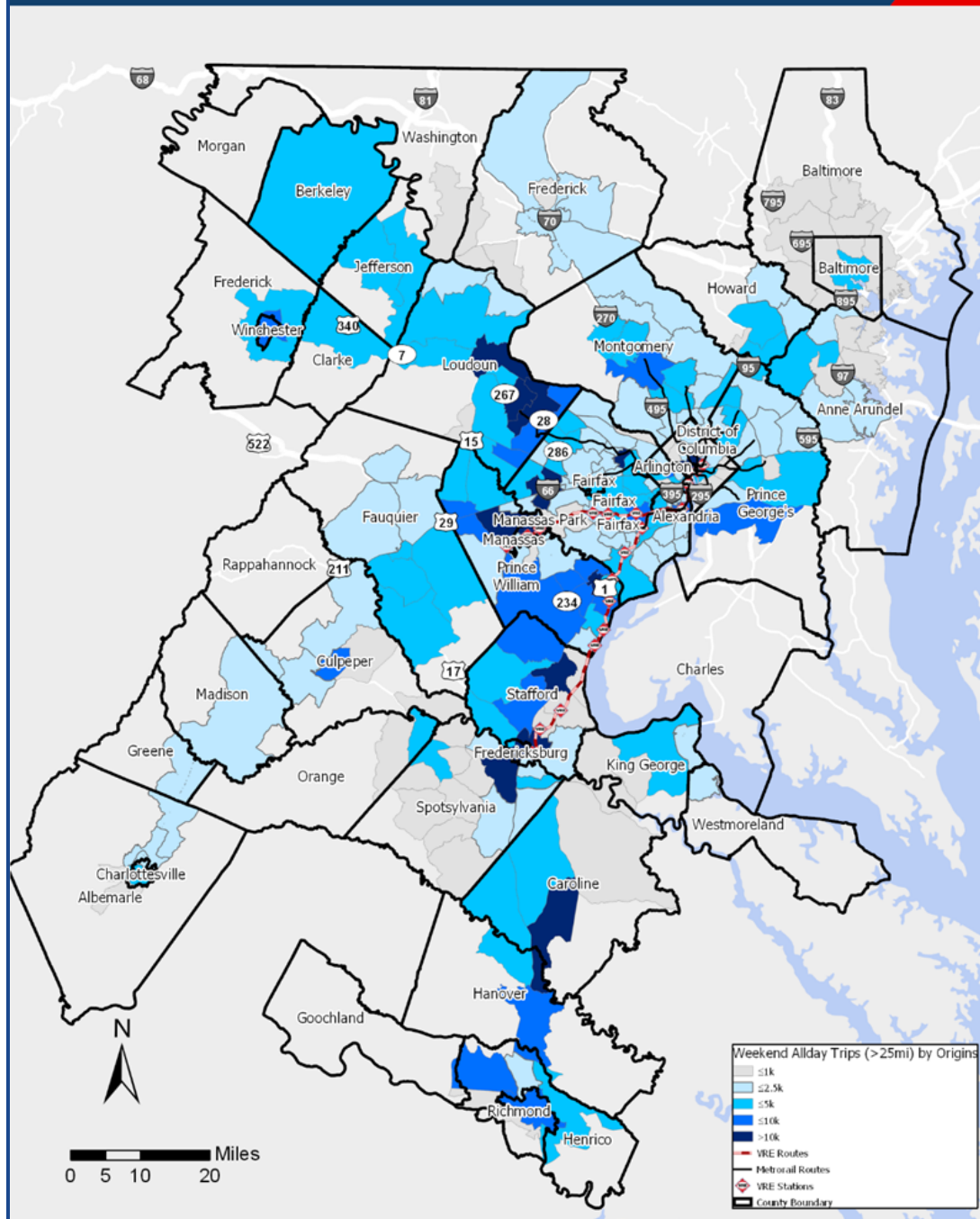
Weekday Peak	Saturday	Sunday
<ul style="list-style-type: none"><li>• Centreville – DC Core</li><li>• Caroline County West of I-95 – Central Fredericksburg/South Stafford</li></ul>	<ul style="list-style-type: none"><li>• Centreville – DC Core</li><li>• DC Core – Centreville</li></ul>	<ul style="list-style-type: none"><li>• Dulles Airport – DC Core</li><li>• DC Core – Centreville</li></ul>
<ul style="list-style-type: none"><li>• Potomac Mills – DC Core</li></ul>	<ul style="list-style-type: none"><li>• Dulles Airport – DC Core</li></ul>	<ul style="list-style-type: none"><li>• DC Core – Dulles Airport</li></ul>



Long-Distance Weekday AM Trips from/to VA by Origins



Long-Distance Weekend Daily Trips from/to VA by Origins



**These trips are:**

- 25+ miles
- Start or end in VA
- Shown by origin

# Travel Market Assessment

## Evolving Travel Choices

- Severe drop and modest recovery of VRE ridership due to:
  - Seasonal demand variability observed even in pre-pandemic times
  - Attrition from workforce (Retirement, layoff, etc.)
  - Higher rates of telework
  - Faster driving options
- Recovery mirrors national and regional transit trends
- Many travel markets along VRE corridors have relatively high demand but less competitive transit travel time
  - Lower weekend transit competitiveness due to lower roadway congestion and lower frequency of transit service
- Very modest numbers of Maryland-bound trips originate along VRE corridors

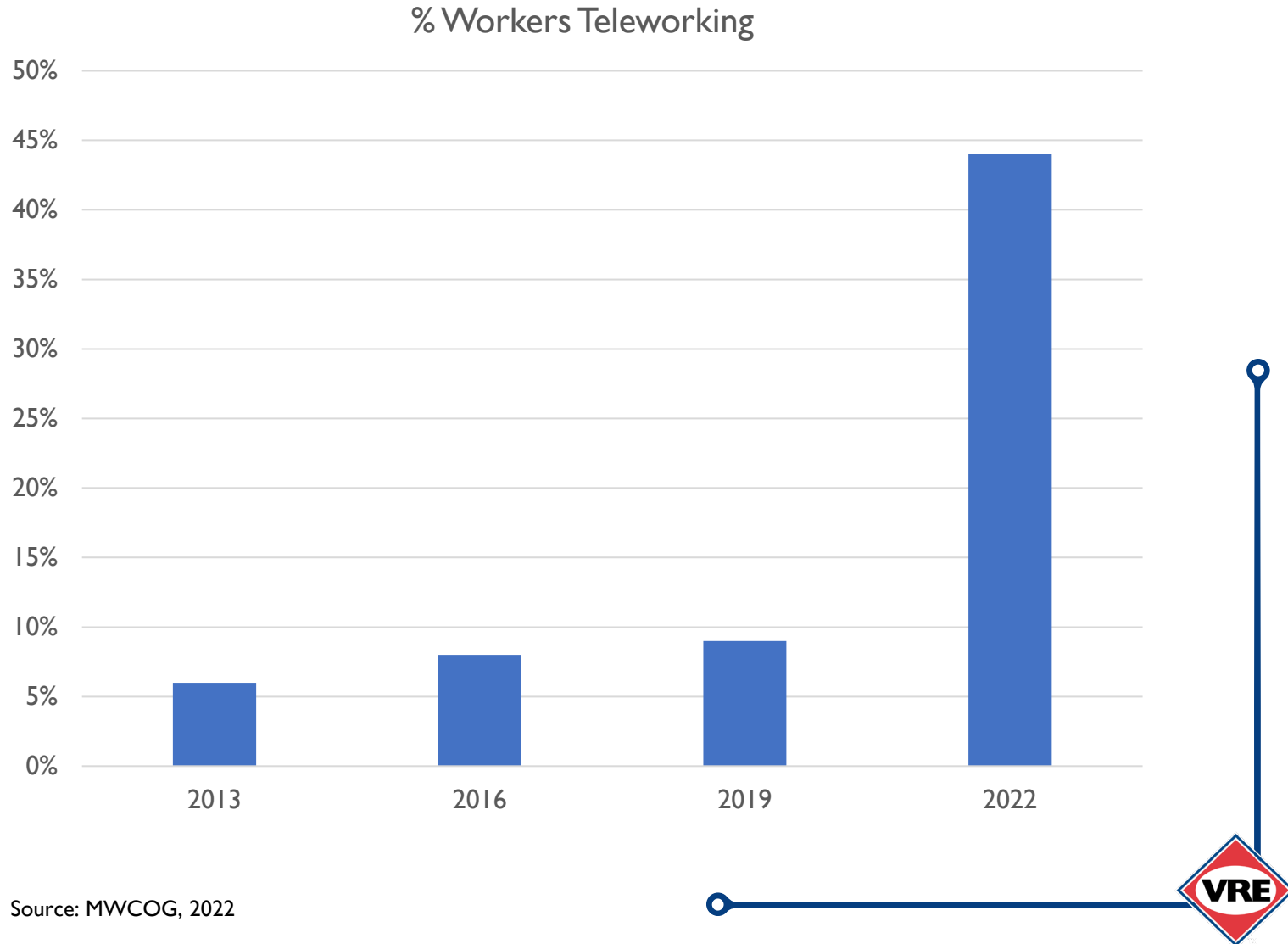




# Pandemic and Teleworking

## Teleworking in the D.C. region...

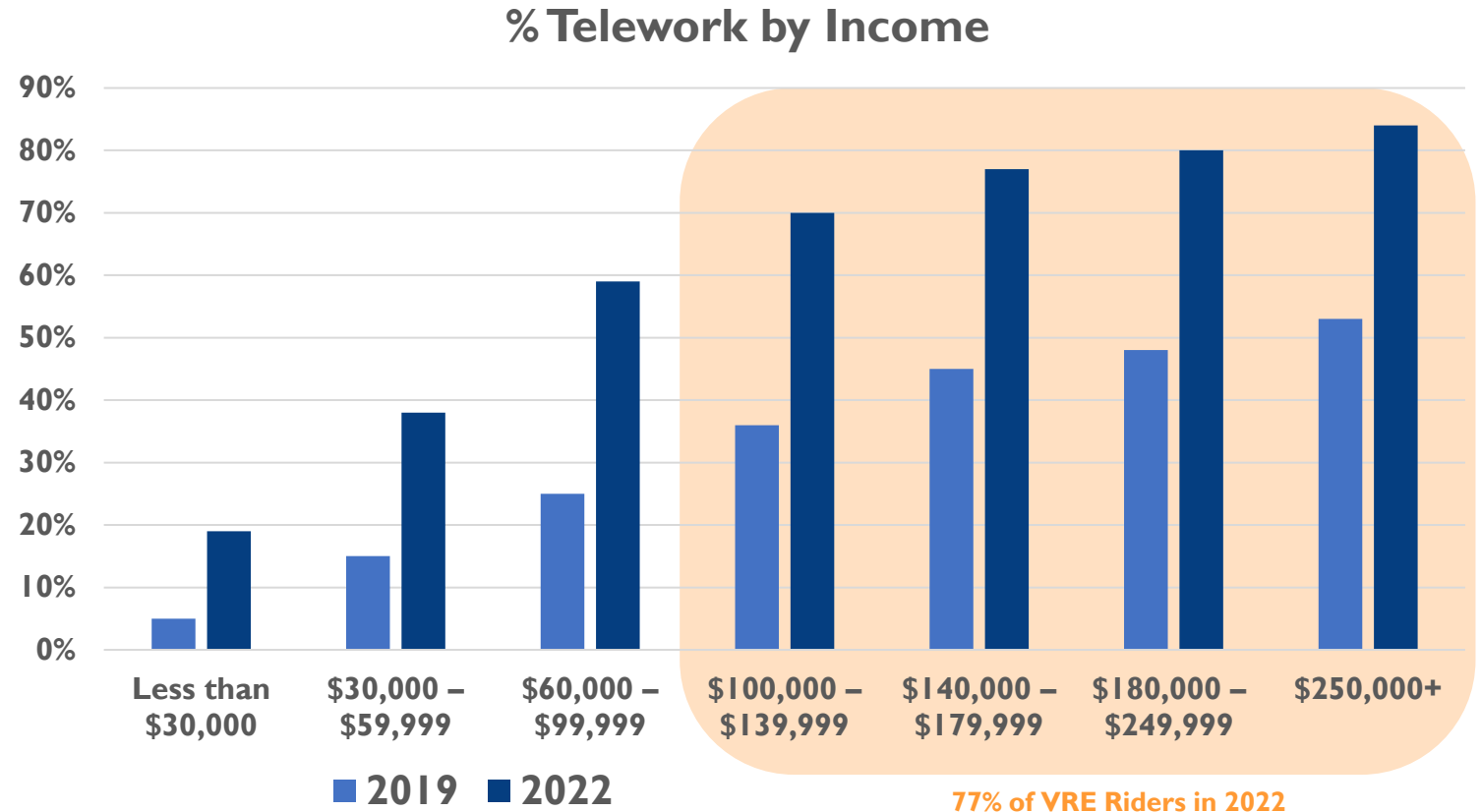
- Grew 4.5% between 2007 and 2019
- Approximately 44% of all regional workers teleworked or worked at home on a typical workday in early 2022
- The regional telework rate grew by more than x5 between 2019 and 2022



# Pandemic and Teleworking

## Teleworking in the D.C. region...

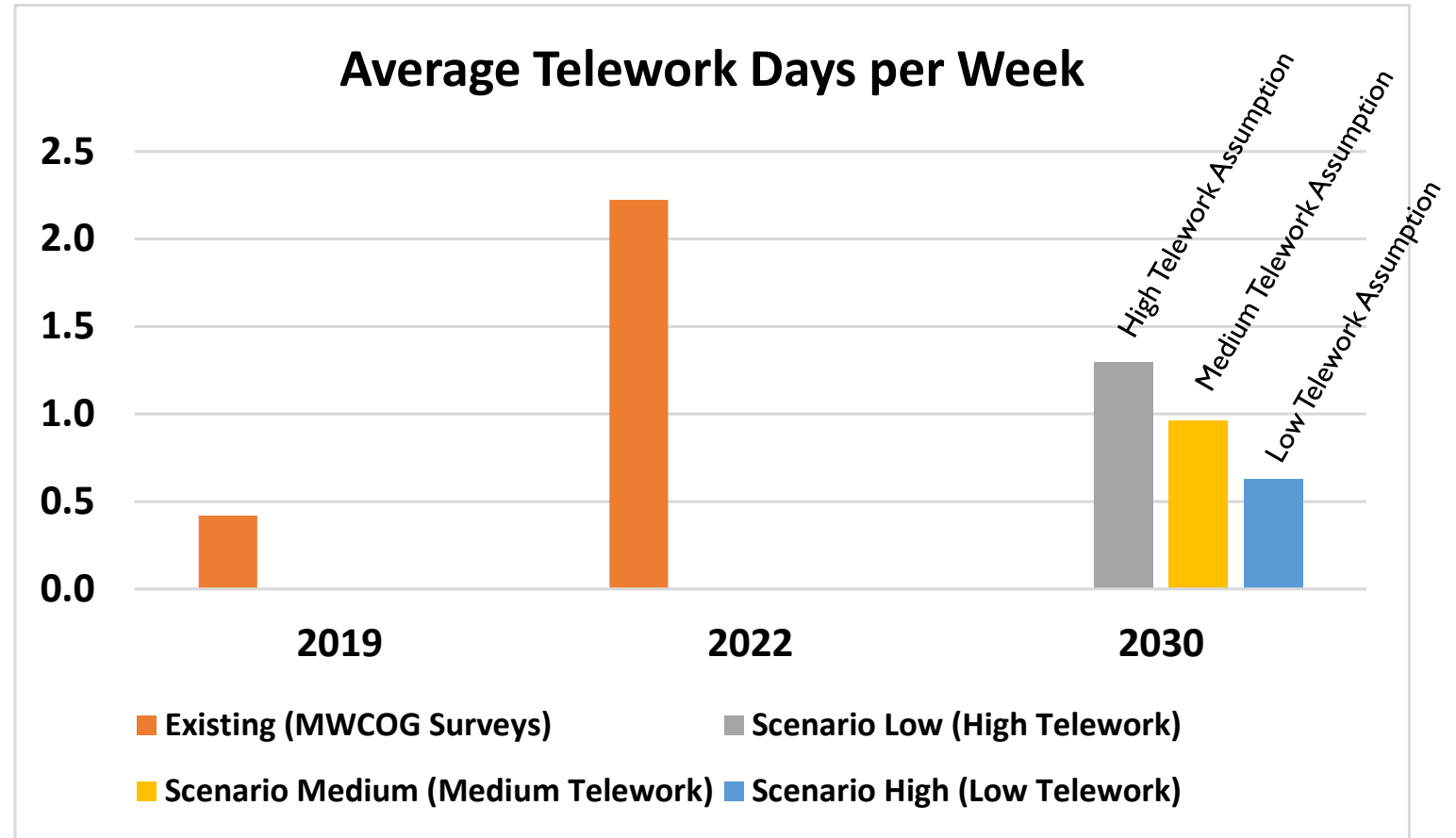
- A strong pattern of increasing rates of telework as household income increases
- High rates of telework among high-earners is nothing new



Source: MWCOG, 2022

# Telework Assumptions for Forecasting

Existing 2019 / 2022  
Future (2030)



Source: MWCOG State of Commute Surveys for Existing Data



# LET'S DISCUSS

1. What are effects of mismatch between growth areas and VRE station locations?
2. How can VRE become a competitive travel option for longer trips?
3. What does post-pandemic growth in off-peak and weekend travel mean for a peak-focused service?
4. What are the implications of remote work and high incomes in service area?





# 2030 RIDERSHIP PROJECTIONS



# 2030 Ridership Projection Summary

- Presented as a range of Low, Medium, and High
- The low end assumes that telework rates will be elevated because of hybrid work patterns similar to but less than the 2022 level
- The high end assumes that telework rates return to 2019 (pre-pandemic) levels, then grow at a rate similar to that observed between 2007-2019
- Based on the general population survey and regional demographic trends, VRE riders tend to telework at a higher-than-average rate—our rates were adjusted accordingly



# Baseline Ridership Projections: Telework

What makes up our range?

The region commutes in a hybrid mode similar to, but with less telework than 2022

LOW Ridership

HIGH Ridership

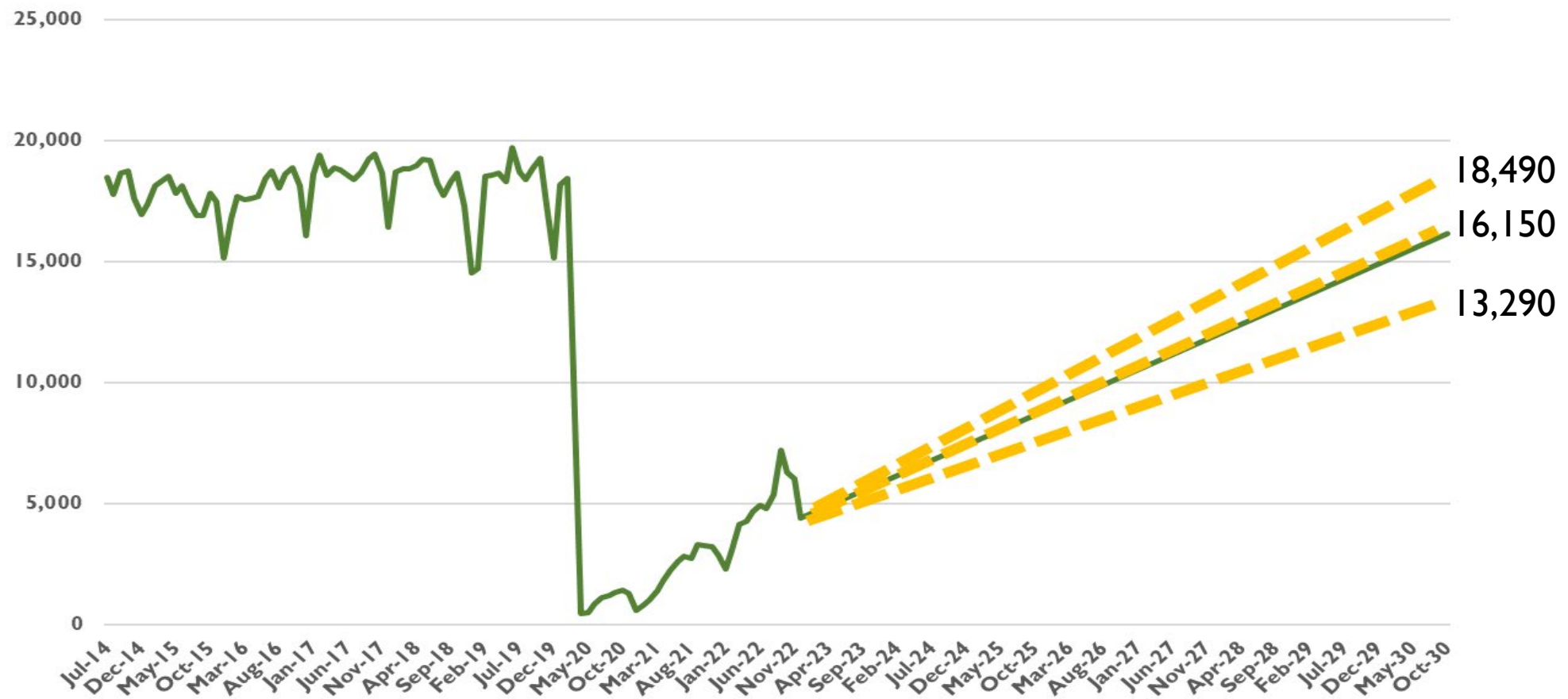
The region commutes following the pre-pandemic commuting growth trend

MWCOG's State of the Commute Survey used for telework data



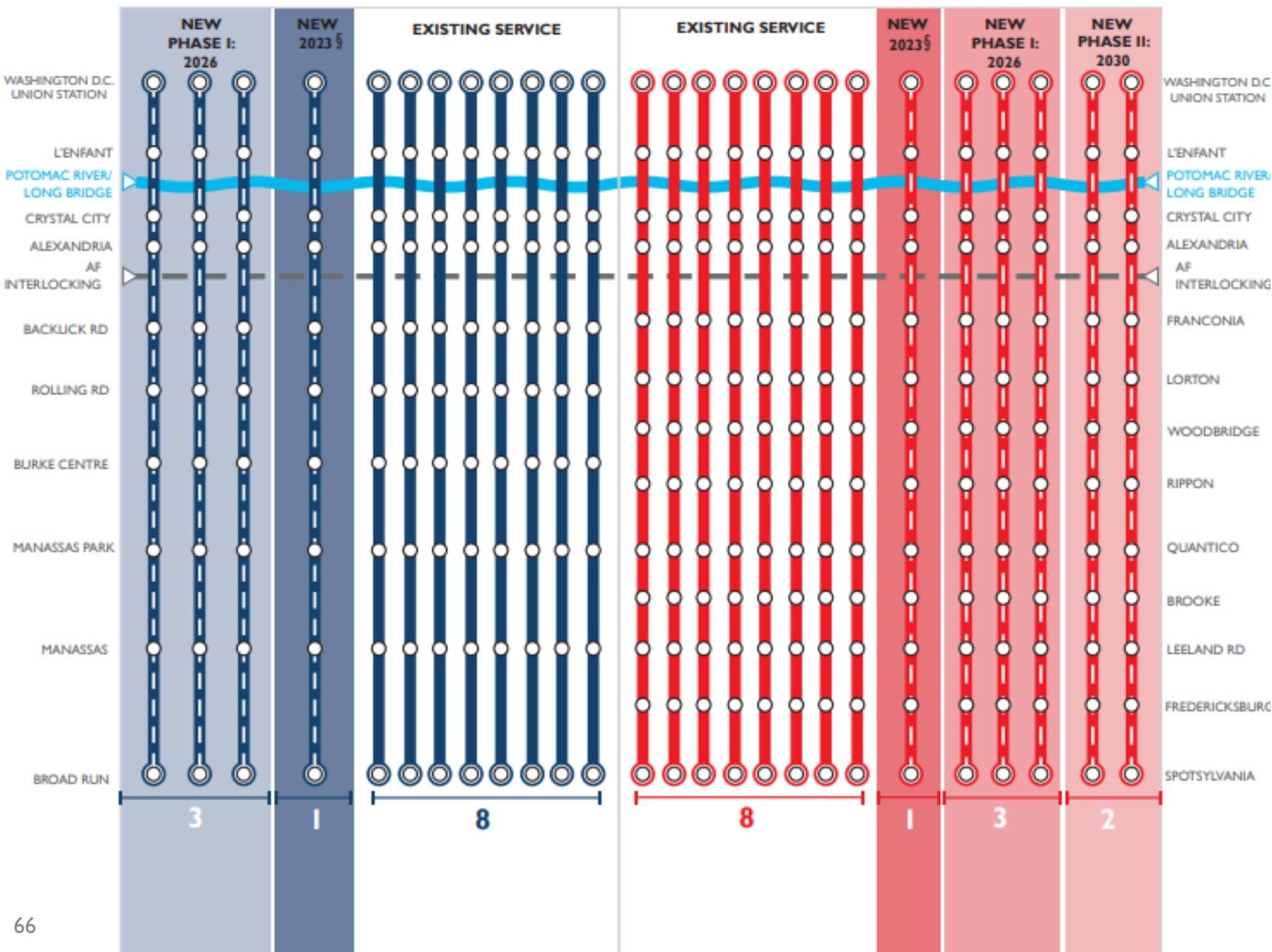
# 2030 Ridership Forecast: No Build (2023 Service)

2030 average daily ridership with no change to VRE service pattern



## \*VRE MANASSAS LINE

## VRE FREDERICKSBURG LINE



# TRV Baseline Service

Additionally, Amtrak service will grow:

8 VA R/T Trains 2023

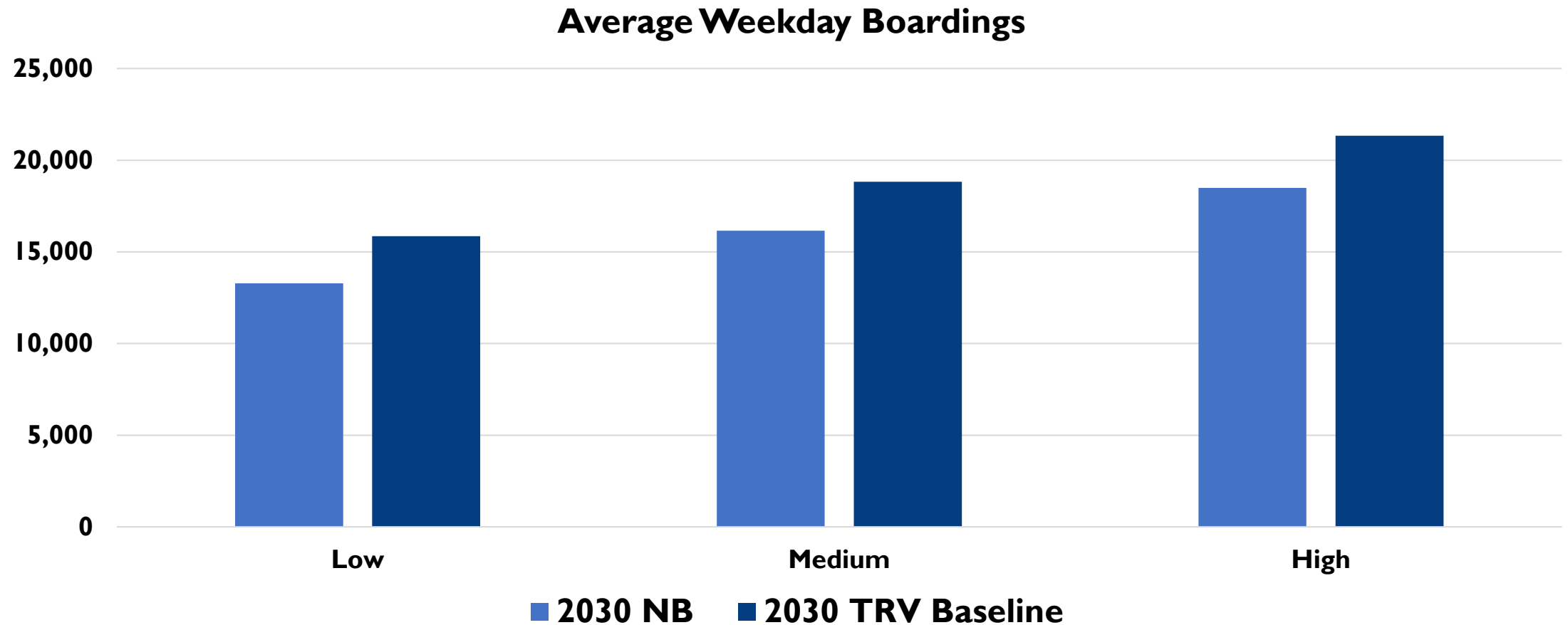
13 VA R/T Trains 2030\*

\*Only includes VA State-Sponsored Amtrak trains



# 2030 Weekday Ridership Forecasts: No Build versus TRV Baseline

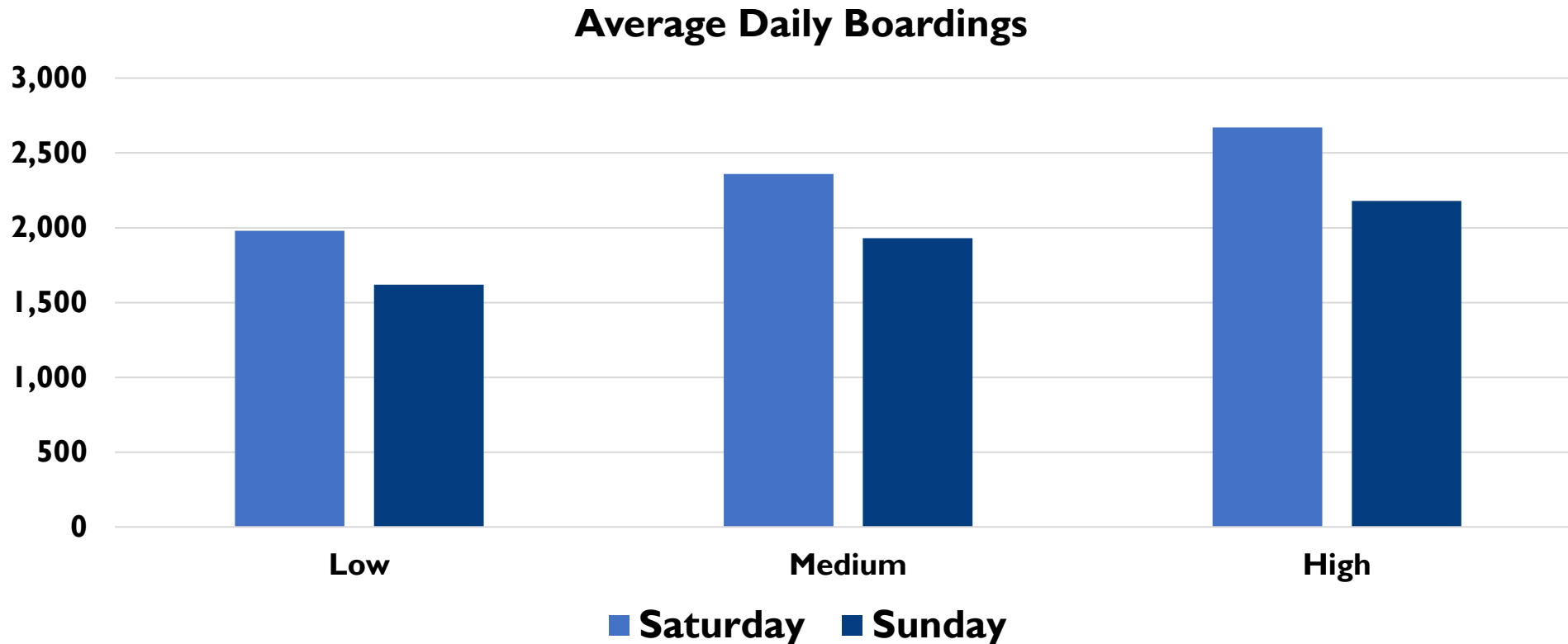
Planned 2030 TRV Baseline service improvements will increase weekday boardings by 20%





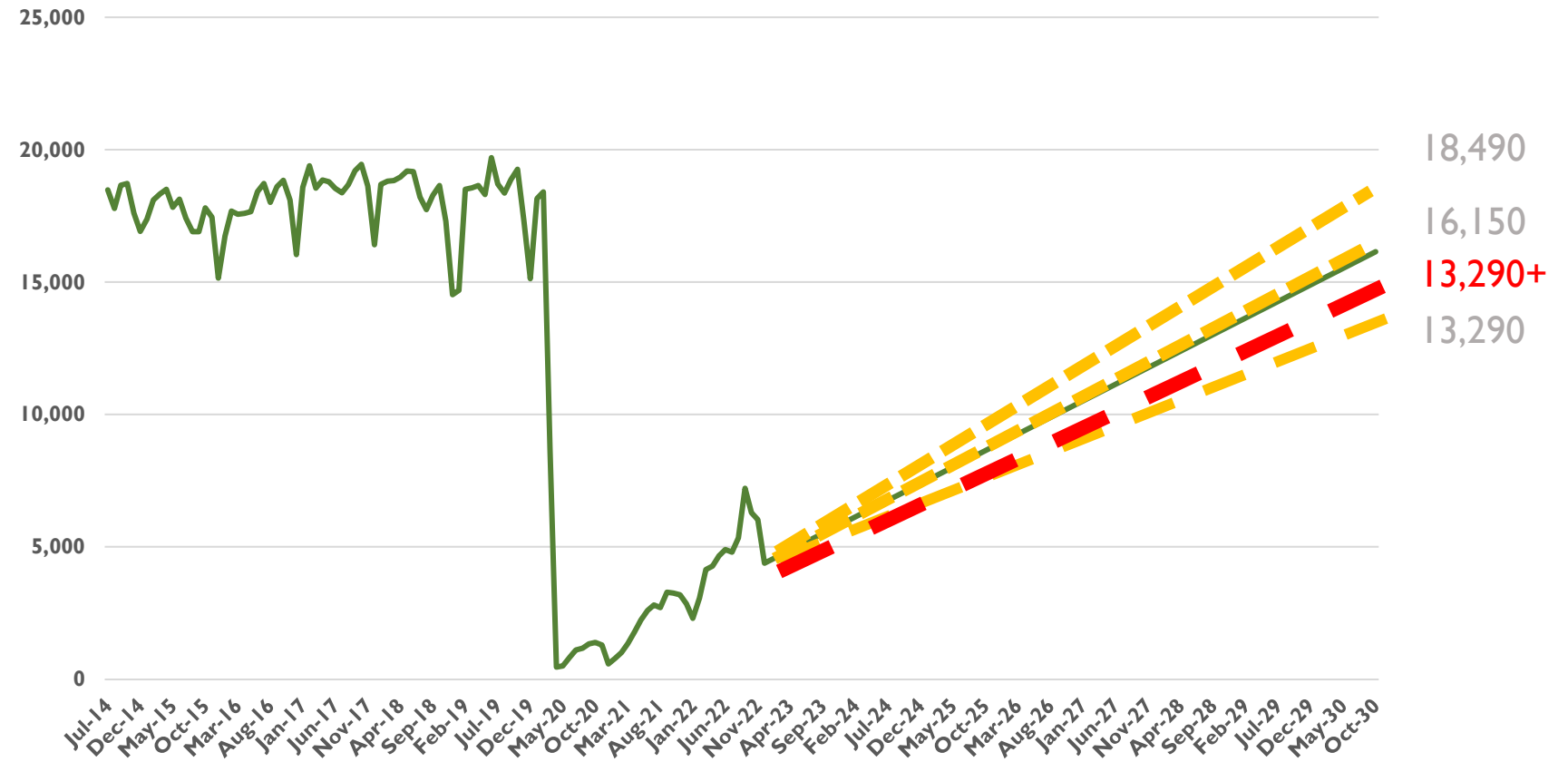
# 2030 Weekend Ridership Forecasts: TRV Baseline

2030 TRV Baseline service improvements add 3,600 – 4,800 weekend riders with 20% more on Saturday than Sunday



# What-if: Re-baseline telework assumptions to 2023 VRE Ridership levels

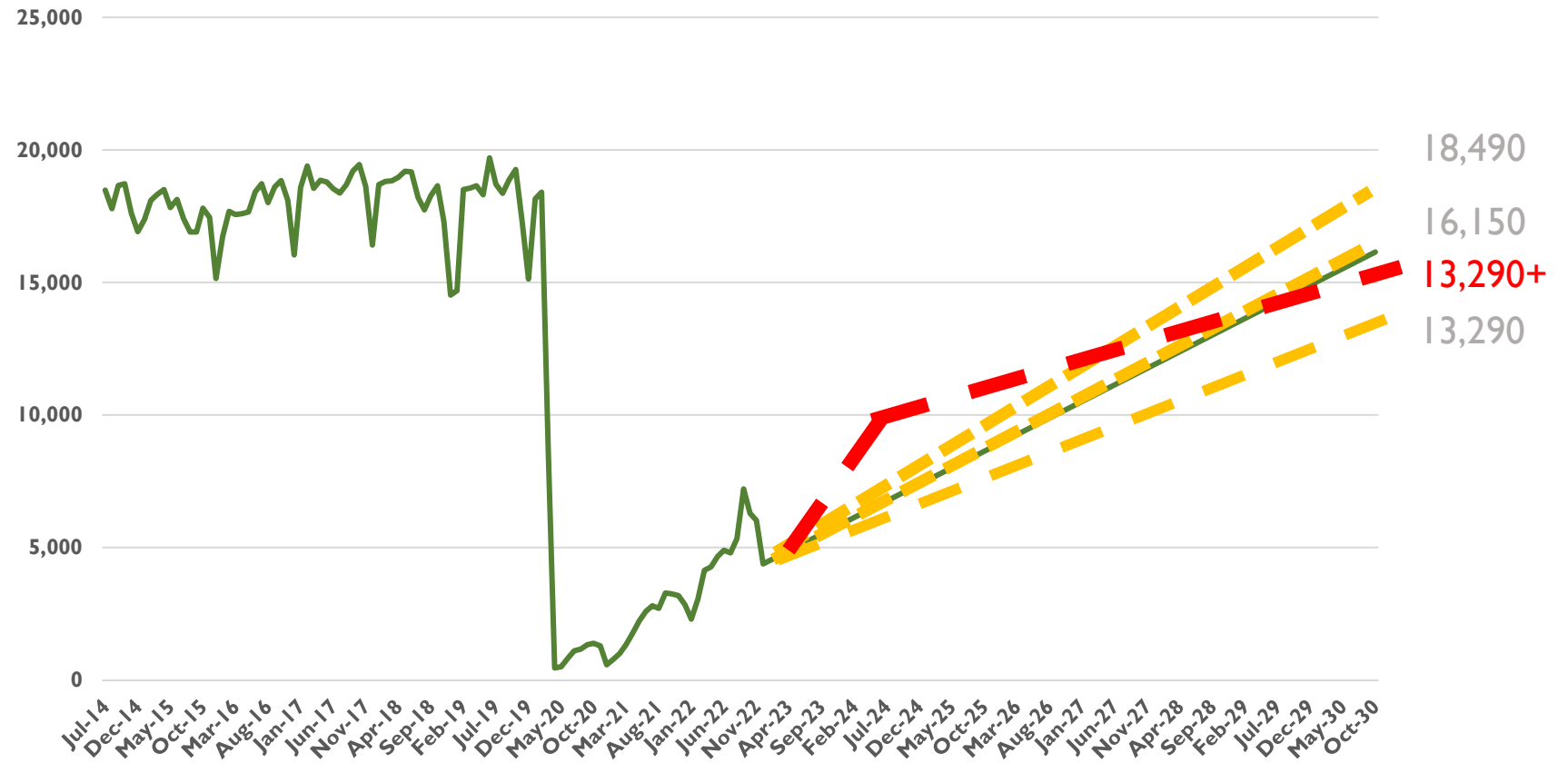
More people commuting increases the low-end of the forecast range



# What-if: Large Federal Return-to-work directive in spring 2024

More people commuting increases the low-end of the forecast range

Does not likely change the high-end of the forecast range



# What We Learned

## 2030 Ridership Projections

- Managed lanes along I-95/I395 and I-66 have offered an option of better travel times for those willing to pay, competing with VRE
- During the pandemic, many people switched to driving due to lower congestion levels and health concerns – they have been slow to return to transit
- TRV 2030 Baseline service adds ~63% more weekday service and ~20% more weekday riders (and up to 4,800 weekend riders)
- Major return-to-office initiatives will improve the outlook of projections but do not impact the "high" end of the forecast range





• **LUNCH BREAK**



# TOPIC 3: 2030 PROPOSED SERVICE SCENARIOS



# How we can “move the needle” between now and 2030

## Serve longer trips better

- Provide better connections to outer stations to extend the reach of VRE
- Add more express trains to improve travel times and give riders a convenient alternative to driving
- Coordinate with VPRRA on Amtrak stopping patterns to maximize convenience for intercity and regional travelers and utility for VRE users

## Serve unmet travel needs

- Add weekend service to increase ridership without need for additional capacity or equipment
- Add service throughout the day, making VRE an option for more travelers
- Focus on station access to support sustainable and equitable growth



# Transforming Rail in Virginia (TRV)

*2030 Scenarios are developed to answer this critical question:*

**How does VRE best leverage this transformational investment to best meet the needs of regional travelers and jurisdiction partners?**



# Refined Short List Service Scenario Screening

Operating Concept	Refined Short List Service Scenarios	
Existing	Existing (2023) [16 roundtrips]	
TRV Baseline Service	TRV Baseline (2030) [26 roundtrips]	
TRV Baseline Modified Service	A	Rebalanced schedule + 6 weekend roundtrips
	B	Rebalanced schedule + 26 weekend roundtrips
	C	Rebalanced schedule + 13 weekend roundtrips
	D	Rebalanced to focus on express service + 6 weekend roundtrips



# TRV Baseline Modified Service Scenarios

**Span:** Longer All Day

**Frequency:** 2 Long Peaks - Rebalanced peak/off-peak service patterns

**Stopping Patterns:** VRE Local & Peak Express, Flexible Amtrak stopping patterns

**Roundtrips (Weekday):** A-B-C-D: **26** – Same as TRV Baseline

**Roundtrips (Weekend):** A: **6** B: **26** C: **13** D: **6**

**Bi-Directionality:** Selective Bi-Directional

**Timed Transfers:** MARC Penn Line – Meet 1/4 to 1/3 of arrivals/departures within 10-30min transfer

**Equipment Use:** VRE all times, with Amtrak supplementing

**Implementation Timeframe:** Weekday: Post Long Bridge, Weekend Alts. A,C,D: 2024, Weekend Alt. B: 2026



# Existing vs TRV Baseline Modified Service

Existing VRE and Amtrak Service Pattern

Washington, DC Union Station					MARC Brunswick   Camden   Penn Timed Transfers	
L'Enfant						
					Potomac River / Long Bridge	
Crystal City						
Alexandria						
					AF Interlocking	
MSS	Backlick Rd					Franconia
	Rolling Rd					Lorton
	Burke Centre					Woodbridge
	Manassas Park					Rippon
	Manassas					Potomac Shores
	Broad Run					Quantico
NS B line	Prince William					Brooke
	Fauquier					Leeland Rd
	Warren					Fredericksburg
	Frederick (VA)					Spotsylvania
NS Peid mont	Fauquier					Caroline
	Culpeper County					Hanover
	Culpeper Town					Ashland
	Charlottesville					Richmond Staples Mill
						Richmond Main Street

TRV Baseline Modified VRE, Amtrak & Connecting Service

Washington, DC Union Station					MARC Brunswick   Camden   Penn Timed Transfers	
L'Enfant						
					Potomac River / Long Bridge	
Crystal City						
Alexandria						
					AF Interlocking	
MSS	Backlick Rd					Franconia
	Rolling Rd					Lorton
	Burke Centre					Woodbridge
	Manassas Park					Rippon
	Manassas					Potomac Shores
	Broad Run					Quantico
NS B line	Prince William					Brooke
	Fauquier					Leeland Rd
	Warren					Fredericksburg
	Frederick (VA)					Spotsylvania
NS Peid mont	Fauquier					Caroline
	Culpeper County					Hanover
	Culpeper Town					Ashland
	Charlottesville					Richmond Staples Mill
						Richmond Main Street

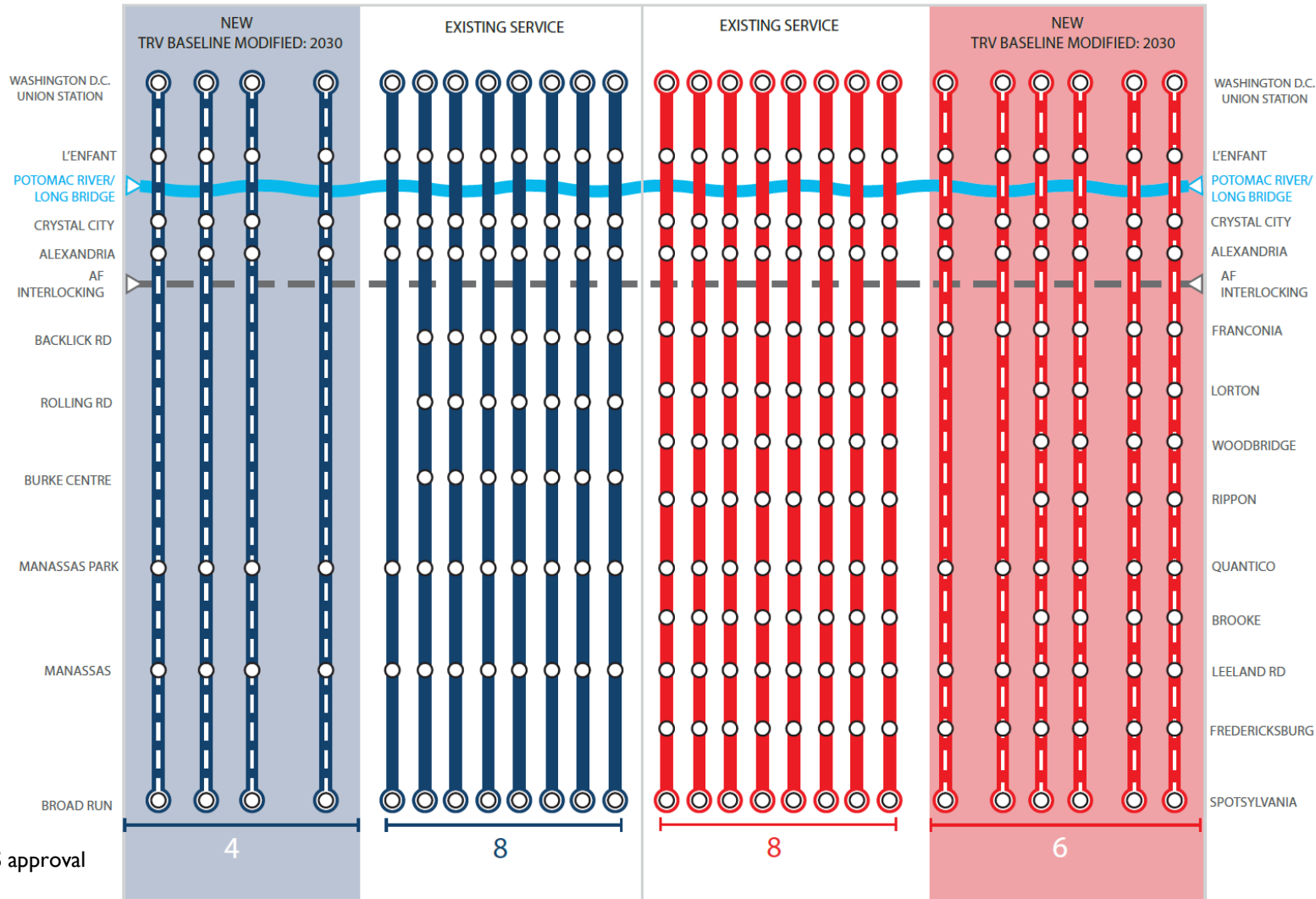


# VRE 2023 vs. TRV Baseline Modified Service

## ALTERNATIVE A/B/C - WEEKDAY

### VRE MANASSAS LINE

### VRE FREDERICKSBURG LINE



MSS Line service changes subject to NS approval

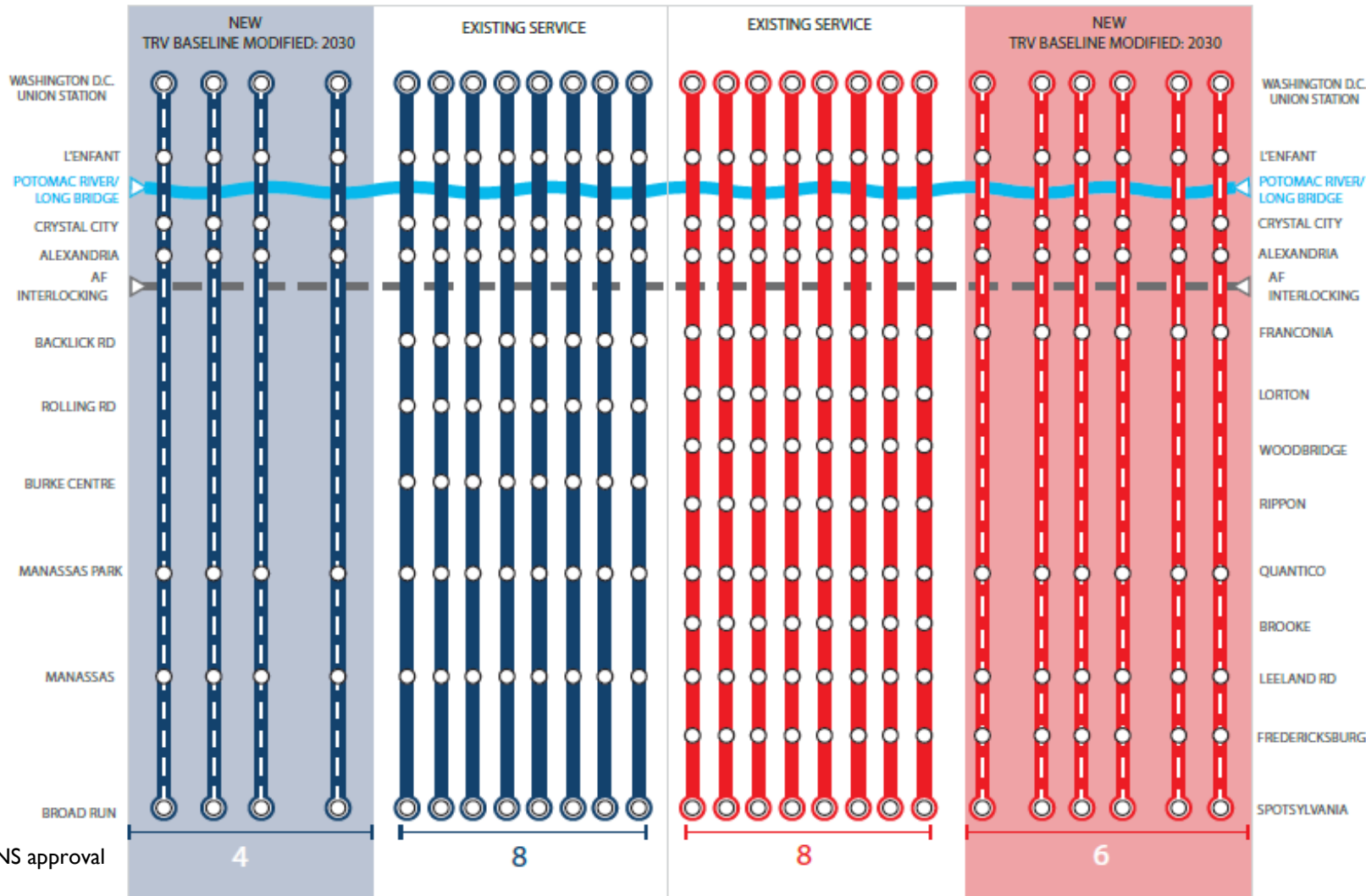


# VRE 2023 vs. TRV Baseline Modified Service

## ALTERNATIVE D - WEEKDAY

### VRE MANASSAS LINE

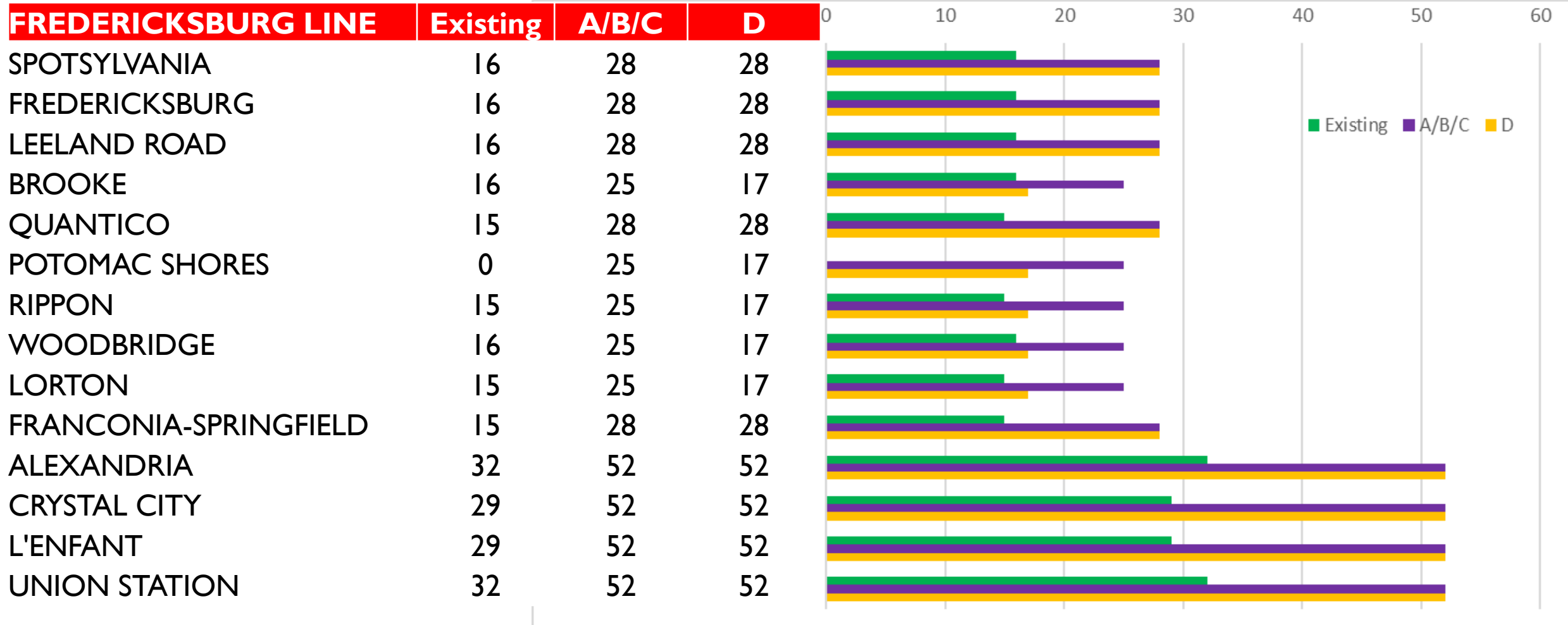
### VRE FREDERICKSBURG LINE





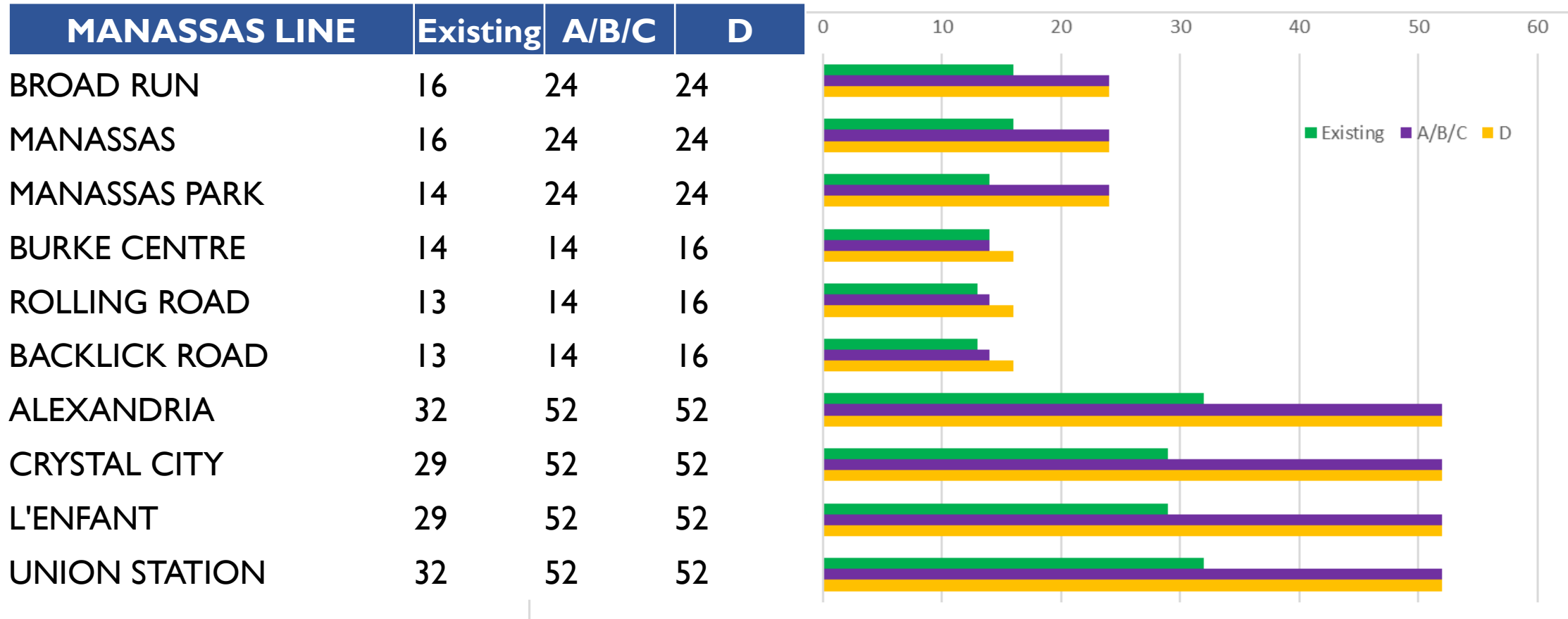
# VRE Train Stops by Station

## Alternative A/B/C/D - Fredericksburg Line - Weekday



# VRE Train Stops by Station

## Alternative A/B/C/D – Manassas Line - Weekday



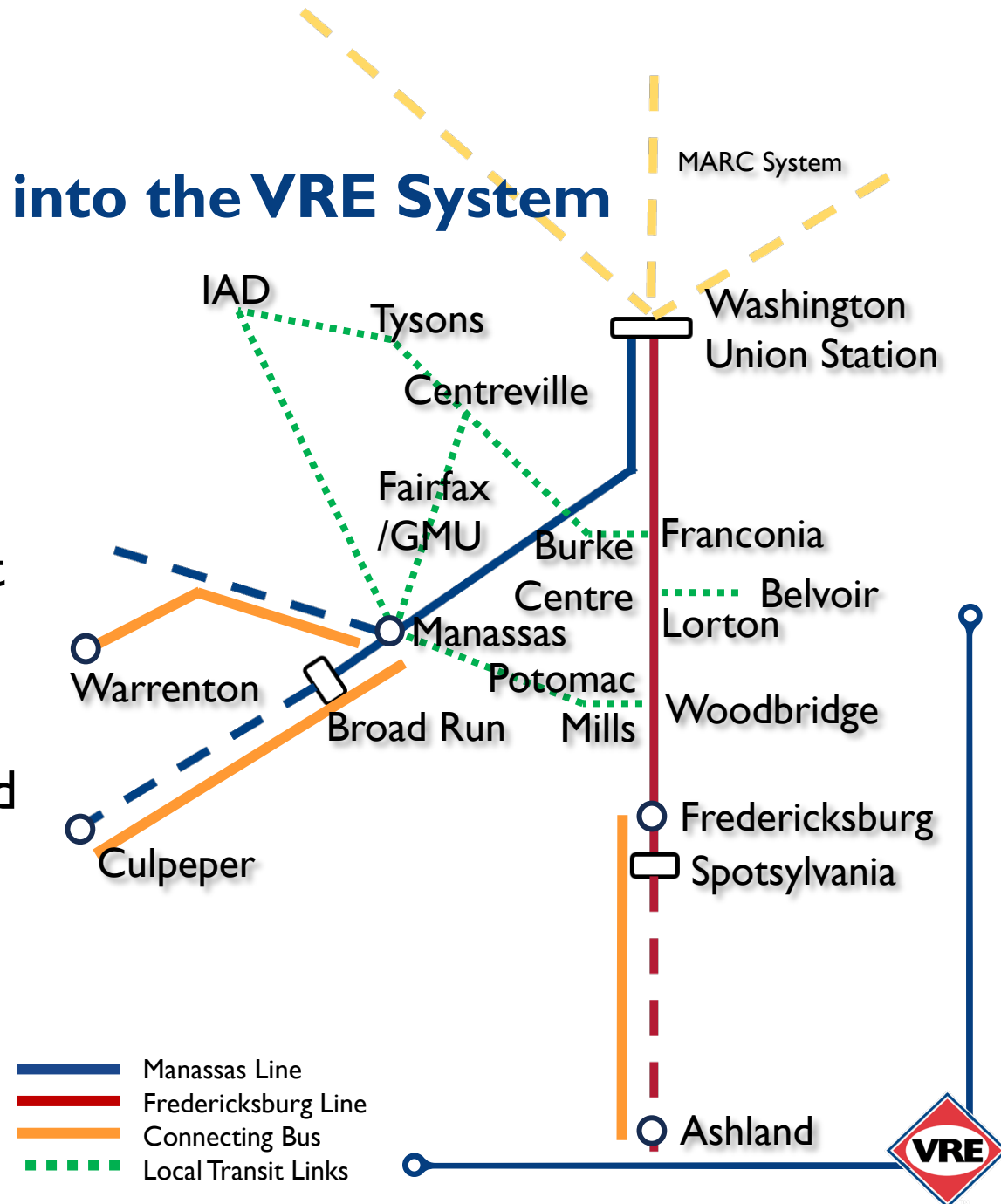
# Connecting Bus and Rail

## Bringing Long-Distance Commuters into the VRE System

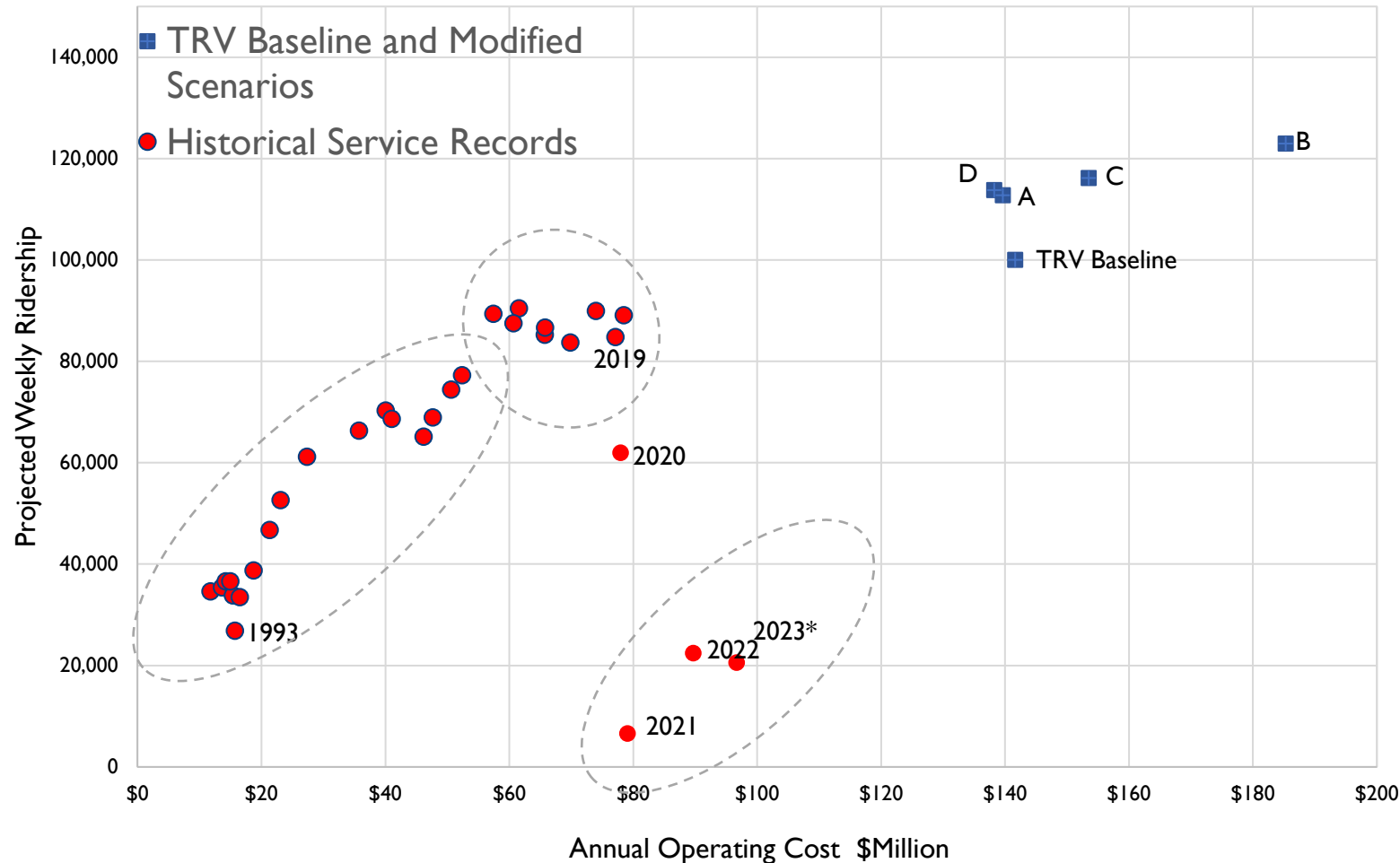
2030 scenarios enable service expansion via connecting bus service

Buses extend the reach of VRE and complement VRE express service, Amtrak VA trains, and Virginia Breeze service

Transfer to/from MARC Penn Line accomplished through timed transfers and ticketing policies



# 2030 Operating Cost vs Projected Ridership



All historical data from National Transit Database (NTD) and VRE

Operating cost estimates of TRV Baseline and TRV Baseline Modified Scenarios based on 2019 Operating Expense per Vehicle Revenue Mile/Hour

2020 - 2022 records seen as outliers due to pandemic-related impacts on ridership

2023\* (3-months of data)





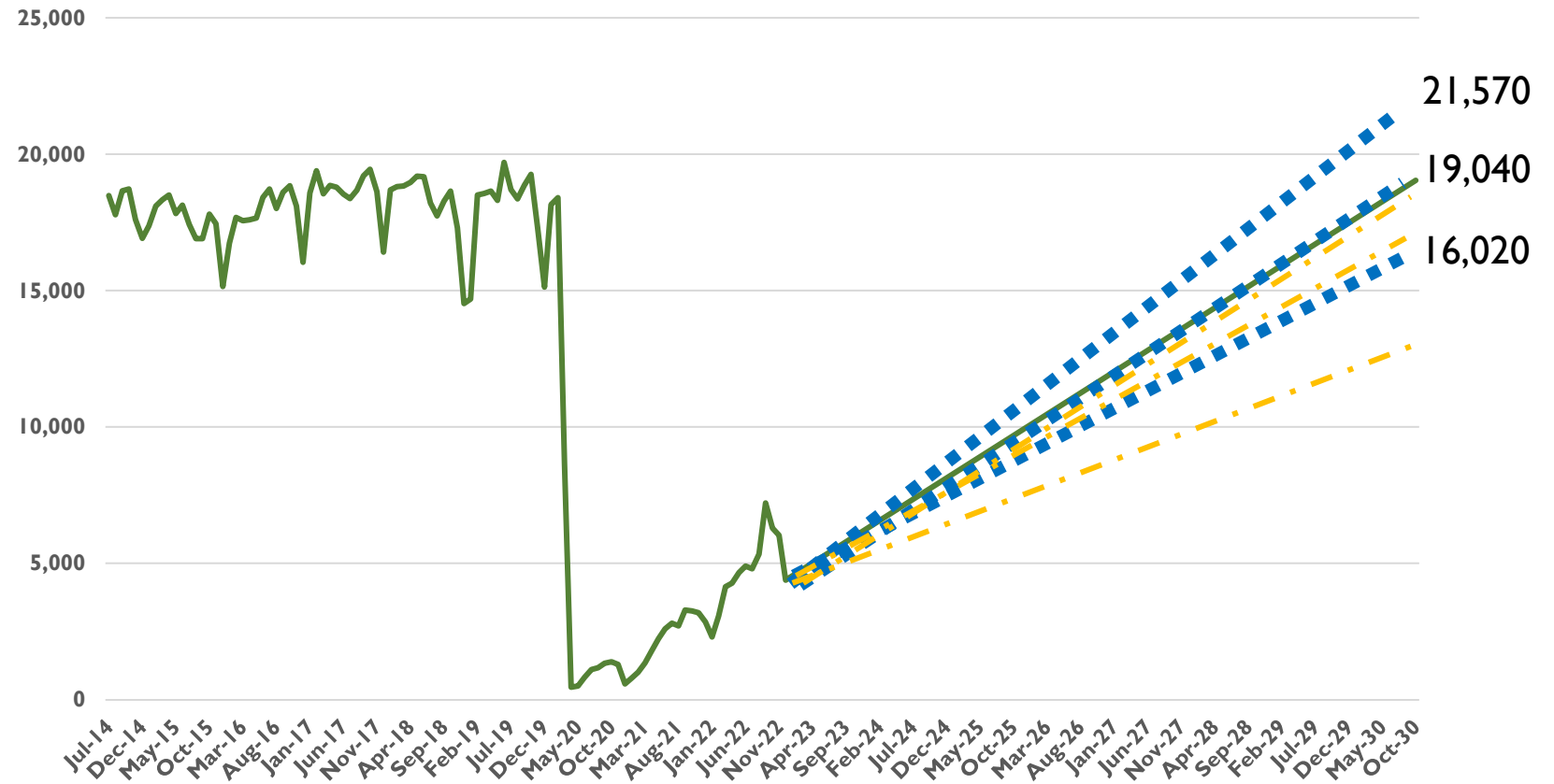
# ALTERNATIVES A/B/C/D RIDERSHIP PROJECTIONS



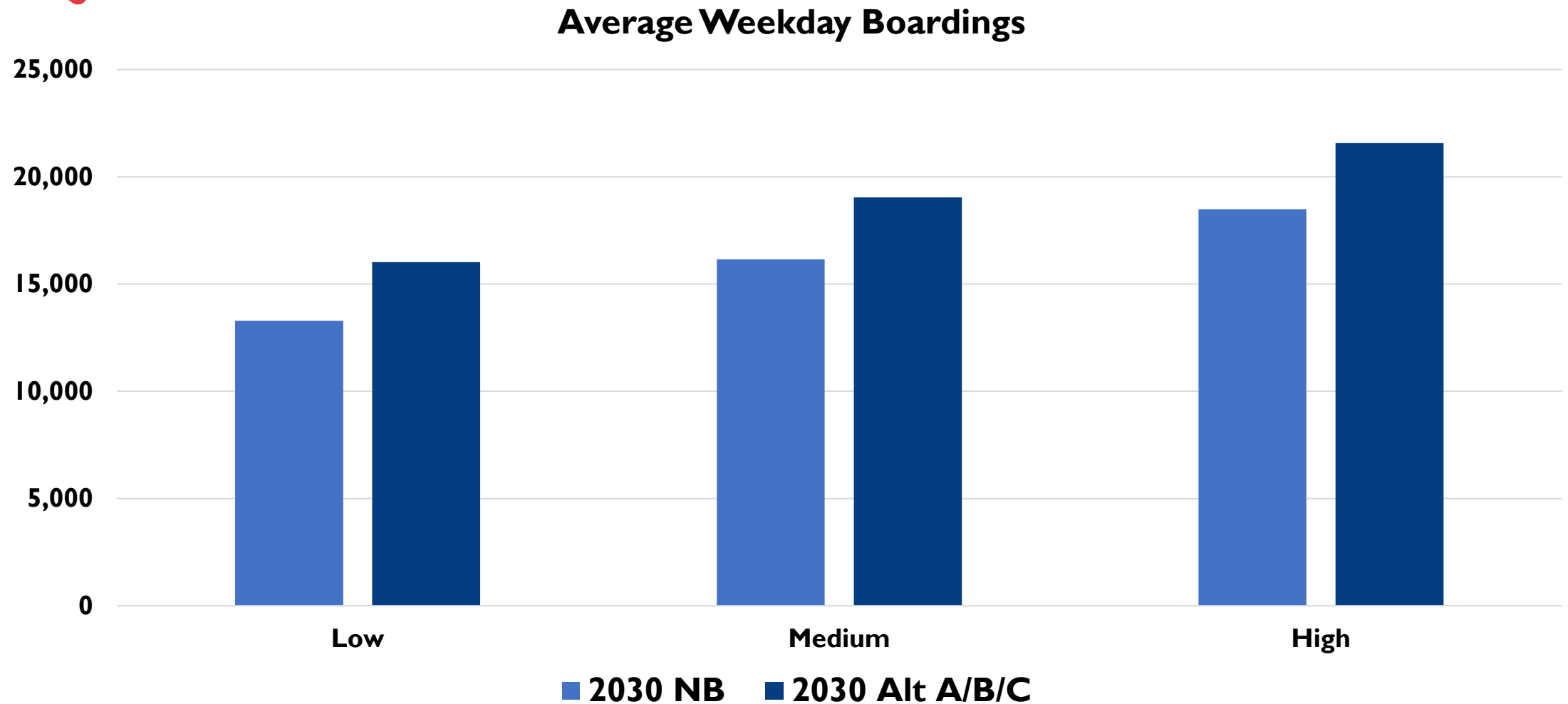
# Alt A/B/C 2030 Average Weekday Ridership

**Build  
Alts Average  
Weekday  
Boarding  
Forecasts**

**No-Build  
Average  
Weekday  
Boarding  
Forecasts**



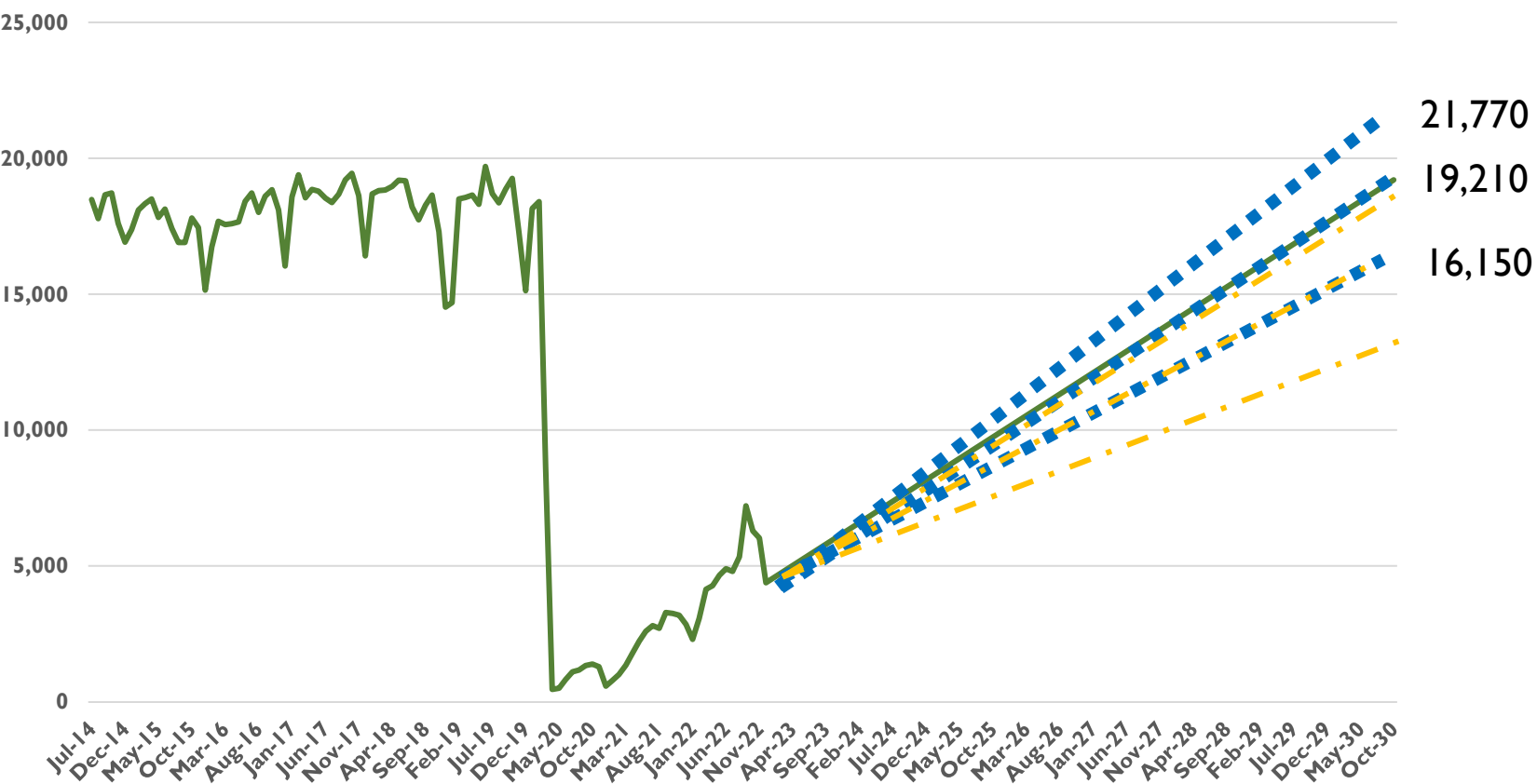
# 2030 Weekday Ridership Forecasts: Alt A/B/C vs No Build



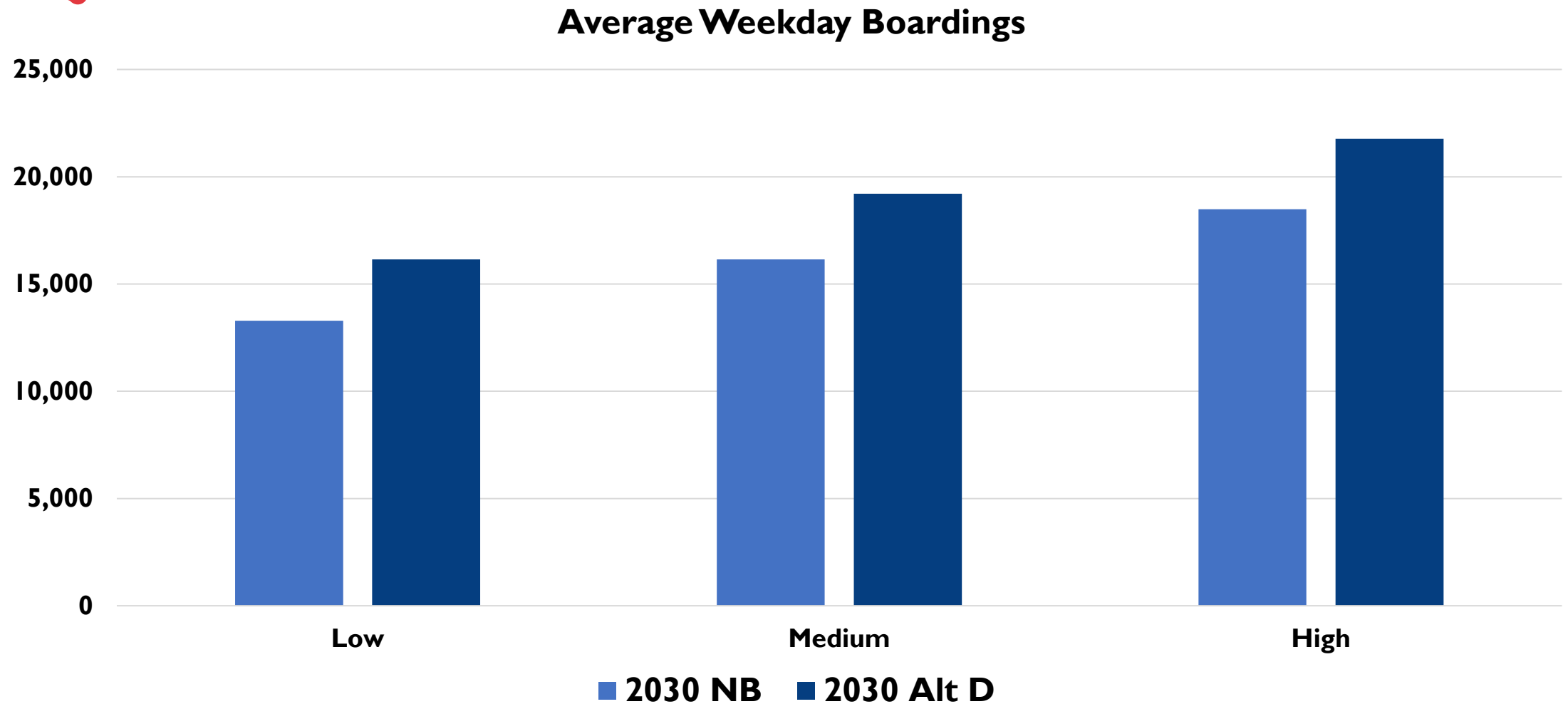
# Alt D 2030 Average Weekday Ridership

Alt D Average Weekday Boarding Forecasts (slightly higher than Alt A)

No-Build Average Weekday Boarding Forecasts

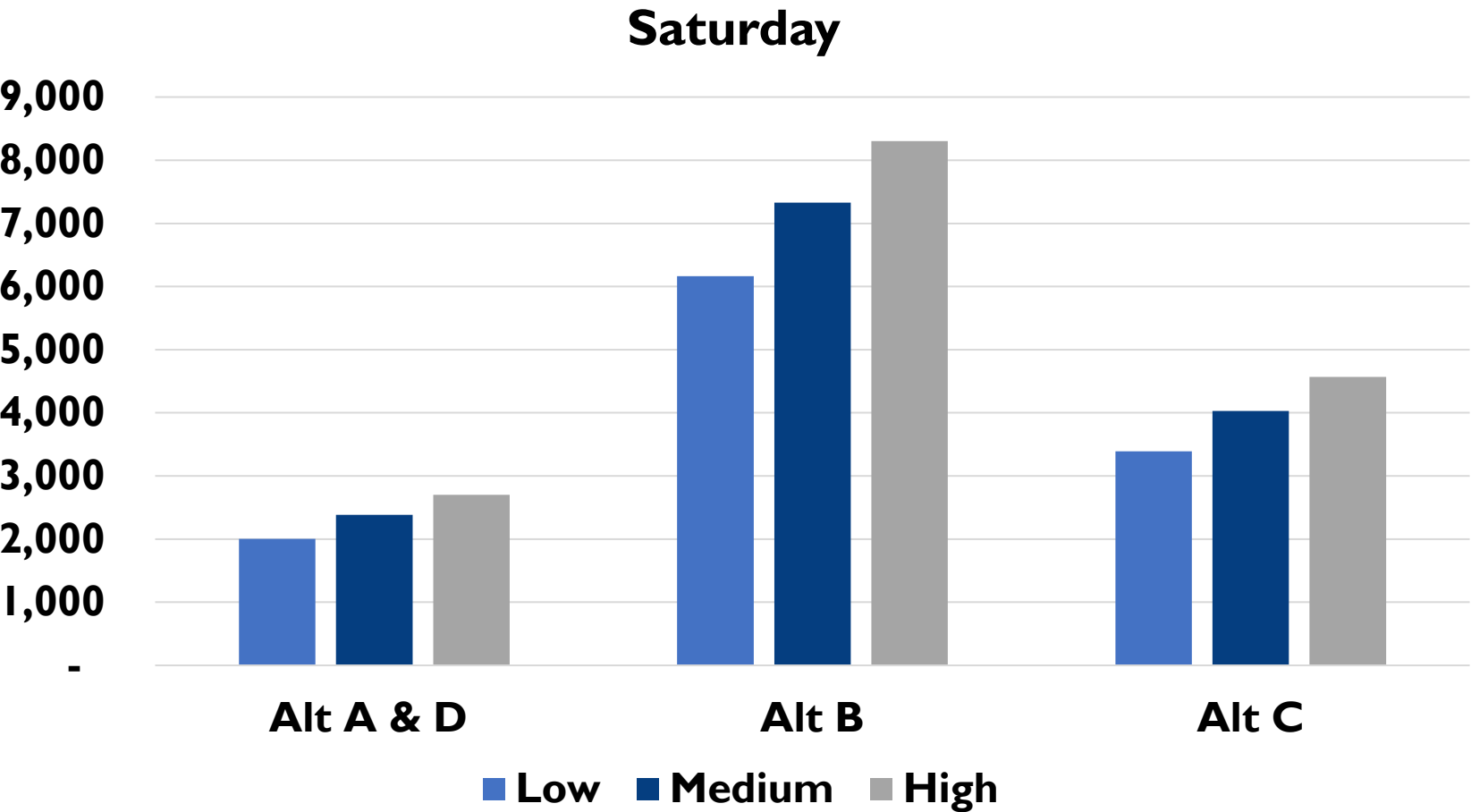


# 2030 Weekday Ridership Forecasts: Alt D vs No Build



# 2030 Average Saturday Ridership Forecasts

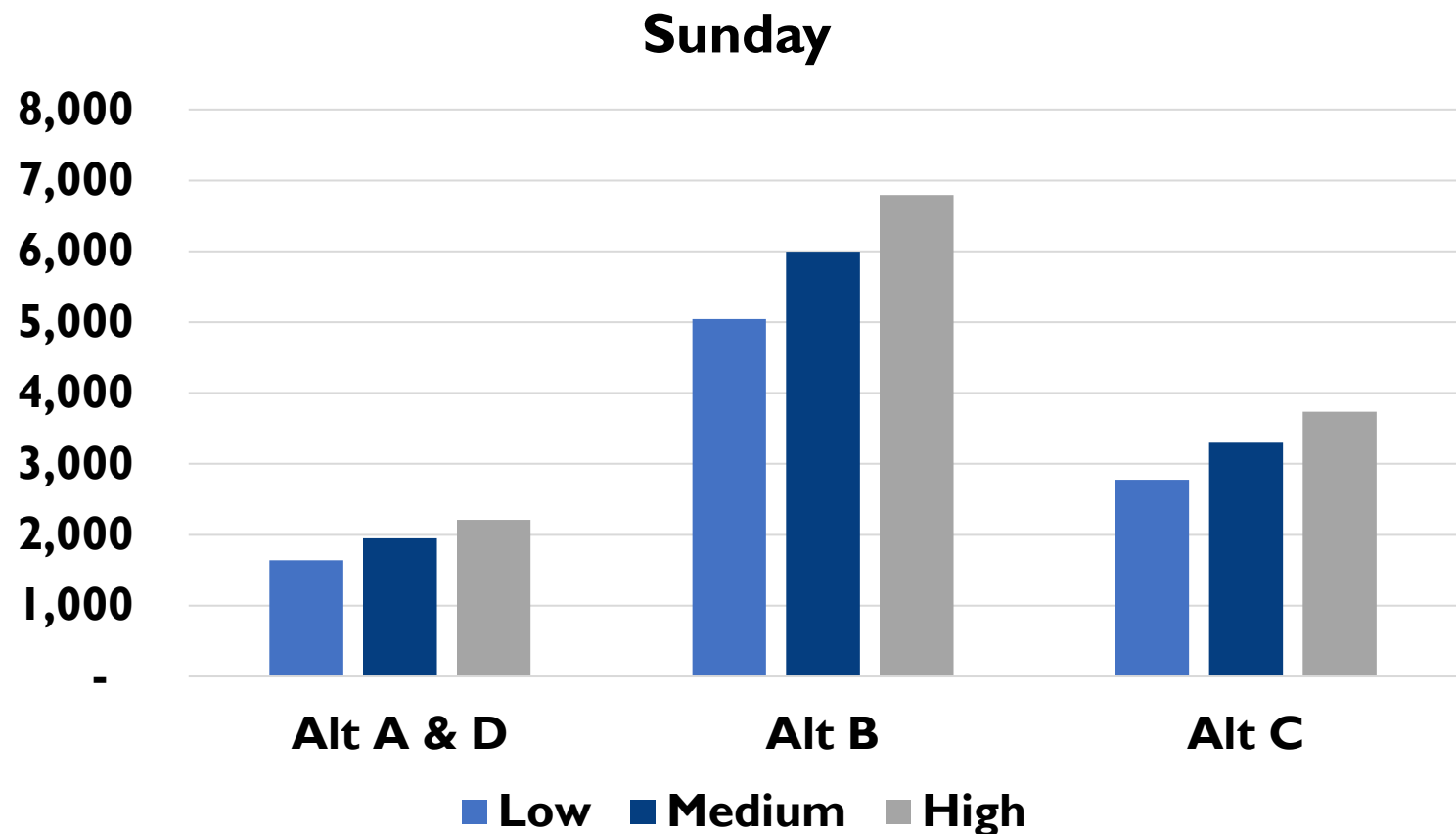
Average  
Saturday  
Boardings





# 2030 Average Sunday Ridership Forecasts

Average  
Sunday  
Boardings



# In Summary

- Telework assumptions have a significant impact on the ridership forecasts, forming a wide range of potential daily ridership projection for 2030
- Holding service to 2023 levels or even the TRV Baseline level will make returning to pre-pandemic ridership levels a challenge by 2030
- TRV Baseline would generate a considerable ridership increase over the no-build (approximately 20%)
- TRV Modified (A-D) Service scenarios would increase the weekday ridership marginally (1-2%) over TRV AND result in significant weekend ridership gains
- Adding express service (decreasing travel times) increases ridership
- Increased service frequency also increases ridership and convenience

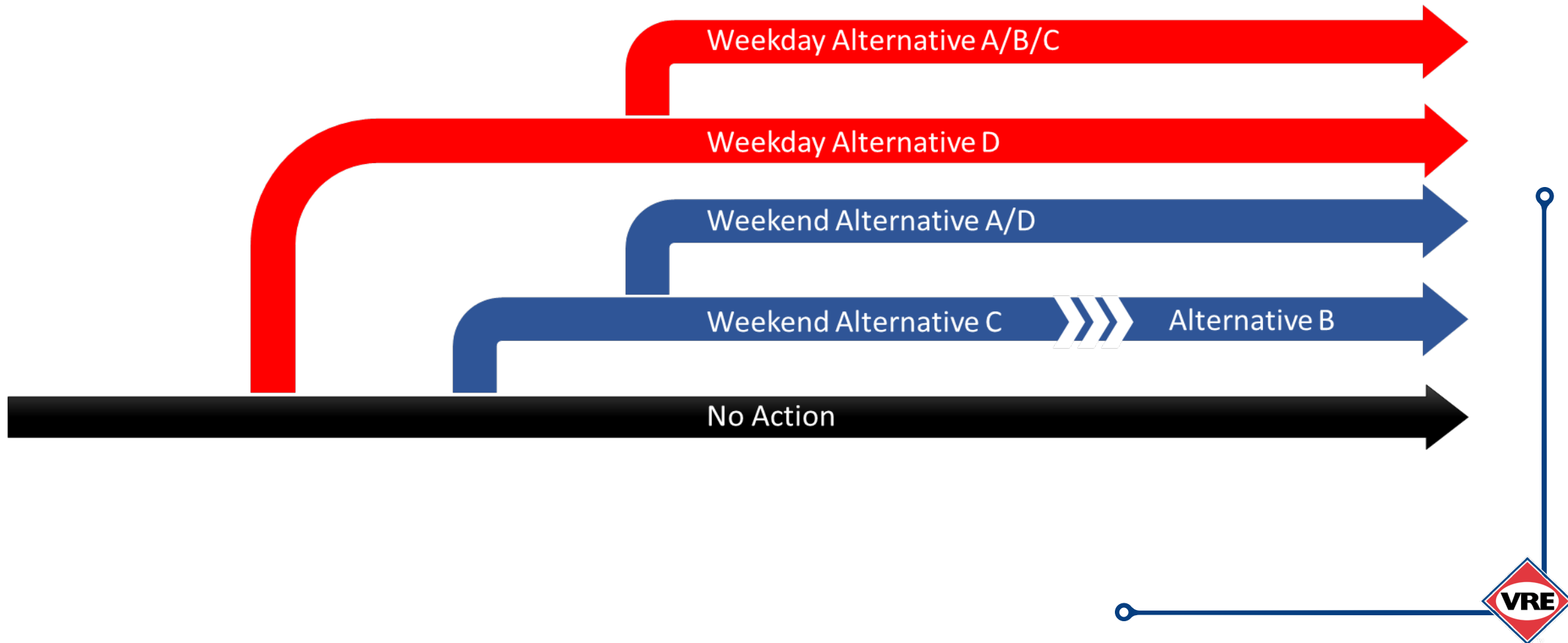


# DISCUSSION

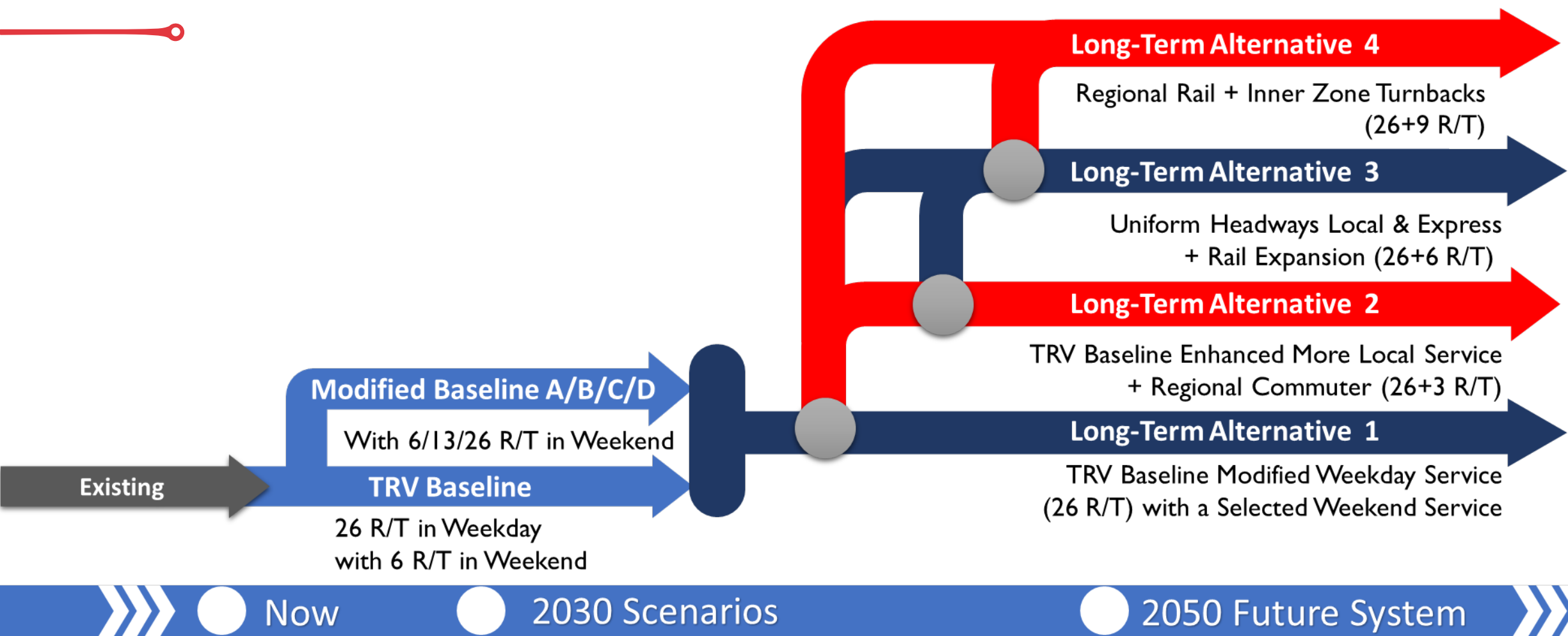
1. What opportunities does TRV create for VRE by 2030 or even before that?
2. What areas of flexibility should VRE retain as we plan for 2030?
3. How will service improvements in the near-term shape the future?
4. Which service alternative do you prefer?



# Looking Ahead to 2030



# Looking Ahead Beyond 2030





# Looking Ahead

- VRE's down payment in TRV creates an important opportunity and obligation for VRE to invest in impactful service for 2030
- Your recommendation for 2030 will inform how VRE staff shapes the 2050 long-term scenarios
- Public input on 2050 scenarios would be valuable at this stage

## Proposed Fall Board Work Session topics:

- Further detail (cost/funding, etc.) on 2030 recommended alternative
- Range of 2050 scenarios and implications
- Other key topics?



**THANK YOU FOR YOUR TIME,  
GUIDANCE, AND LEADERSHIP**

