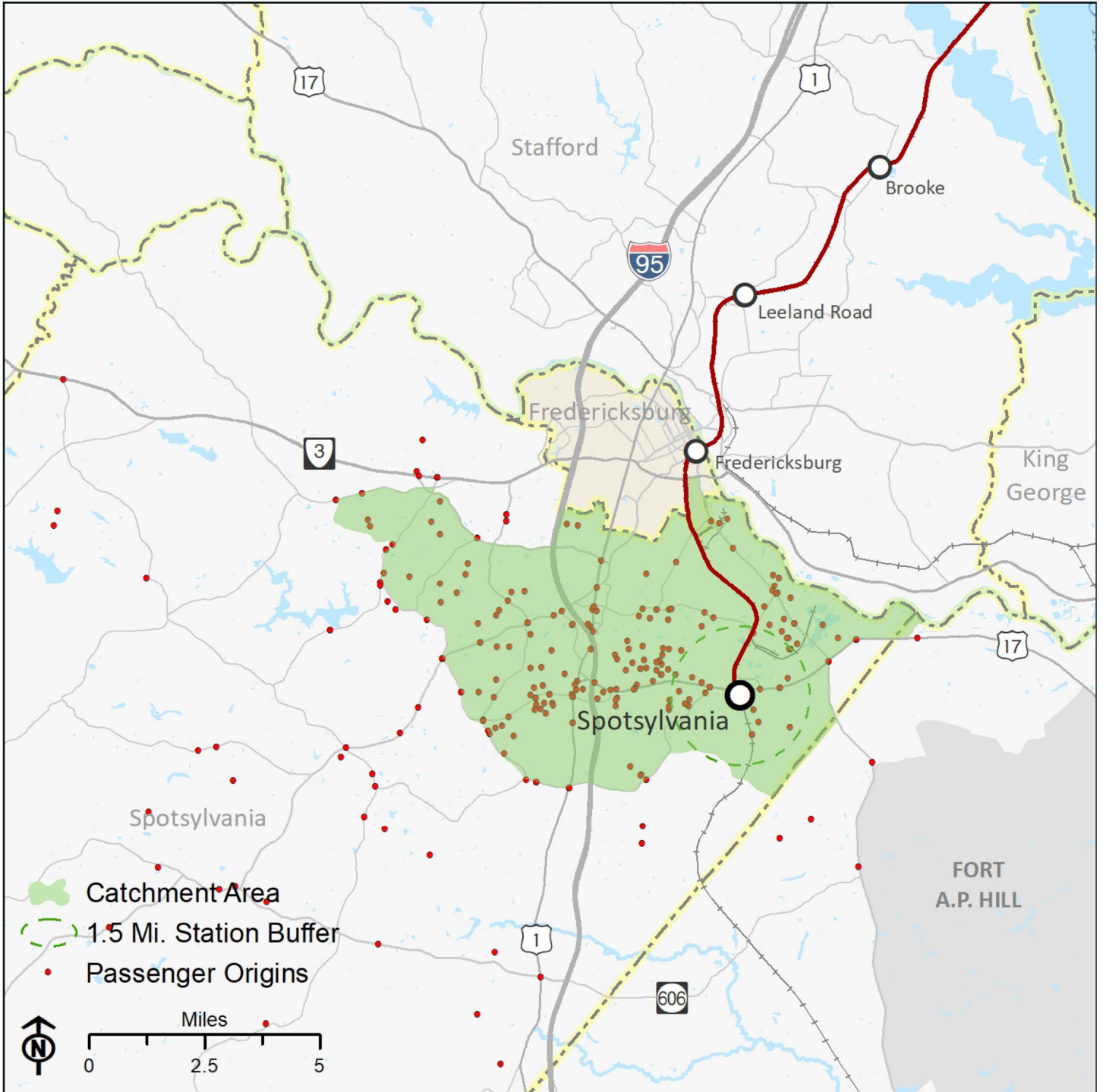




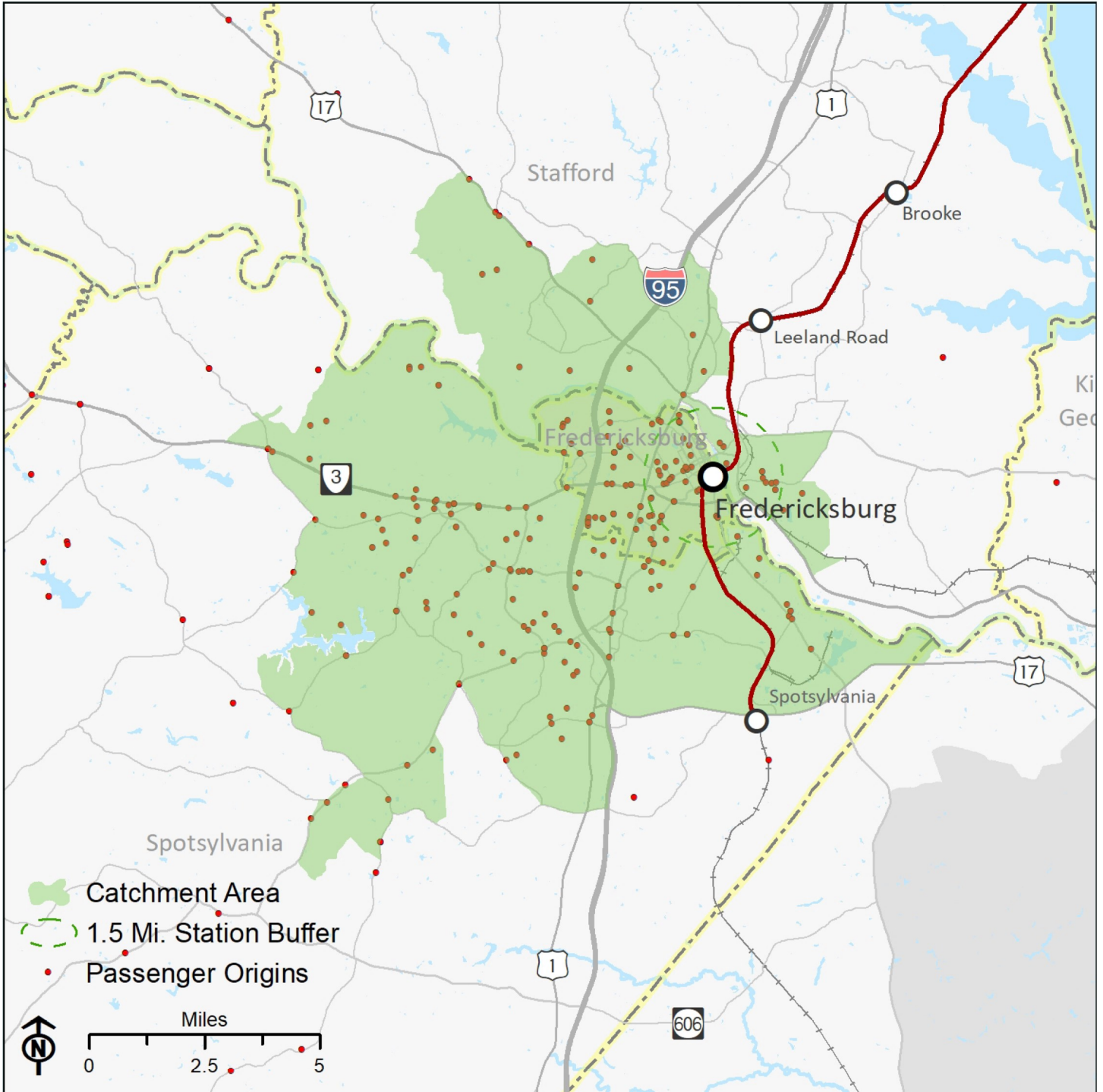
Appendix A:
Station Area Exhibits

Spotsylvania Station - Fredericksburg Line



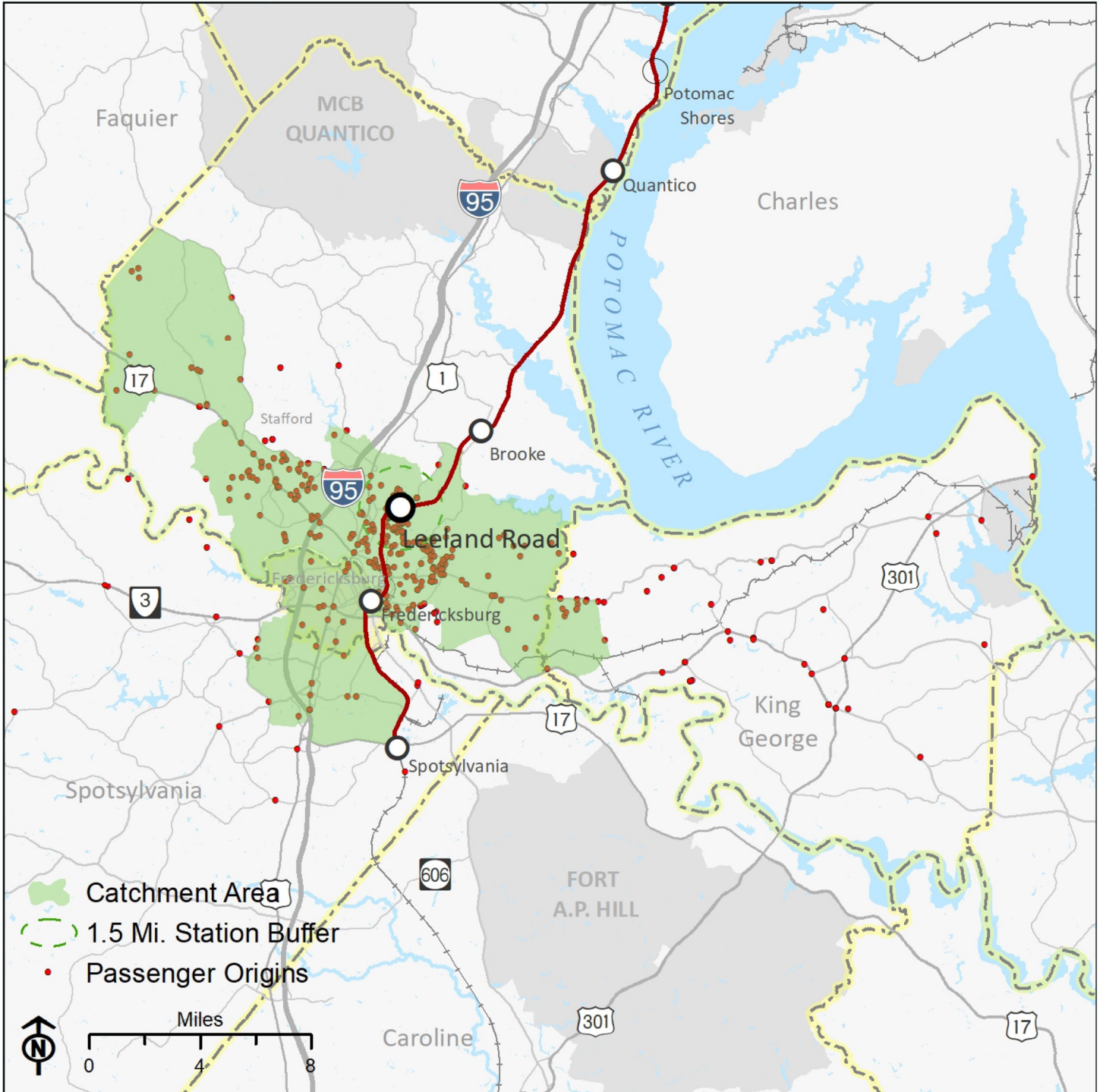
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	16,324	20,825	27.5%	5,097	5,578	9.3%	
Catchment Area	72,687	82,133	13.0%	27,198	29,807	9.6%	47.9

Fredericksburg Station - Fredericksburg Line



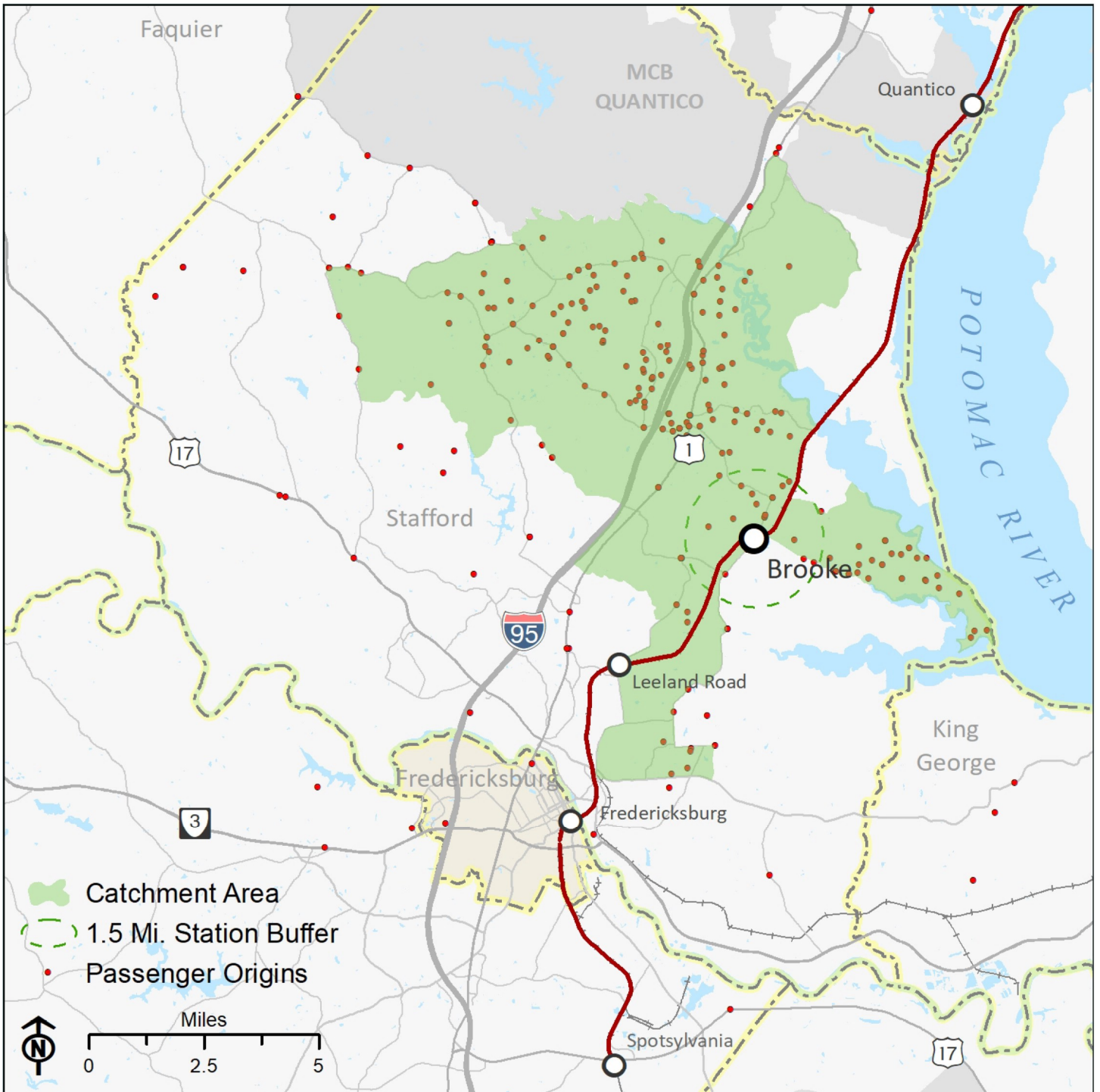
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	29,908	33,911	13.4%	29,233	34,688	18.7%	
Catchment Area	149,251	169,417	13.5%	93,687	107,050	14.3%	112.3

Leeland Road Station - Fredericksburg Line



Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	12,599	15,288	21.3%	3,272	4,347	32.9%	
Catchment Area	112,205	132,908	18.5%	77,176	89,549	16.0%	124

Brooke Station - Fredericksburg Line



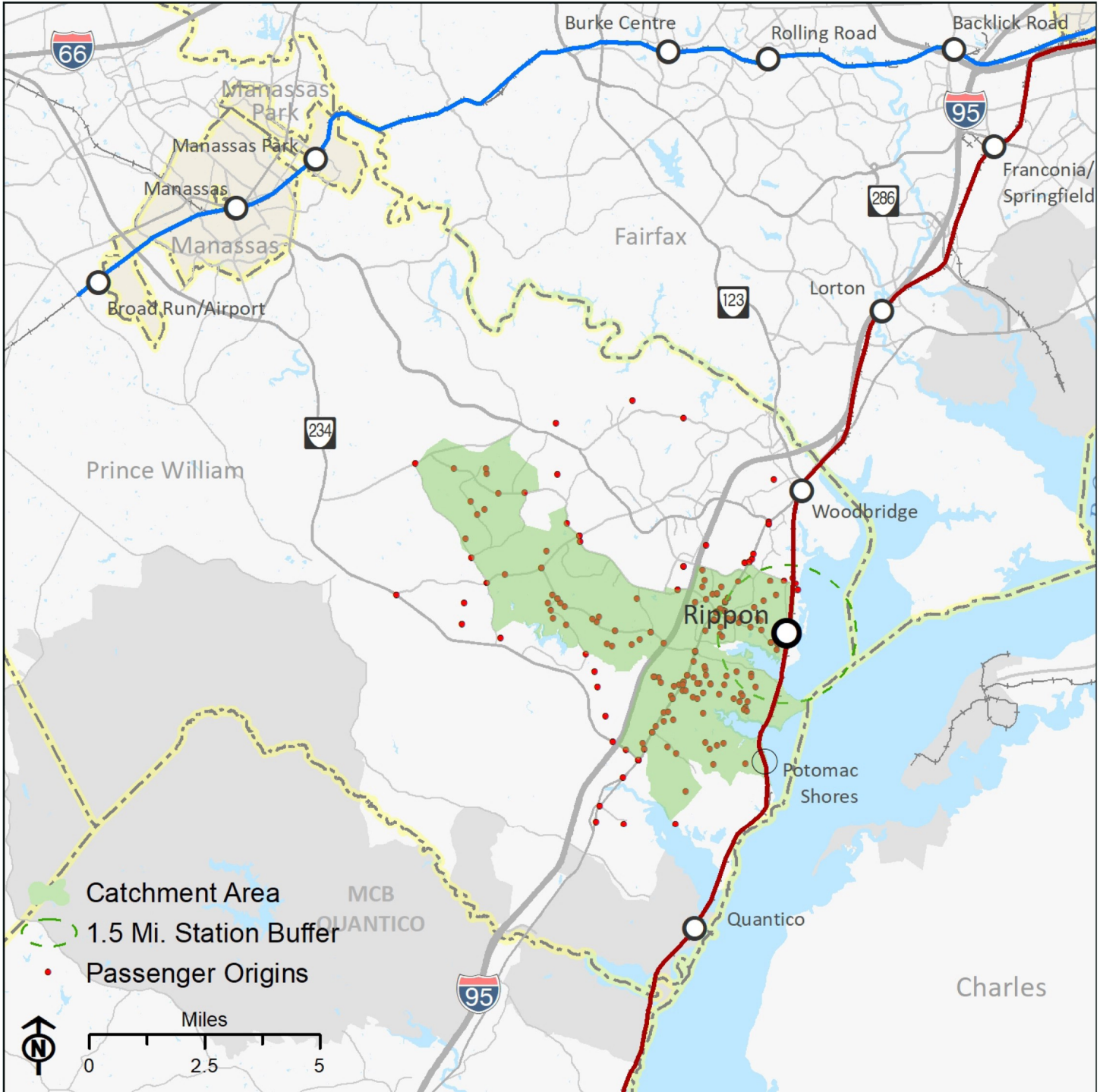
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	8,280	10,987	32.7%	3,377	3,857	14.2%	
Catchment Area	88,431	104,378	18.0%	22,005	25,649	16.6%	71.5

Quantico Station - Fredericksburg Line



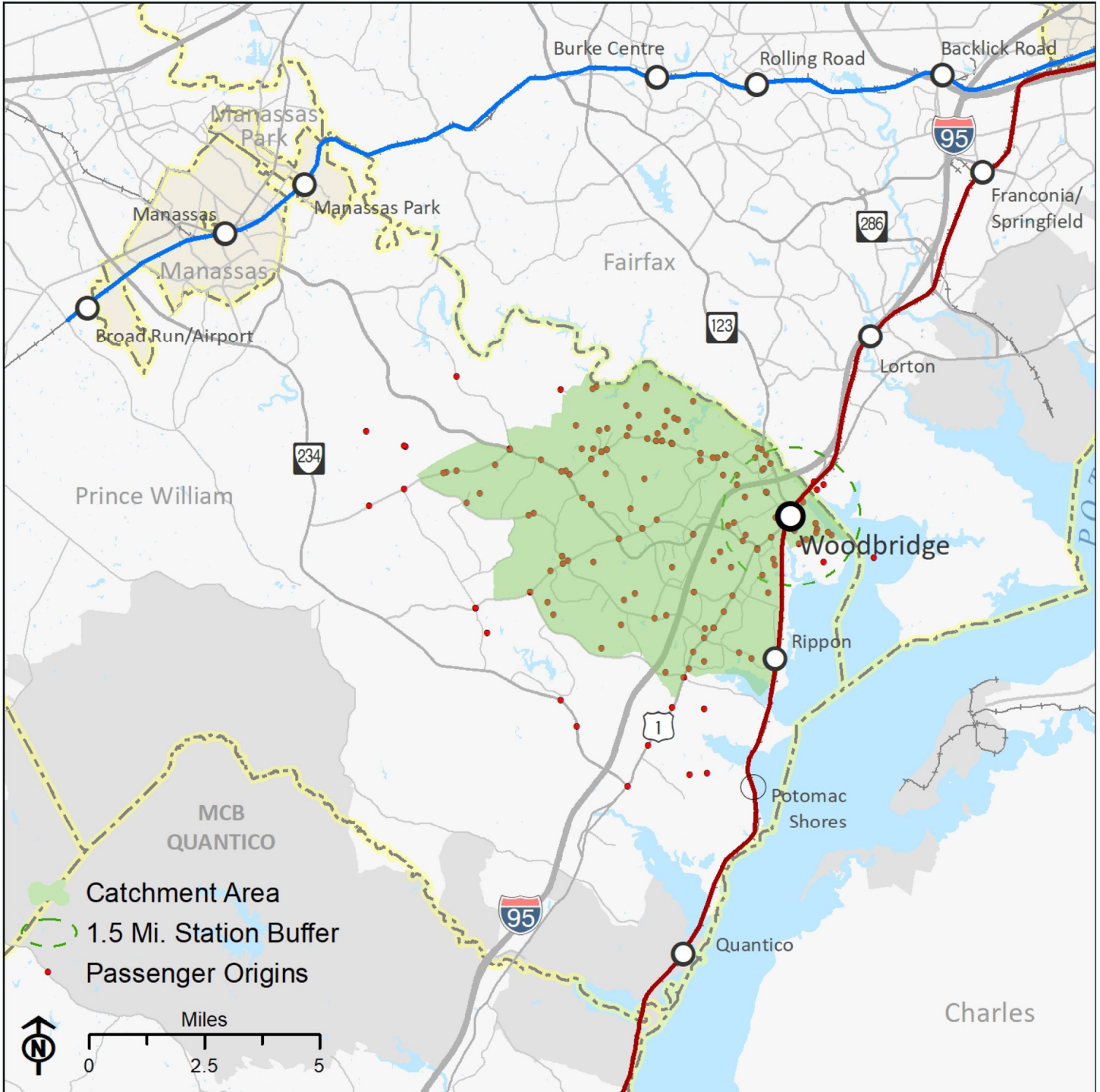
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	4,076	4,117	1.0%	15,642	17,952	14.8%	
Catchment Area	88,205	102,070	15.7%	20,109	23,096	14.9%	42.4

Rippon Station - Fredericksburg Line



Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	26,218	29,479	12.4%	3,902	3,982	2.1%	
Catchment Area	105,382	118,071	12.0%	15,166	17,321	14.2%	25.2

Woodbridge Station - Fredericksburg Line



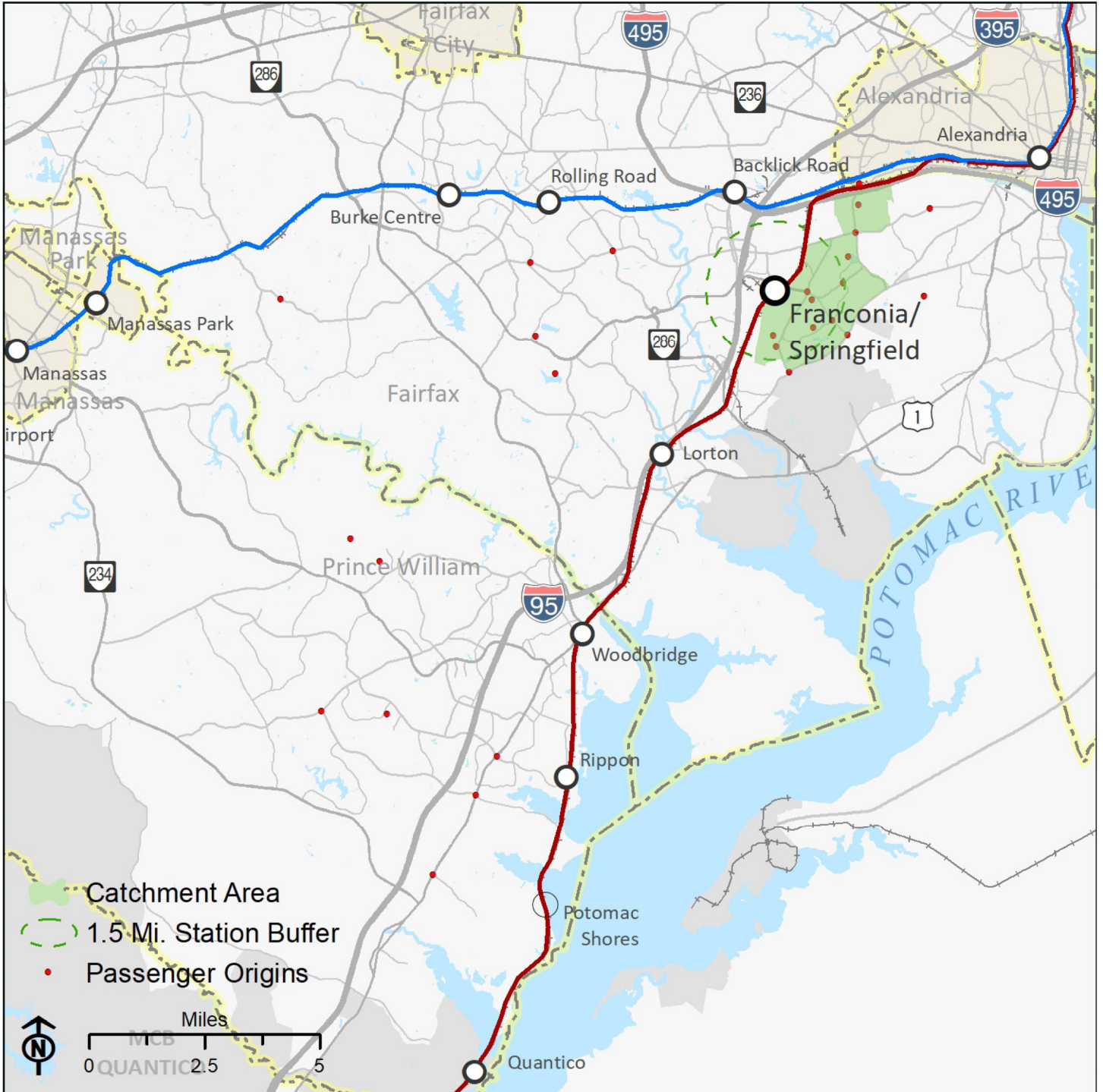
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	37,985	42,315	11.4%	11,537	12,557	8.8%	
Catchment Area	159,992	176,492	10.3%	48,728	53,111	9.0%	36.6

Lorton Station - Fredericksburg Line



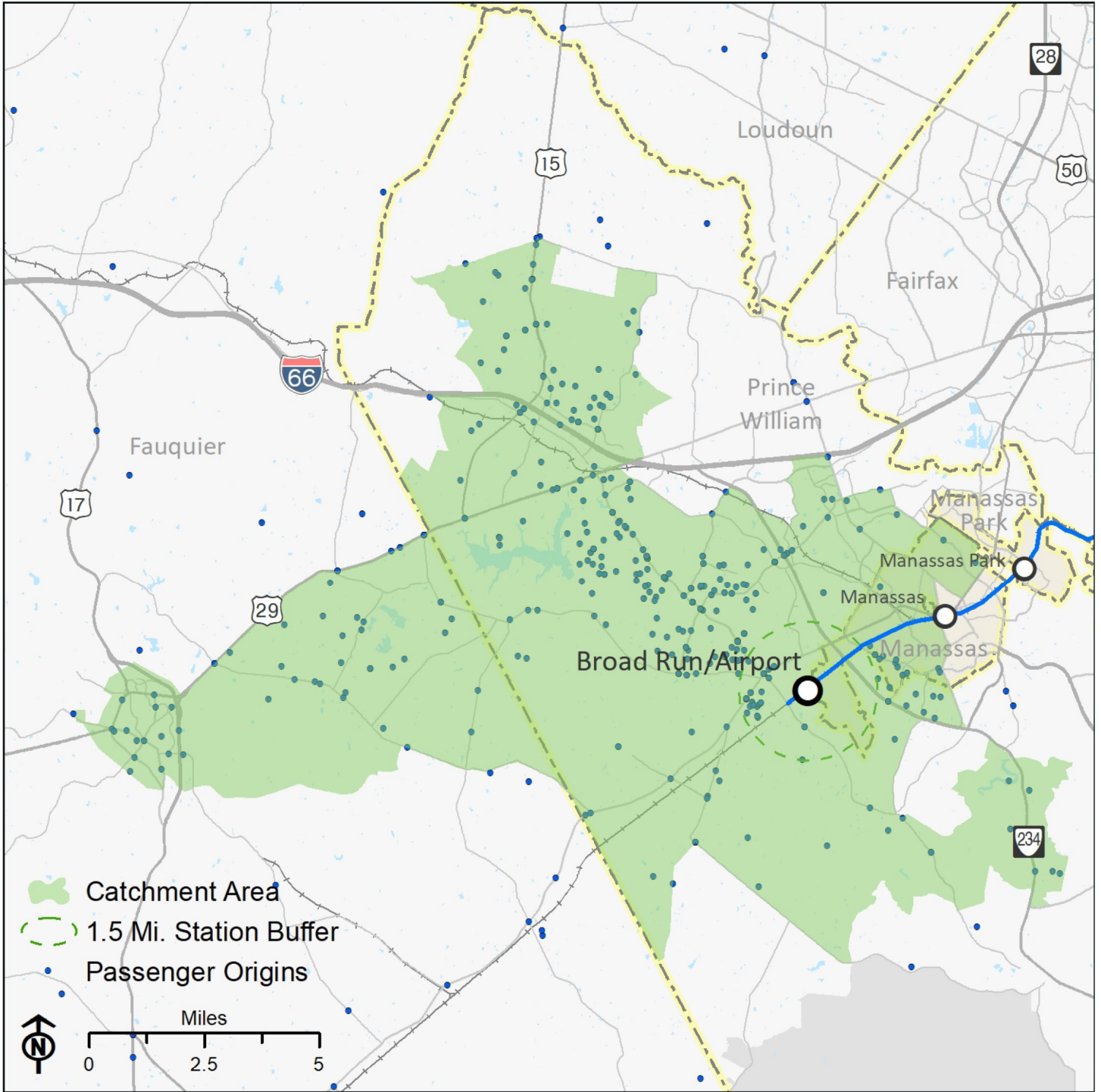
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	41,319	43,611	5.5%	17,819	20,169	13.2%	
Catchment Area	62,792	65,352	4.1%	10,797	12,043	11.5%	16.4

Franconia/Springfield Station - Fredericksburg Line



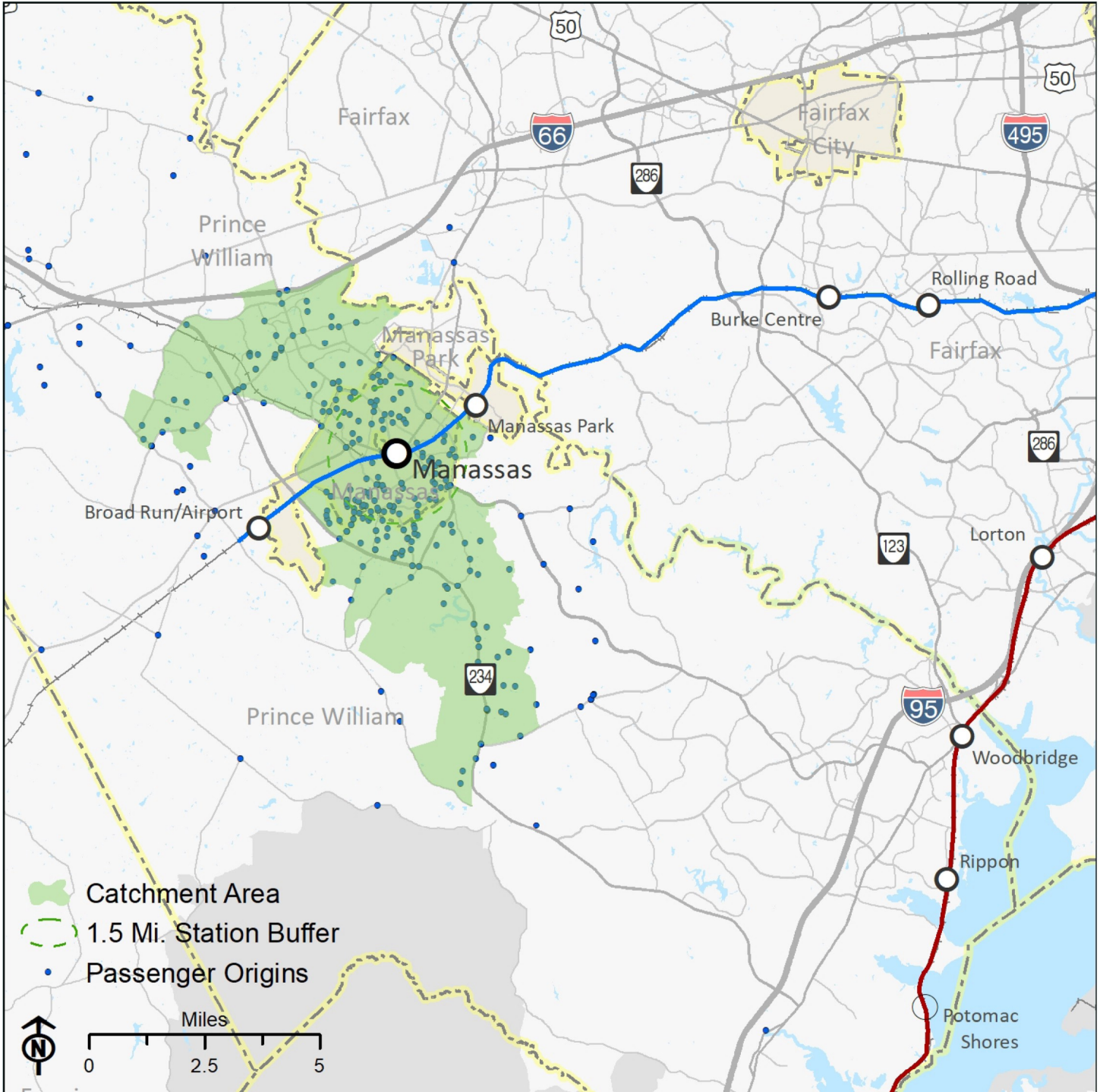
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	40,950	43,488	6.2%	33,020	43,109	30.6%	
Catchment Area	30,801	31,718	3.0%	11,486	12,617	9.8%	5.9

Broad Run Station - Manassas Line



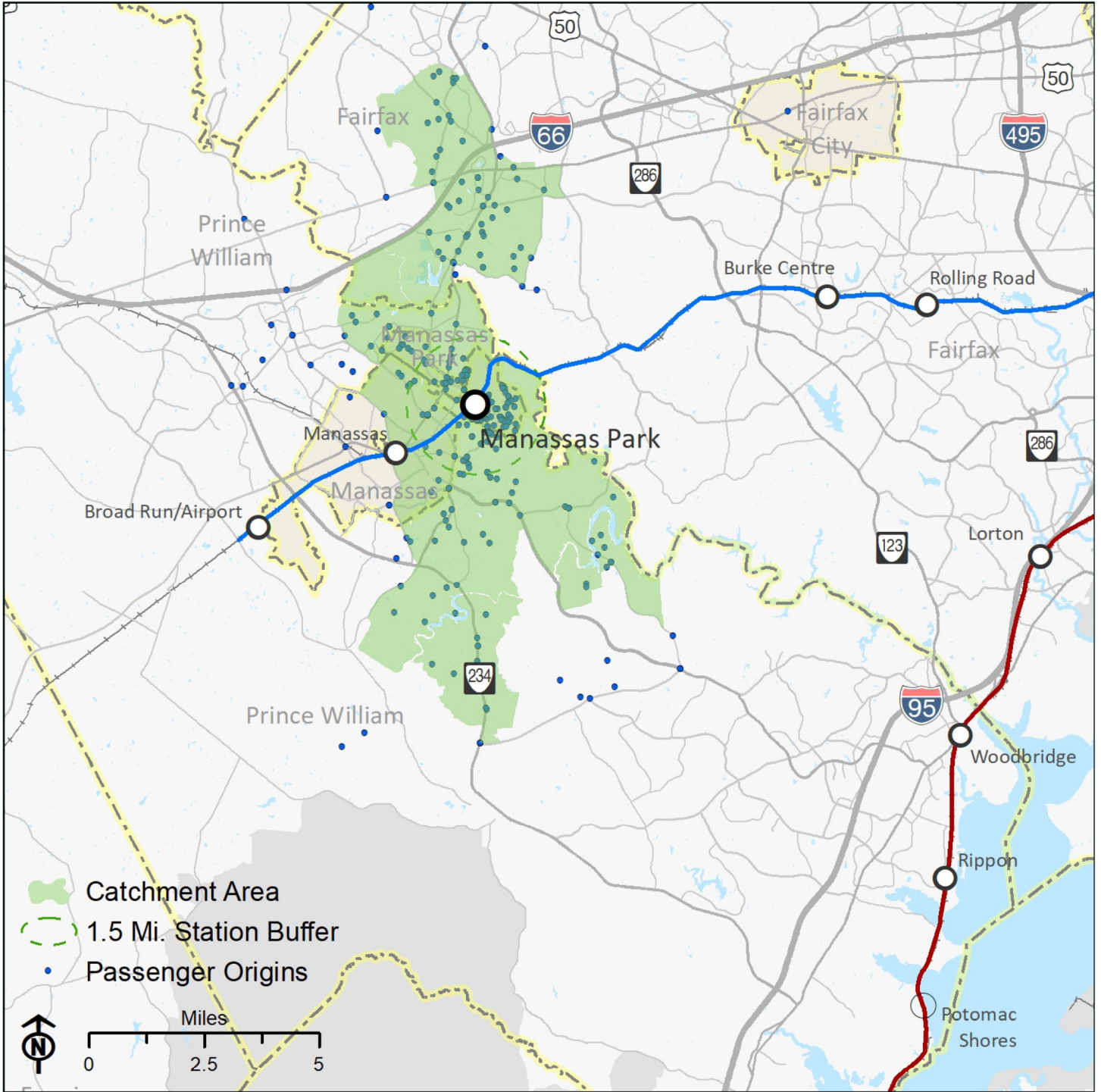
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	8,273	10,749	29.9%	9,457	15,620	65.2%	
Catchment Area	184,990	205,007	10.8%	91,257	112,594	23.4%	146.7

Manassas Station - Manassas Line



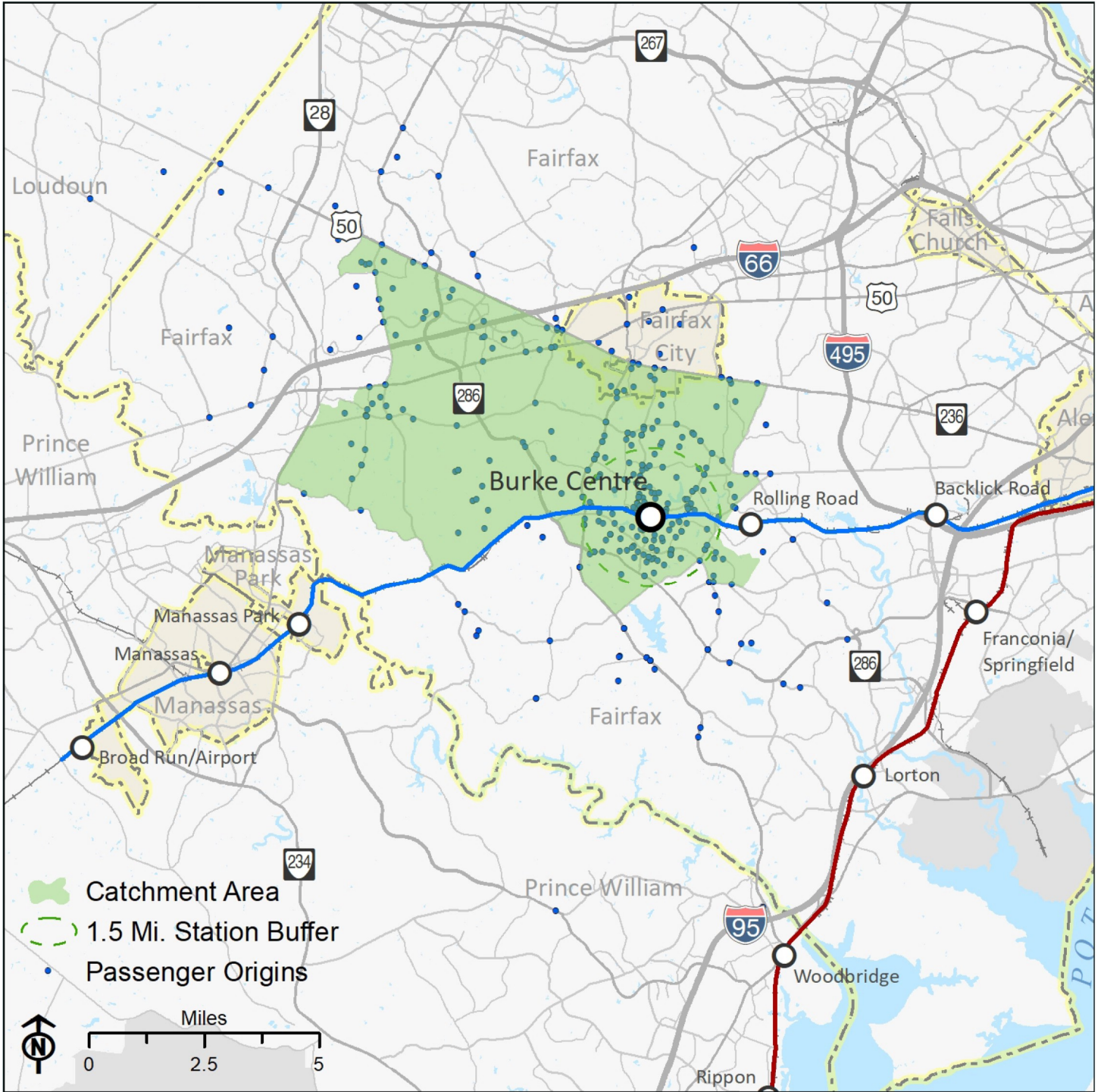
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	45,945	48,104	4.7%	27,360	28,904	5.6%	
Catchment Area	109,058	118,697	8.8%	53,575	61,408	14.6%	38.7

Manassas Park Station- Manassas Line



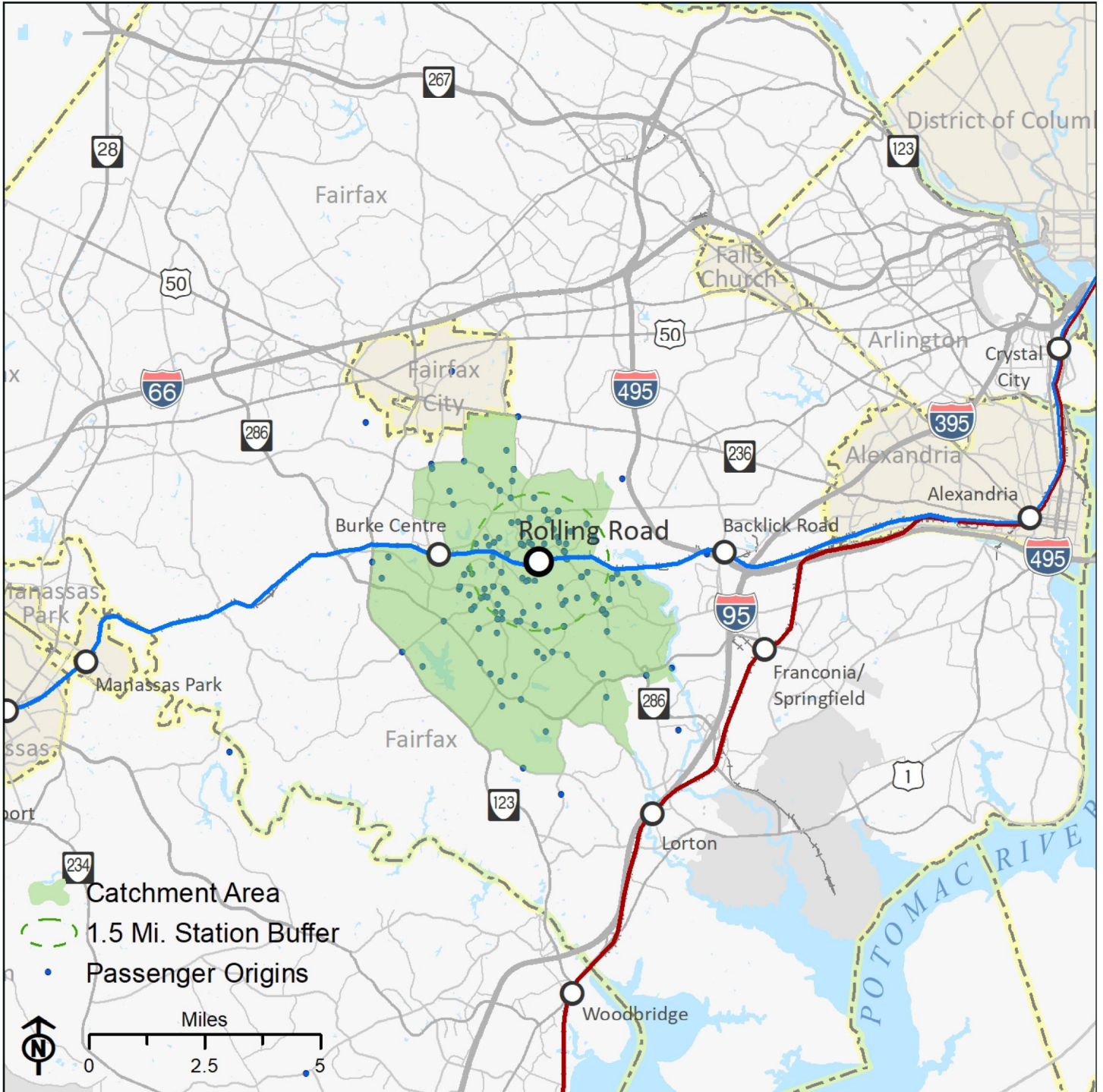
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	40,721	42,610	4.6%	16,612	17,448	5.0%	
Catchment Area	136,761	142,278	4.0%	32,889	34,379	4.5%	44.3

Burke Centre Station - Manassas Line



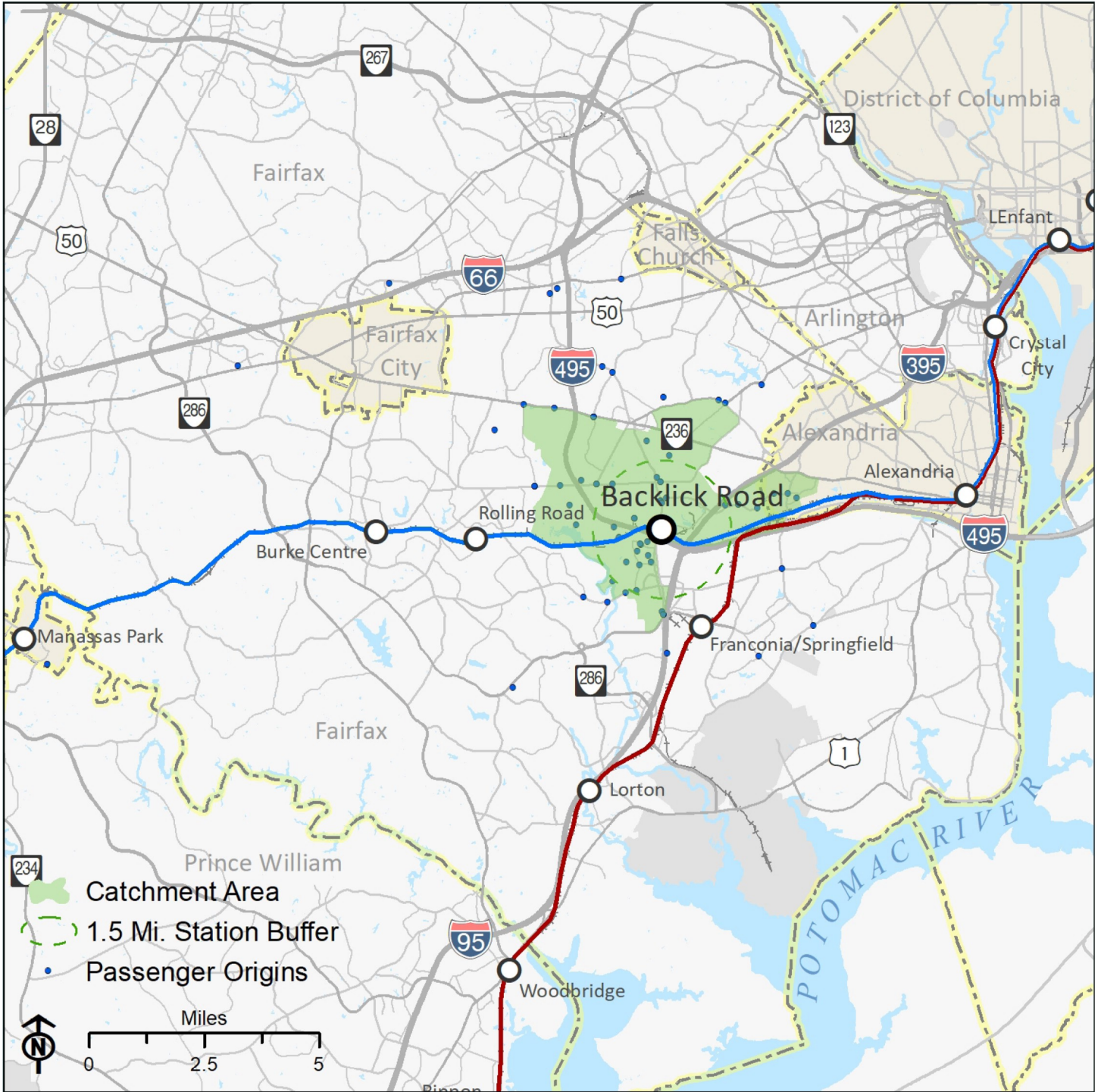
Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	47,352	47,728	0.8%	9,002	9,239	2.6%	
Catchment Area	156,566	158,991	1.5%	67,076	69,290	3.3%	44.8

Rolling Road Station - Manassas Line



Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	49,176	49,346	0.3%	10,209	10,436	2.2%	
Catchment Area	122,634	123,299	0.5%	18,506	18,822	1.7%	30.3

Backlick Road Station- Manassas Line



Station Areas	Population			Employment			Area (sq. mi)
	2017	2025	% change	2017	2025	% change	
1.5-mile Buffer	42,824	44,158	3.1%	24,832	25,641	3.3%	
Catchment Area	79,771	81,873	2.6%	37,667	38,519	2.3%	15.4



Appendix B:
Stakeholder Outreach



VIRGINIA RAILWAY EXPRESS FY2019-FY2025 TRANSIT DEVELOPMENT PLAN UPDATE

WORKSHOP #1

Wednesday, February 28, 2018

9:00am-12:00pm

National School Boards Association

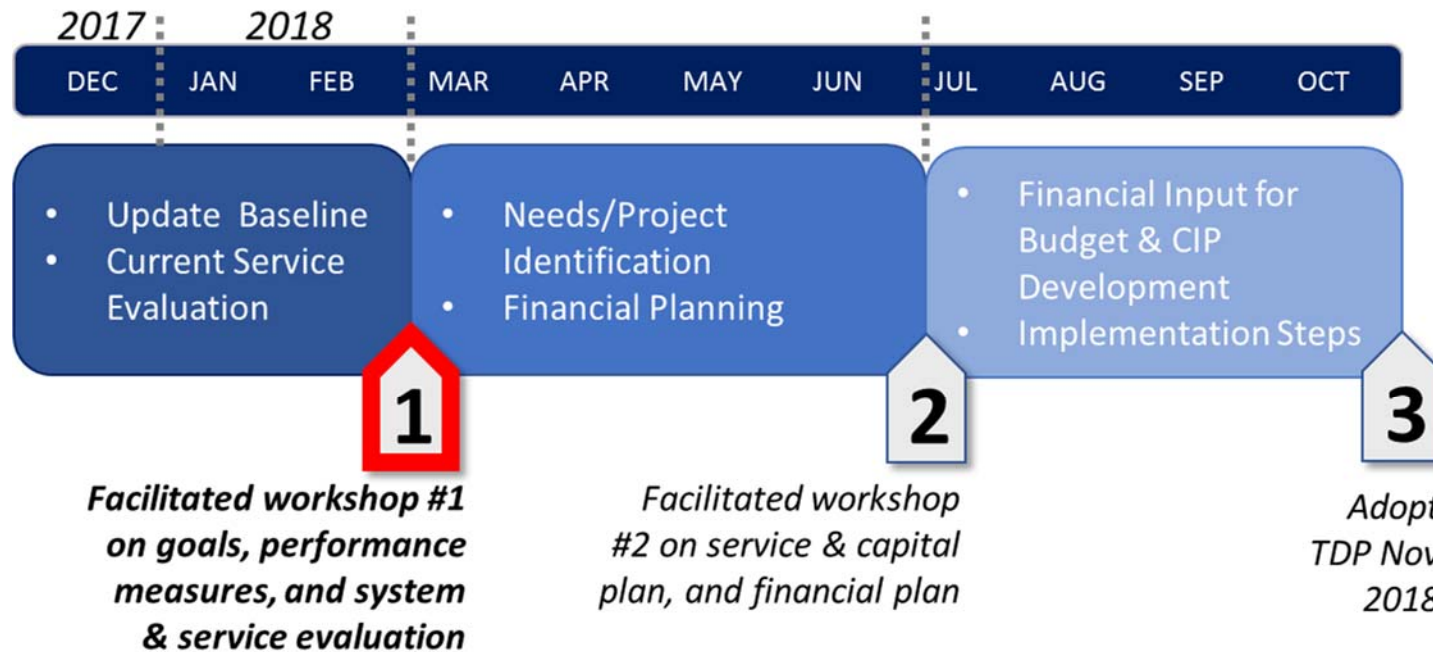
1680 Duke Street, Alexandria, VA 22314

Meeting Agenda

AGENDA ITEM
1) Arrival of guests/light refreshments
2) Safety briefing and introductions
3) Presentation <ul style="list-style-type: none">• The TDP Process• VRE Background• Initial Findings• Proposed Goals and Objectives
15 MINUTE BREAK
4) Facilitated session #1 on VRE's message
5) Facilitated session #2 on alignment of stakeholder needs with VRE goals and objectives
6) Report out
7) Next steps and wrap up



TRANSIT DEVELOPMENT PLAN UPDATE FOR VRE PROCESS, MILESTONES AND OUTCOMES





VIRGINIA RAILWAY EXPRESS FY2020-FY2025 TRANSIT DEVELOPMENT PLAN UPDATE

Date: 2/28/2018 Venue: TDP WORKSHOP # 1

NAME	TITLE	EMAIL
Bright Anderson	GW Ride Connect	anderson@gwregion.org
Bob Libbraudt	PWC	rlibraudt@pwgov.org
Bill Martin	VHB	willmartin@vha.com
DAVID McGETTIGAN	PWC PLANNING	dmcgettigan@pwgov.org
Nancy SELLECK	DRPT	nancy.selleck@drpt.virginia.gov
Steve Sindriog	Transit Capital Program Mgr	steve.sindriog@alexandriava.gov
Hyle Nembhard	MDOT MTA	knembhard@mta.maryland.gov
Sree Nampoothiri	Transportation Planner NVCA	sree.nampoothiri@thenvrauthority.org
Pierre Holloman	Analyst	p.holloman@california.gov
Chuck Steigerwald	PRTC	csteigerwald@omavide.com
Peggy Tadej	NVRC	peggy.tadej@noravirginia.org



VIRGINIA RAILWAY EXPRESS FY2020-FY2025 TRANSIT DEVELOPMENT PLAN UPDATE

Date: 2/28/2018 Venue: TDP WORKSHOP #1

NAME	TITLE	EMAIL
Andrew Dhuyvetter	NVTC	andrew.dhuyvetter@noratransit.org
Chloe Delhomme	City of Manassas	cdelhomme@manassasva.gov
Craig Reed	Fredericksburg Transit	creed@fredericksburgva.gov
MIKE LAKE	FAIRFAX COUNTY DOT	MICHAEL.LAKE@FAIRFAXCOUNTY.GOV
AMRITA HILL	AMTRAK	HILLA@AMTRAK.COM
Clara Williams	DRPT	Clara.Williams@drpt.virginia.gov
Eric Randall	MUWCOG	erandall@muwco.org
Doug Morgan	TP Planner	DM Dmorgan@Spotsylvania.VA.US
Rich Dalton	VRE	rdalton@vre.org
Rohin McElkenny	Metro	rmcelkennysmith@wmcta.com
TRICKET	VRE	TRICKET@VRE.ORG
Joey Hess	Stafford County	jhess@staffordcountyva.gov
Zachary Krohmal	Fairfax County DOT	zachary.krohmal@fairfaxcounty.gov

VIRGINIA RAILWAY EXPRESS

FY2019 - FY2025 TRANSIT DEVELOPMENT PLAN

Workshop #1
February 28, 2018



A BETTER WAY. A BETTER LIFE.

AGENDA FOR TODAY

SAFETY BRIEFING INTRODUCTIONS

PRESENTATIONS

- The TDP Process
- VRE Background
- Initial Findings
- Proposed Goals & Objectives

BREAKOUT SESSIONS

- VRE's Message
- Alignment of Needs



A BETTER WAY. A BETTER LIFE.

WHAT IS A TDP MAJOR UPDATE ?

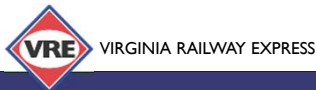


Internal perspective

- An actionable VRE resource
- Strategic plan that coordinates actions and initiatives

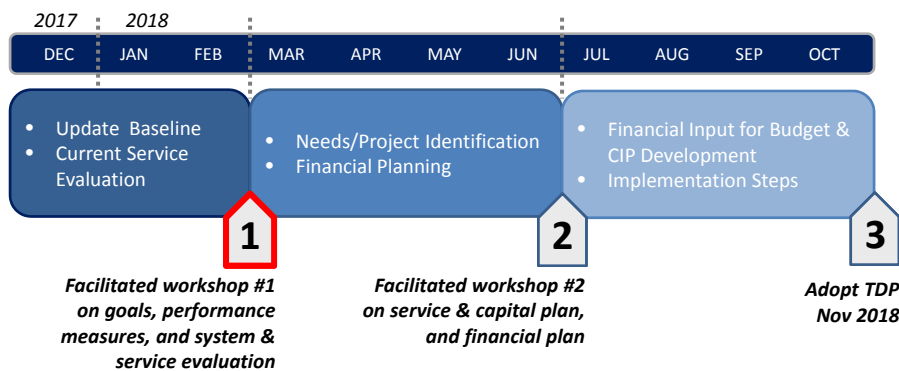
External perspective

A document for all Commonwealth transit agencies to **identify needs, service changes, required funding, and local priorities** to meet near and long term opportunities/challenges.



3

PROCESS, MILESTONES AND OUTCOMES



4

THE TDP PROCESS

VRE BACKGROUND

INITIAL FINDINGS

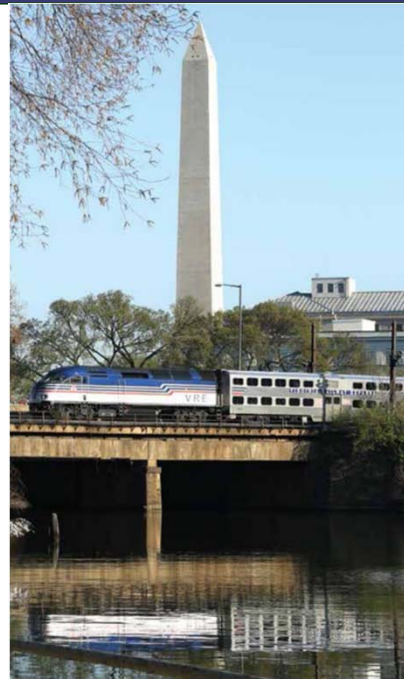
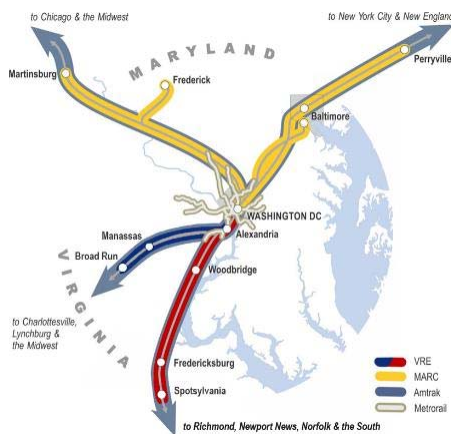
PROPOSED GOALS & OBJECTIVES



A BETTER WAY. A BETTER LIFE.

VRE ROLE

A key link in regional mobility centered around Washington DC



VRE SYSTEM FACTS

Joint project of two
Transportation Commissions



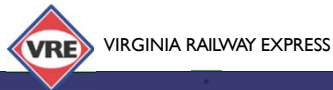
9 member jurisdictions

3 host railroads

Two lines, 90 route-miles

4.7 million annual riders between
Virginia and DC (19,000 daily trips)

Metro connections at five VRE
stations



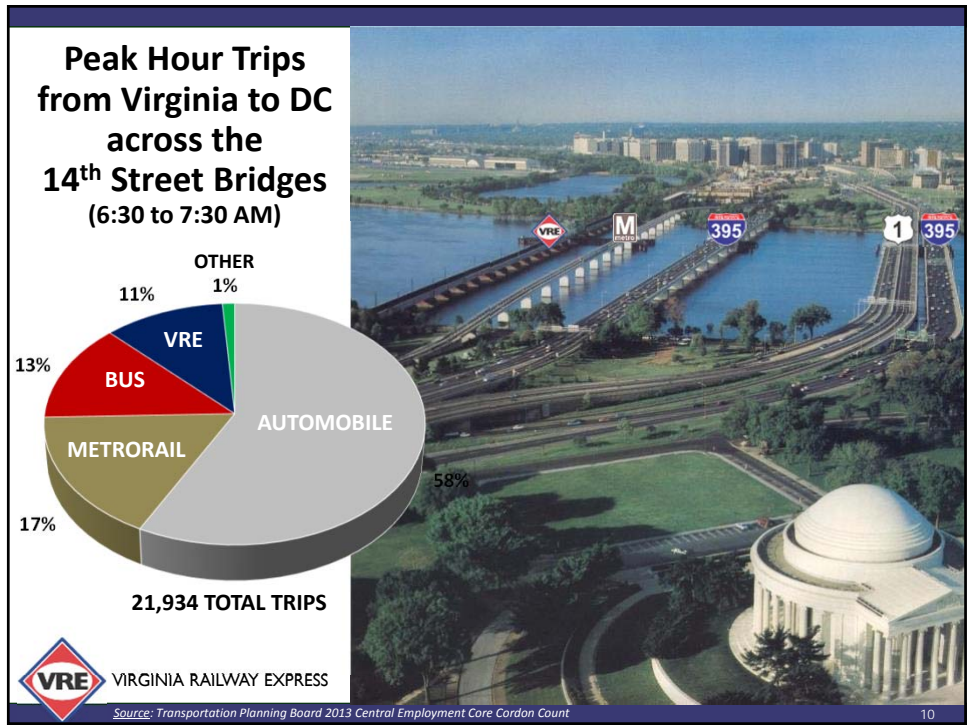
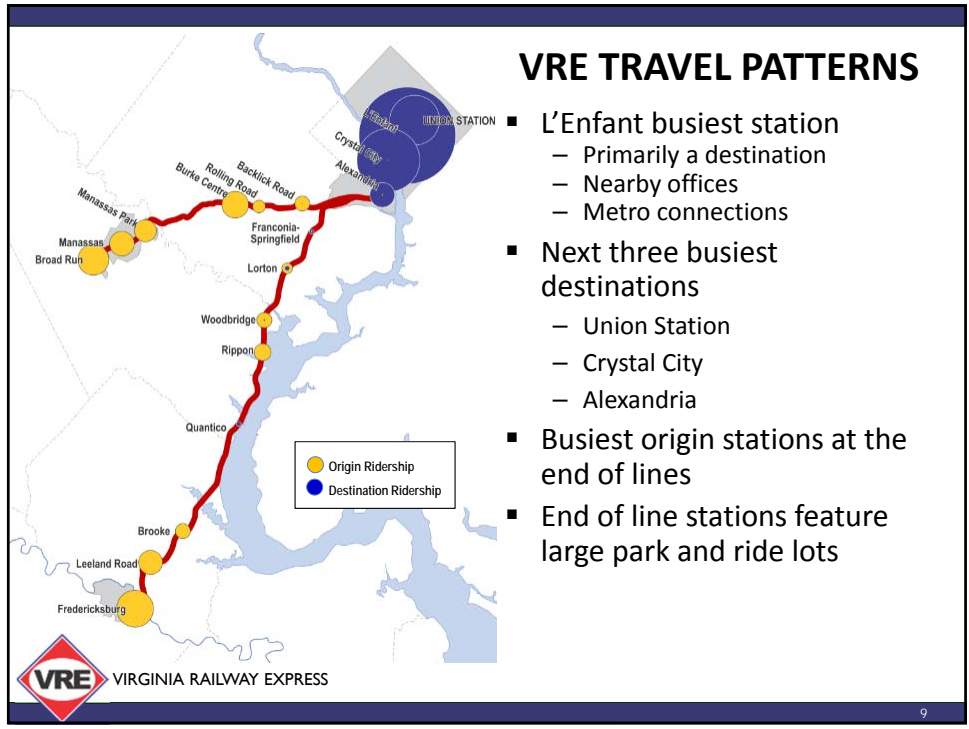
7

REGIONAL COLLABORATION

- WMATA Metrorail
 - Expands the reach of VRE
 - Used by 17% of VRE riders
- Amtrak Virginia Trains
 - Step-Up fares available
 - Faster ride option for longer trips
- Other Transit Services
 - Fare integration (local bus, MARC)
 - Exploring opportunities for through running (MARC)

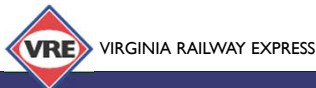
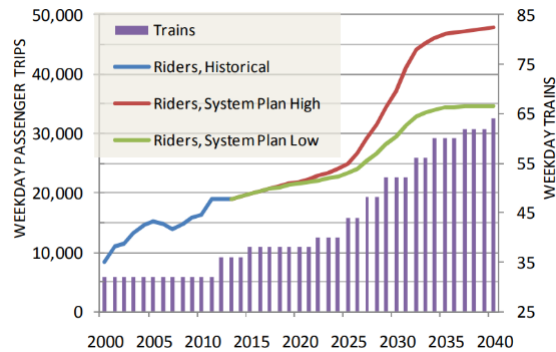


8



VRE SYSTEM PLAN 2040 (2014)

- Without action, VRE capacity growth capped below market demand.
- Full rider potential reached through additional trains and supporting infrastructure.
- Investments to expand trains beyond limits of existing host railroad agreements.



11

SYSTEM PLAN PHASES



PHASE 1: Run Longer Trains

- Longer & second platforms
- More station parking
- More railcars
- More train storage tracks

PHASE 2 & 3: Run More Trains

Earn additional "train slots" through capacity improvements

- Additional tracks
- Long Bridge expansion
- Parking, railcars, yards
- Broad Run Expansion
was Gainesville-Haymarket Extension



12

THE TDP PROCESS
VRE BACKGROUND

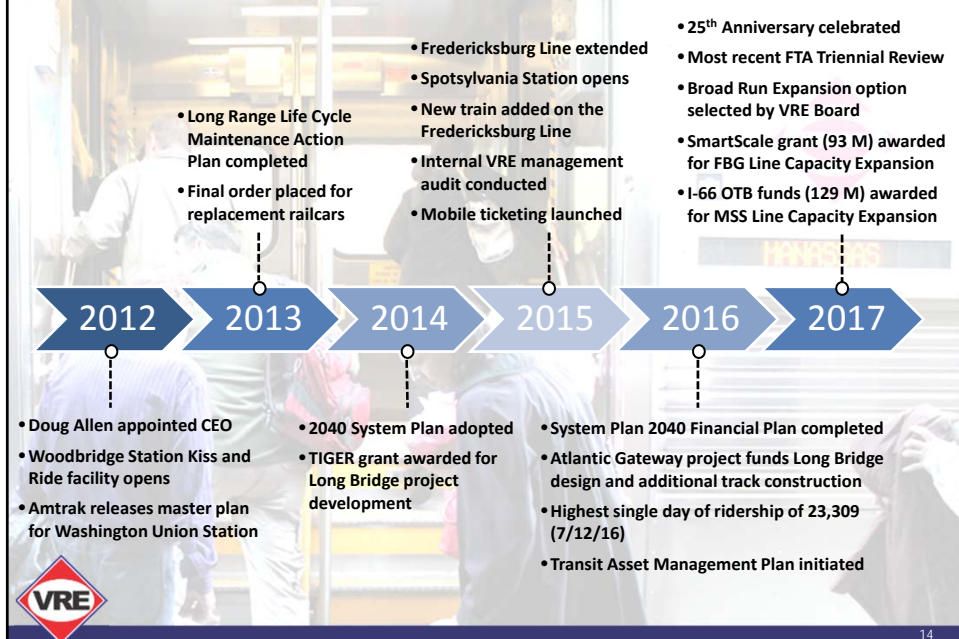
INITIAL FINDINGS

PROPOSED GOALS & OBJECTIVES



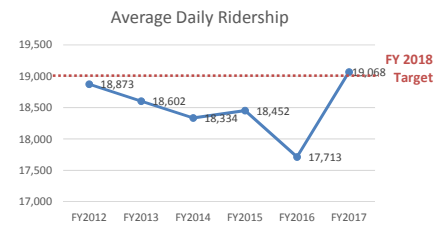
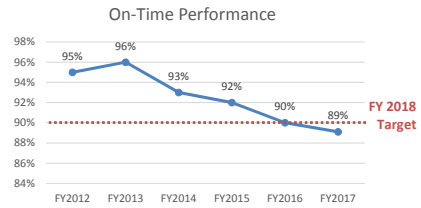
A BETTER WAY. A BETTER LIFE.

SINCE THE LAST MAJOR TDP UPDATE ...





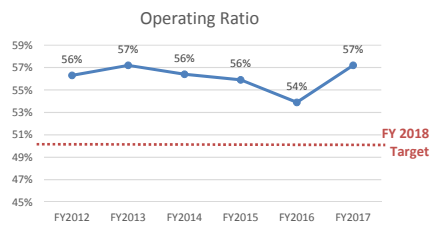
PERFORMANCE TRENDS SERVICE DELIVERY



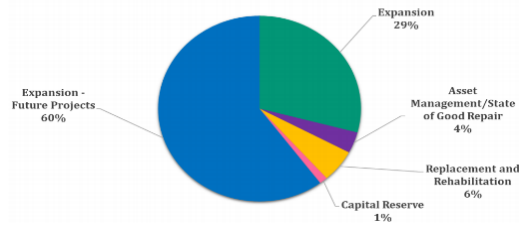
15



PERFORMANCE TRENDS FINANCIAL



FY 2019 - FY 2024 \$2.3B
CIP FUNDING NEEDS BY PROJECT TYPE



16

CUSTOMER SURVEY TRENDS (2012-2017)

STATION ACCESS

- Drive Alone access to VRE stations: **84%**
 - 2% **increase** since 2012
 - 1.3% **increase** from 2016
- Transit/bike/walk access to VRE stations: **6%**
 - Transit share **decreased** 0.5% since 2012 (0.7% overall)
 - Bike walk **increased** 0.8% since 2012 (5.1% overall)

EMPLOYERS OF RIDERS

- Federal government/military ridership: **75%**
 - 5% **increase** since 2012
- Private company: **15%**
 - 6.6% **decrease** since 2012



VIRGINIA RAILWAY EXPRESS

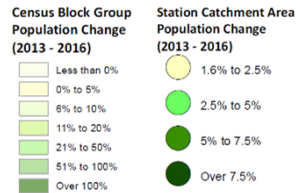
Source: May 2017 VRE Customer Survey

17

MARKET CHANGES

POPULATION

- Changes since last TDP (2013-2016)
- Population growth accelerating at outlying stations



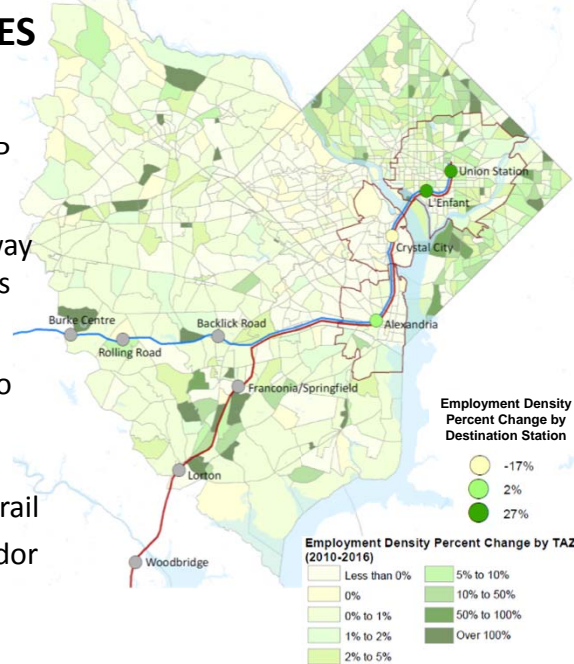
VIRGINIA RAILWAY EXPRESS

18

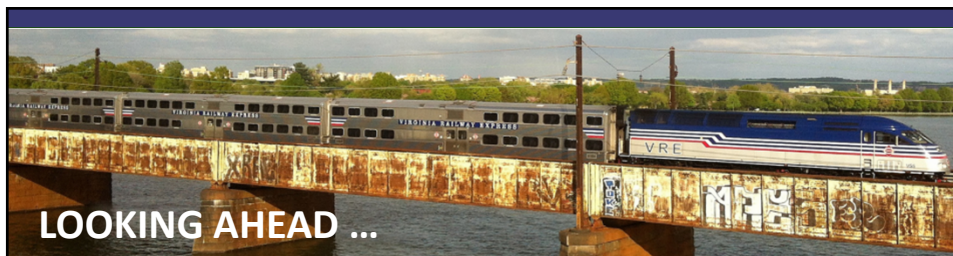
MARKET CHANGES

EMPLOYMENT

- Changes since last TDP (2013-2016)
- Employment shifts away from core VRE stations
 - Crystal City
- Effectiveness of VRE to serve new growth concentrations
 - Eisenhower Metrorail
 - F/S to Lorton corridor



VIRGINIA RAILWAY EXPRESS



CHALLENGES

- Demographic shifts in age & location
- Changing work patterns & locations
- Expanded transportation options within VRE service area
- Declining transit ridership

OPPORTUNITIES

- Use of new technology to enhance customer safety & convenience
- Funded capacity improvements that enable service expansion & improve reliability
- Better intermodal connections at stations

FUNDING

- Uncertainty in traditional revenue sources/amounts
- Changing project locations & sources

VISION

- Transition from commuter rail to regional rail



VIRGINIA RAILWAY EXPRESS

THE TDP PROCESS
VRE BACKGROUND
INITIAL FINDINGS

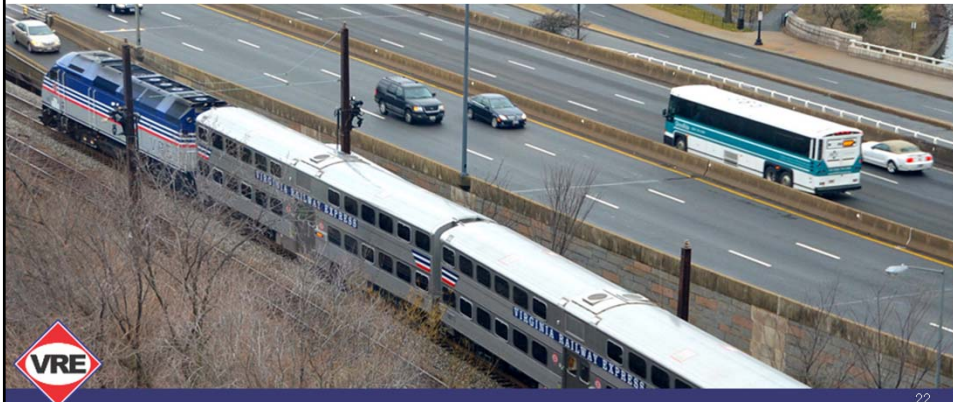
PROPOSED GOALS & OBJECTIVES



A BETTER WAY. A BETTER LIFE.

MISSION STATEMENT

“The Virginia Railway Express (VRE), a joint project of the Northern Virginia Transportation Commission and the Potomac and Rappahannock Transportation Commission, will provide safe, cost effective, accessible, reliable, convenient, and comfortable commuter-oriented rail passenger service. VRE will contribute to the economic development of its member jurisdictions as an integral part of a balanced, intermodal regional transportation system.”



22

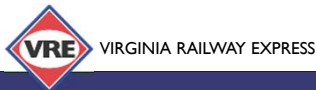
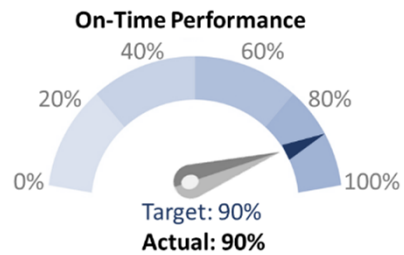
PURPOSE

Comprehensive Goals:

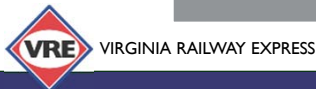
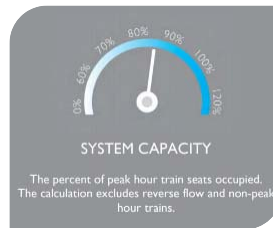
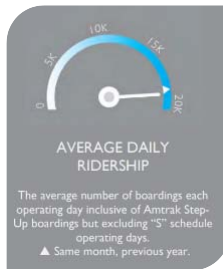
- Express long-term intentions
- Answer “What you wish to achieve?”

Measurable Objectives:

- Derive performance indicators (KPIs)
- Show accountability
- Provide management/department insight



HOW VRE CURRENTLY MEASURES SUCCESS



PROPOSED VRE TDP GOALS

- **GOAL #1 – SERVICE DELIVERY**

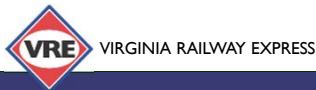
Deliver safe, high-quality, and convenient service that is responsive to customer needs

- **GOAL #2 – BUSINESS PRACTICES**

Employ industry-leading business practices to drive operating efficiencies, project delivery, regulatory compliance, and partnerships

- **GOAL #3 – SERVICE EXPANSION**

Expand VRE ridership through operational enhancements, physical improvements, and coordinated intermodal integration throughout the system



25

CATEGORIZING GOALS & OBJECTIVES



Service Expansion/
New Opportunities



Financial
Accountability



Operational
Excellence



Regulatory
Compliance



Community
Integration



Environmental
Stewardship



26

GOAL #1 - Deliver safe, high-quality, and convenient service that is responsive to customer needs.



Objective 1.1 –Act on improvements identified through the annual customer survey.



Objective 1.2 –Track monthly performance indicators and address any trends requiring corrective action.



Objective 1.3 – Maintain a safety-first focus in all operations



VIRGINIA RAILWAY EXPRESS

27

GOAL #2 - Employ industry-leading business practices to drive operating efficiencies, project delivery, regulatory compliance, and partnerships.



Objective 2.1 – Proactively maintain all assets in a state of good repair.



Objective 2.2 – Demonstrate accountability and good stewardship to host railroads, funding partners, and regulatory entities.



Objective 2.3 – Implement technology to streamline administrative functions and project delivery.



Objective 2.4 –Provide training and oversight for positive workforce development.









Objective 2.5 – Seek opportunities to incorporate environmentally conscious design and equipment.



VIRGINIA RAILWAY EXPRESS

28

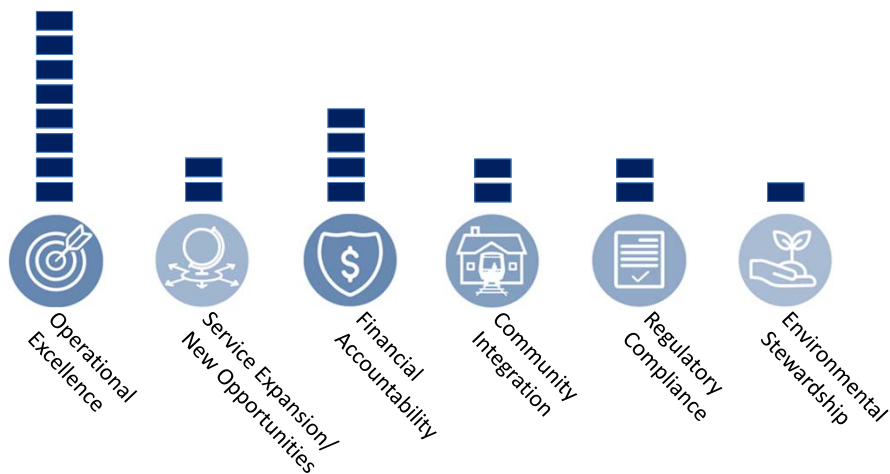
GOAL #3 - Expand VRE ridership through operational enhancements, physical improvements, and coordinated intermodal integration throughout the system.

-   **Objective 3.1** – Execute a robust capital improvement program.
-  **Objective 3.2** – Pursue strategies and partnerships to serve new markets.
-  **Objective 3.3** – Support and advocate for regional initiatives that benefit the delivery of commuter rail services.
-   **Objective 3.4** – Advance project readiness and operational planning to be able to tap into emerging revenue sources.



29

OBJECTIVE CATEGORIES/DISTRIBUTION

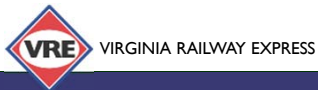


30

MEASURING SUCCESS



- What data sources will be used to measure performance?
- What is the timeframe for achievements?
- Should targets be specific or indexed?
- Are targets realistic and within VRE's ability to influence?



31

A photograph of a large wooden trestle bridge over water at sunset. The sun is low on the horizon, creating a warm glow. Several workers in white hard hats are visible on the bridge structure. The water reflects the bridge and the sky.

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Consultant Contact: RYAN FURGERSON
Phone: 703.236.7469
Email: RYAN.FURGERSON@MBAKERINTL.COM

The VRE logo is a red diamond with 'VRE' in white. To the right of the logo, the tagline 'A BETTER WAY. A BETTER LIFE.' is written in a sans-serif font.

AGENDA FOR TODAY

15 MINUTE BREAK

UP NEXT - BREAKOUT SESSION PARTICIPATION

- VRE's Message
- Alignment of Needs



A BETTER WAY. A BETTER LIFE.



VIRGINIA RAILWAY EXPRESS FY2020-FY2025 TRANSIT DEVELOPMENT PLAN UPDATE

WORKSHOP #2

Tuesday, June 5, 2018

9:30am-12:30pm

Ohio Room at Independent Insurance Agents and Brokers of America, Inc.

127 S. Peyton Street, Fourth Floor

Alexandria, VA 22314

Meeting Agenda

1) Arrival of guests/light refreshments
2) Safety briefing and introductions
3) Presentation - Project Identification
VRE STAFF INTERACTION TIME + INPUT ON POSTER BOARDS
4) Workshop Session: Anatomy of a VRE Project (Lorton)
5) Workshop Session: Facilitated Questions and Answers
6) Next Steps and Wrap Up



PROCESS, MILESTONES AND OUTCOMES



Virginia Railway Express FY2020 to FY2025
Transit Development Plan Update
Workshop #2

Name	Organization	Email	Mailing Address
Chloe Delhomme	City of Manassas	cdelhomme@manassasva.gov	
Nick Quint	FAMPO	quint@gwregion.org	
Cara Williams	DEPT		
Kyle Nemhard	MDOT MTA	knemhard@mta.maryland.gov	
Zachary Krohmel	FC DOT	zachary.krohmel@fairfaxcounty.gov	
Chuck Steijerwald	PRIC	csteijerwald@omniide.com	
Allan Rowley	City of Manassas Park	a.rowley@manassasparkva.gov	
AMRITA HILL	AMTRAK	HILLA@AMTRAK.COM	
Der Leibbrandt	PWC	rleibbrandt@pwc.com	
RANDY SELLECK	DEPT	randy.selleck@dmpt.virginia.gov	
Doug Morgan	Spotsylvania County		
Paul Rink	VRE	PRINK@VRE.ORG	
Norini Walker	VRE	nwalker@vre.org	



June 5, 2018

Virginia Railway Express FY2020 to FY2025
Transit Development Plan Update
Workshop #2

Name	Organization	Email	Mailing Address
Steve Sindory	Alexandria	steve.sindory@alexandriava.gov	
Mark Schofield	VRE	mschofield@vire.org	
Harun Rashid	NVTA	harun.rashid@thenova	
Khadra Abdulle	VRE	khabdulle@vire.org	
Kip Foster	VRE	kfoster@vire.org	
Andrew Meese	MWCOG	ameese@mwkog.org	
Dan Goldfarb	NVTC	dan@goldfarb.org	
* Pierre Holloman	Arlington	pholloman@arlingtonva.us	
STUART BOGGS	FCDOT / TSD	STUART.BOGGS@FAIRFAXCOUNTY.GOV	
Joey Hess	Stafford	jhess@staffordcountyma.gov	



June 5, 2018

VIRGINIA RAILWAY EXPRESS

FY2020 - FY2025 TRANSIT DEVELOPMENT PLAN

Workshop #2
June 5, 2018



A BETTER WAY. A BETTER LIFE.

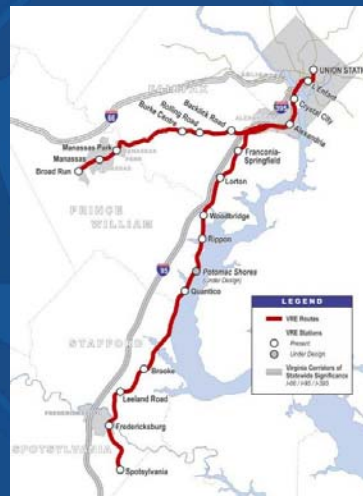
AGENDA FOR TODAY

*Safety Briefing
Introductions*

Project Identification

**Anatomy of a VRE Project:
Lorton Station**

Next Steps and Wrap Up



A BETTER WAY. A BETTER LIFE.

PROCESS, MILESTONES, AND OUTCOMES



3

QUESTIONS FOR TODAY

Please use the stickies to provide feedback specific to your jurisdiction or a VRE line or station.

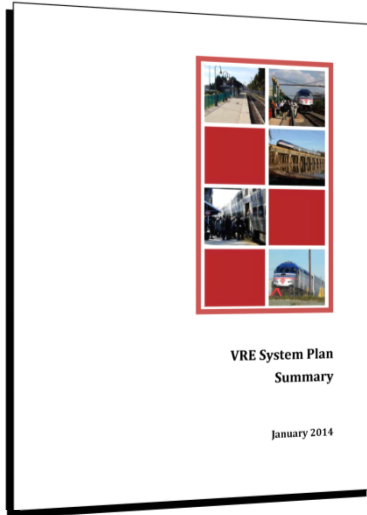
In what ways can localities incorporate VRE into their programs?

What are the critical needs in your jurisdiction for VRE to meet?



A BETTER WAY. A BETTER LIFE.

SYSTEM PLAN 2040

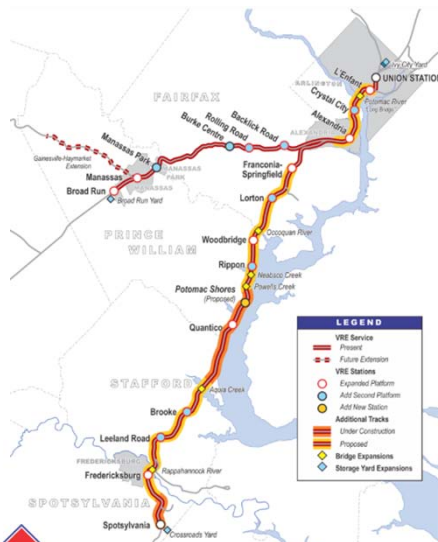


- Adopted in January 2014
- Outlines a phased approach to system improvement
- Adapts VRE to the challenges of a rapidly growing region
 - Move from commuter rail towards “Regional Rail”
 - Bidirectional and more frequent peak service
 - More midday and evening service
 - Nearly doubling ridership by 2040



5

SYSTEM PLAN 2040 GROWTH ASSUMPTIONS



BY 2040

- Population in region expected to grow 30%
 - 5.2 Million to 6.8 Million
- Population in VRE corridors expected to grow 40-90%
- Jobs served by VRE expected to increase by
 - 127,000 in Arlington & Alexandria (40%)
 - 173,000 in DC (22%)



6

SYSTEM PLAN PHASES



PHASE 1 (2015-2020):

Run Longer Trains

- Longer & second platforms
- More station parking
- More railcars
- More train storage tracks

PHASE 2 & 3 (2021-2040):

Run More Trains

Earn additional “train slots” through capacity improvements

- Additional tracks
- Long Bridge expansion
- Parking, railcars, yards
- Broad Run Expansion
was Gainesville-Haymarket Extension

SYSTEM PLAN 2040 OPERATING PLAN GOALS



- Increased Peak Period Service
- Reverse Commute Service
- Off-Peak Service
- All-Day Bi-Directional Service
- Regional Rail Concept
- MARC/VRE Run Through Service

VRE FINANCIAL PLAN

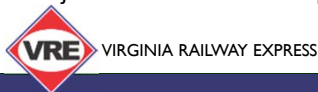
Long-term strategic financial forecast

Completed January 2016

Considered five service scenarios

Key conclusions:

- There are significant core capital expenses regardless of scenario
- Operating expense is driven primarily by host RR contractual agreements
- Meeting future costs by raising fares is not a viable solution
- Higher cost of enhanced service could be defrayed by ridership gains
- VRE needs additional revenue sources just to maintain status quo service levels



9

TDP UPDATE

FY 2020 – 2025

Financially constrained plan

FY 2026 – 2030

Longer term unconstrained plan

Transition from Natural Growth

Adopted plan is to operate longer trains as needed but no new trains added until a dedicated source of funding is obtained.



10

TDP OPERATING PLAN GOALS

- Make every train more productive
- Maximize operational efficiency by reusing trainsets where possible
- Address existing capacity constraints and customer needs
- Strategically position VRE for new service delivery approaches (e.g., midday, evening, express, reverse commute etc.)



11

PROJECT IDENTIFICATION

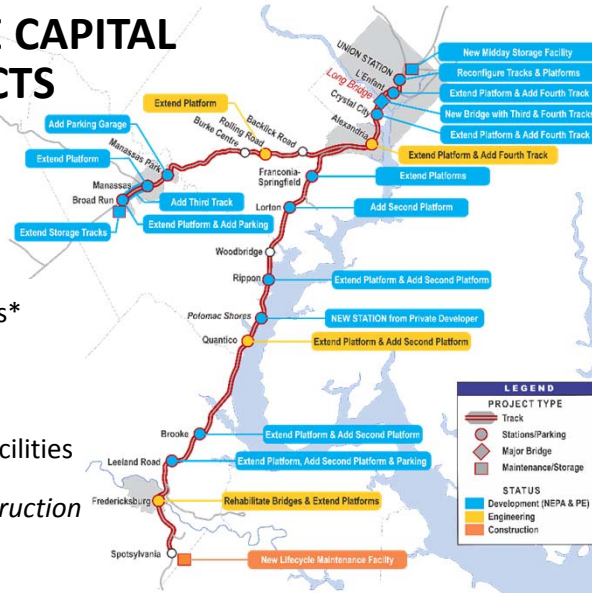


A BETTER WAY. A BETTER LIFE.



ACTIVE CAPITAL PROJECTS

- Stations & Parking
12 projects in NEPA/PE
4 projects in Engineering
- Additional (3rd/4th) Tracks*
39 miles in NEPA/PE
9 miles in Engineering
9 miles in Construction
- Maintenance/Storage Facilities
2 projects in NEPA/PE
1 project ready for Construction



VIRGINIA RAILWAY EXPRESS

As of April 2018

* Includes track projects led wholly or in part by the Virginia Department of Rail & Public Transportation

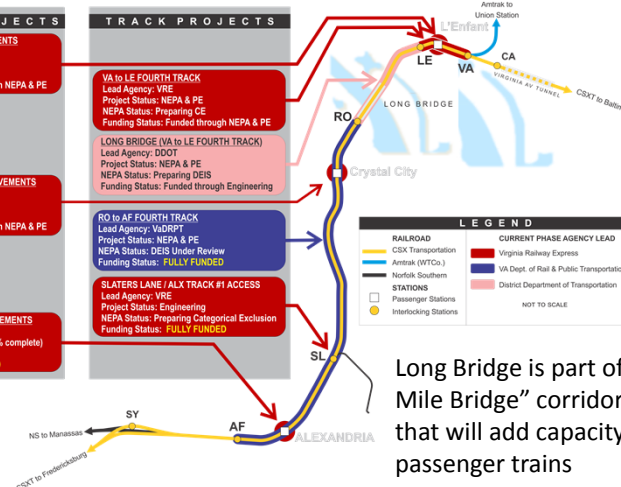
"EIGHT-MILE BRIDGE" CORRIDOR PROGRAM

STATION PROJECTS

- LENFANT STATION IMPROVEMENTS**
Lead Agency: VRE
Project Status: NEPA & PE
NEPA Status: Preparing CE
Funding Status: Funded through NEPA & PE
- CRYSTAL CITY STATION IMPROVEMENTS**
Lead Agency: VRE
Project Status: NEPA & PE
NEPA Status: Preparing CE
Funding Status: Funded through NEPA & PE
- ALEXANDRIA STATION IMPROVEMENTS**
Lead Agency: VRE
Project Status: Engineering (60% complete)
NEPA Status: CE Complete
Funding Status: FULLY FUNDED

TRACK PROJECTS

- VA to LE FOURTH TRACK**
Lead Agency: VRE
Project Status: NEPA & PE
NEPA Status: Preparing CE
Funding Status: Funded through NEPA & PE
- LONG BRIDGE (VA to LE FOURTH TRACK)**
Lead Agency: DDOT
Project Status: NEPA & PE
NEPA Status: Preparing DEIS
Funding Status: Funded through Engineering
- RO to AF FOURTH TRACK**
Lead Agency: VaDRPT
Project Status: NEPA & PE
NEPA Status: DEIS Under Review
Funding Status: FULLY FUNDED
- SLATERS LANE / ALX TRACK #1 ACCESS**
Lead Agency: VRE
Project Status: Engineering
NEPA Status: Preparing Categorical Exclusion
Funding Status: FULLY FUNDED



Long Bridge is part of the "Eight-Mile Bridge" corridor improvements that will add capacity for more passenger trains

Need for operational 'fluidity' for freight and passenger trains between Virginia (VA) and AF (Alexandria) interlockings



VIRGINIA RAILWAY EXPRESS

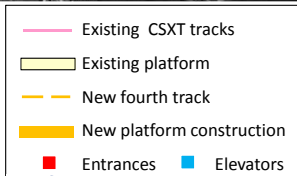
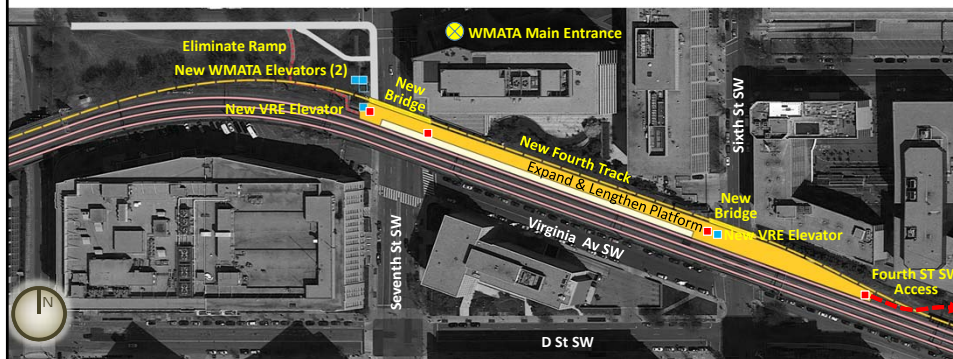
LONG BRIDGE CORRIDOR PROJECT

- Project Area is 1.4 miles in length
- Project Limits:
 - L'Enfant Interlocking (LE) on the north
 - RO Interlocking (Rosslyn) on the south
- Rehabilitate/replace half-mile long, two-track bridge across the Potomac
- Add a new two-track bridge upstream of the existing bridge
- Five other two-track bridges need to be doubled in width



15

L'ENFANT STATION & FOURTH TRACK



- Expand and extend the existing platform
- Add fourth track between VA and LE interlockings
 - A second track serving L'Enfant Station platform
- Improve ADA accessibility/connectivity to Metro
- Key design issues to be resolved:
 - Avoiding encroaching on Hancock Park (Reservation #113)
 - Possible pedestrian access to Fourth St SW



16

CRYSTAL CITY STATION & FOURTH TRACK

This project is funded in part by



Northern Virginia
Transportation Authority

- Existing CSXT tracks
- New fourth CSXT track
- New platform
- South Access
- Bridge / Stairs / Elevator
- North Access
- Tunnel / Ramp
- New Metrorail entrance
- Metroway stop
- Capital Bikeshare station



- *New platform between tracks long enough for ten-car trains*
- *Improved local and regional intermodal connectivity*

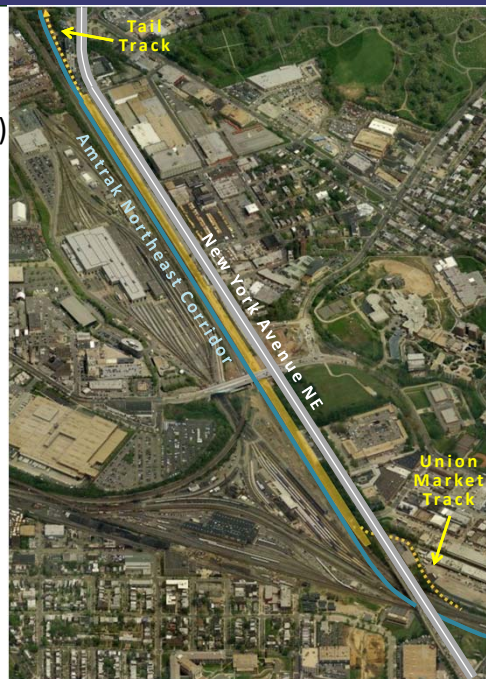


VIRGINIA RAILWAY EXPRESS

17

NEW YORK AVENUE MIDDAY STORAGE

- Long narrow site (5200 x 60 feet)
 - 9.5 acres owned by Amtrak
 - 1.2 acres privately owned
- Sufficient capacity for VRE immediate storage needs 13 trains (9 to 10 cars consists)
 - No fueling/maintenance
 - No idling locomotives
 - No VRE trains overnight or on weekends
- Only feasible storage location
 - Superior access to Union Station via Union Market Track



VIRGINIA RAILWAY EXPRESS

18

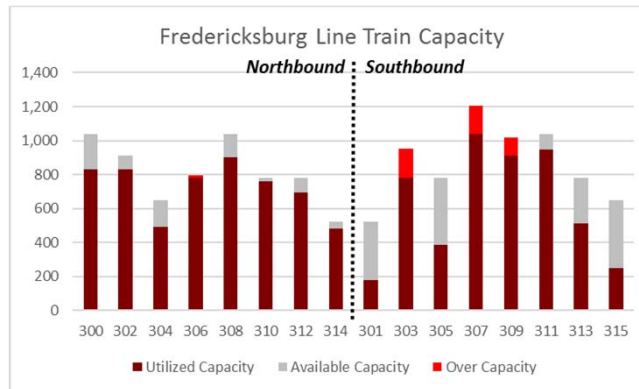
FREDERICKSBURG LINE CAPITAL PROJECTS

- 11 new railcars (1,300+ additional seats)
- New pedestrian tunnel at Alexandria
- Longer platforms at Alexandria, Franconia-Springfield, Rippon, Quantico, Brooke, Leeland Road, and Fredericksburg stations
- Second platforms at Lorton, Rippon, Quantico, Brooke, and Leeland Road stations
- Additional tracks will reduce freight conflicts
- Add capacity and a new Lifecycle Maintenance Facility at Crossroads Yard



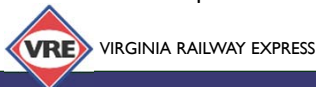
19

SERVICE PLAN – FREDERICKSBURG LINE



Near Term: Potential to address present crowding through longer trains

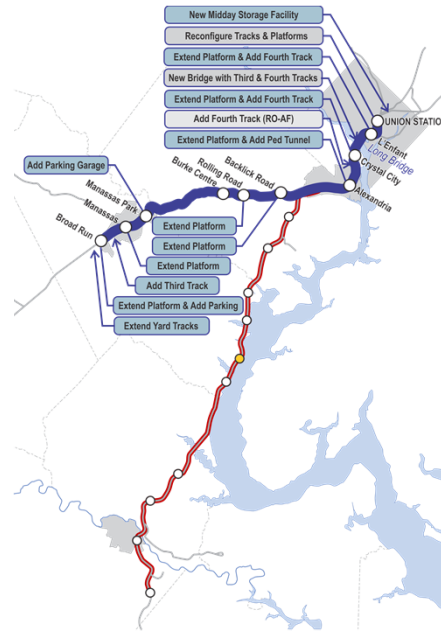
Long Term: Analyze demand for reverse commute, more off-peak/midday, and express service



20

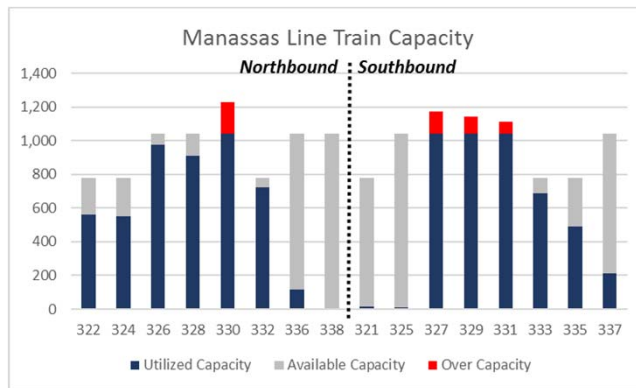
MANASSAS LINE CAPITAL PROJECTS

- 10 new railcars (over 1,150 more seats)
- More parking at Broad Run and Manassas Park
- Longer platforms at Manassas, Rolling Road, and Backlick Road stations
- Additional tracks between Manassas and Broad Run (to reduce freight conflicts)
- Yard improvements (for longer trains)



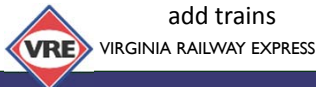
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SERVICE PLAN – MANASSAS LINE

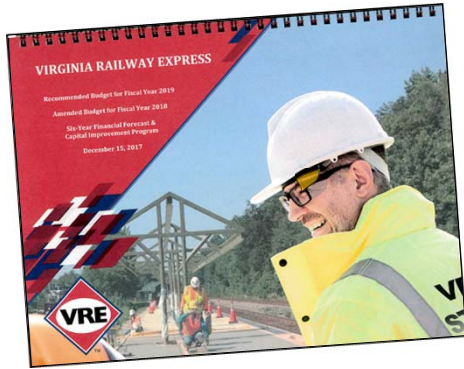


Near Term: Longest trains are currently over-subscribed. Demand exists for extension to ten-car trains. Potential to address present crowding by adjusting the schedule to spread peak load.

Long Term: Analyze potential to convert deadheads to revenue service and add trains



22



Total Six-Year Program: \$2.3 billion
 including capital reserve, rolling stock, asset management & state-of-good-repair projects

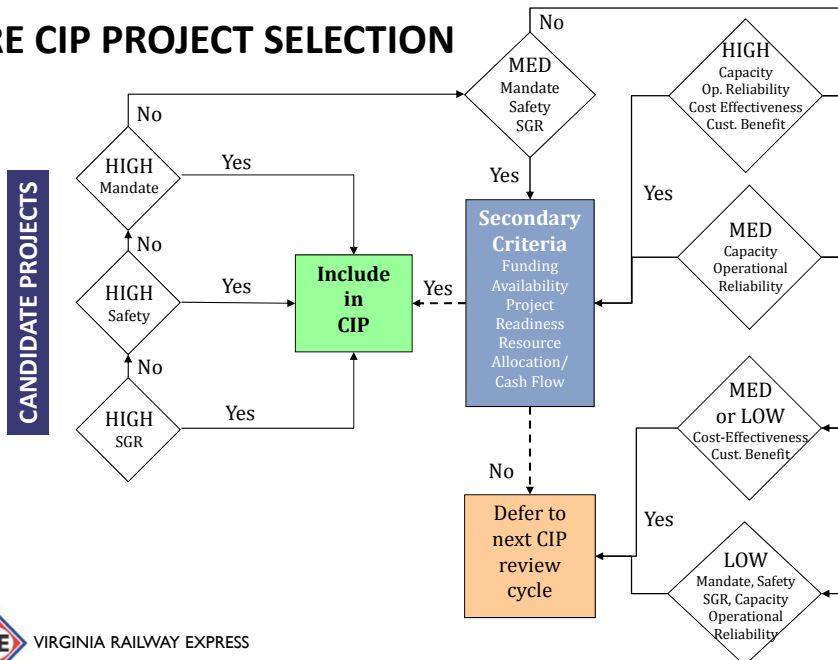


VRE CAPITAL IMPROVEMENT PLAN

Six-Year Roadmap for Investment (FY2019- FY2024)

- Asset Management/SOGR
9 projects – \$85 million
- Passenger Stations
18 projects – \$345 million
- Passenger Station Parking
4 projects – \$65 million
- Track & Signal Infrastructure
2 projects – \$77 million
- Maintenance/Storage Facilities
8 projects – \$280 million
- New Locomotive & Coaches
6 projects – \$349 million
- Long Bridge & Additional Tracks
4 projects – \$1.1 billion

VRE CIP PROJECT SELECTION



UNDER CONSTRUCTION

TRANSIT ASSET MANAGEMENT PLAN

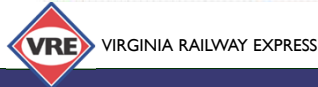


49 CFR Part 625 Subpart C Section 625.25(b)(3)

“...a TAM plan must include... a description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization.”

TAM Plan will include:

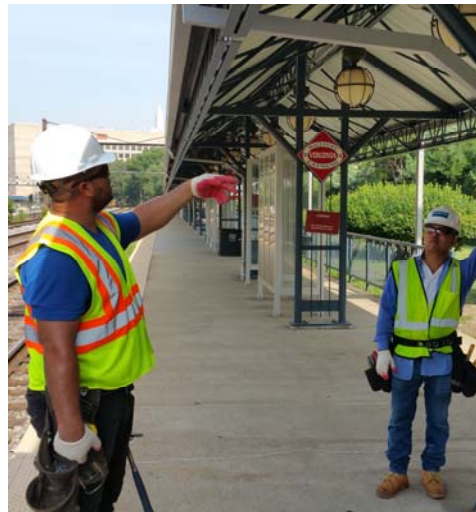
- Inventory and Condition Assessment of all capital assets
- State of Good Repair policy
- TAM plan Implementation Strategy
- How to monitor, update, and evaluate the TAM plan and related business practices to ensure the continuous improvement



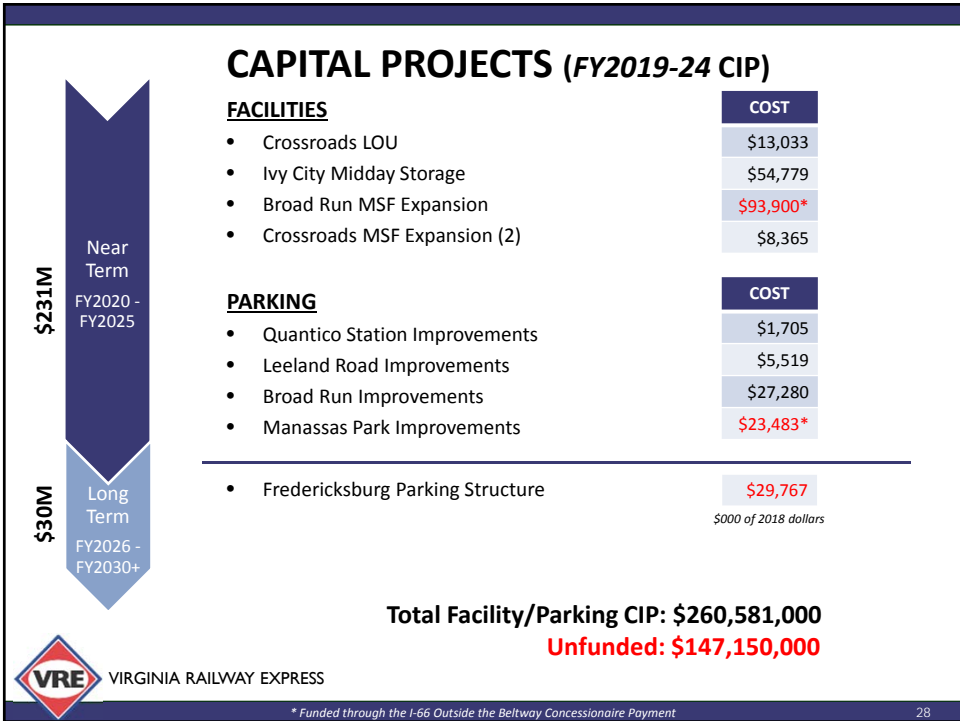
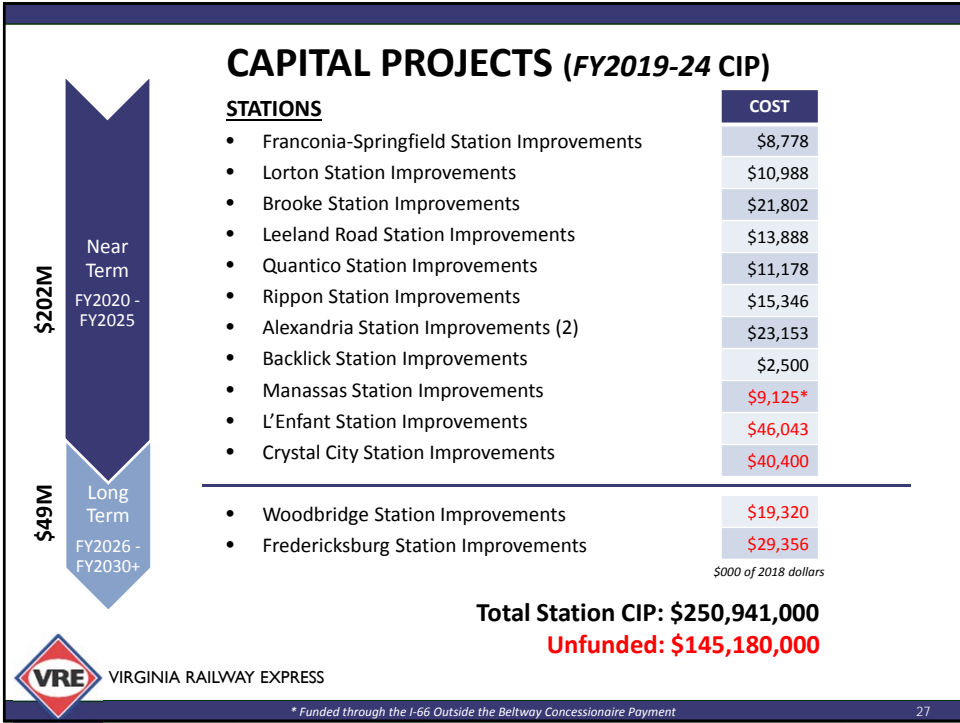
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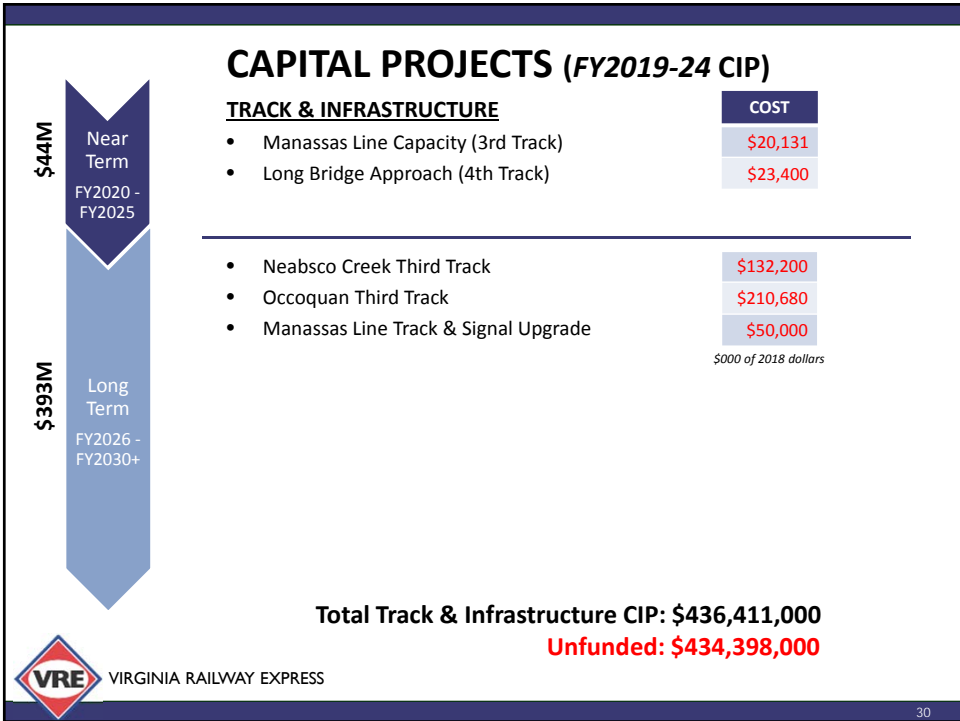
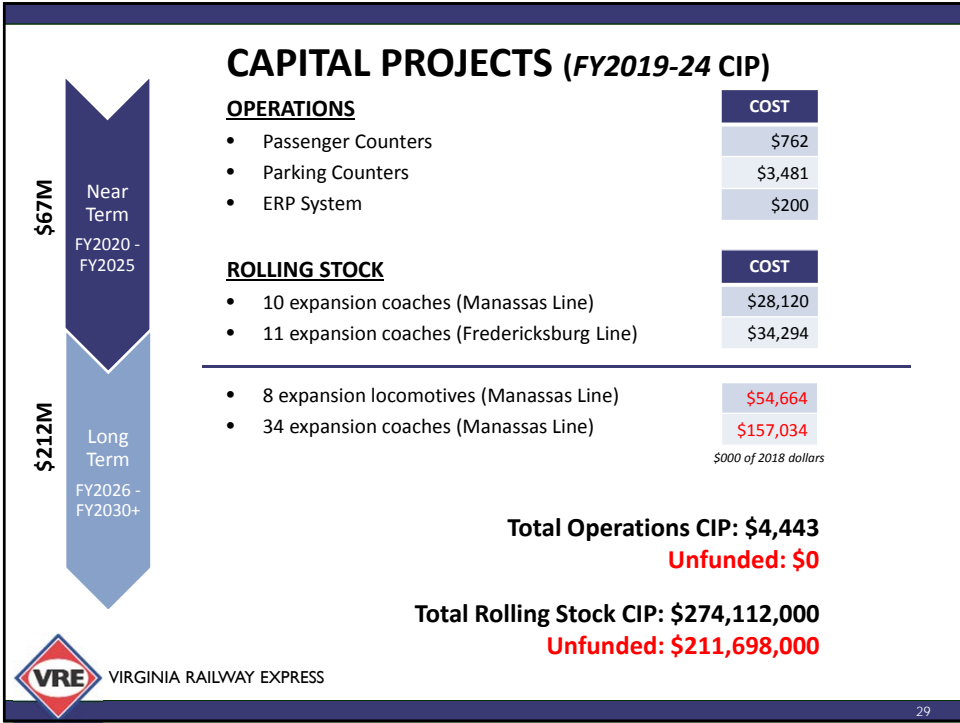
STATE-OF-GOOD-REPAIR PROJECTS

- First priority of the Capital Program
- Lifecycle maintenance philosophy: *Replace/repair components before service failures*
- Sample projects:
 - Elevator modernization
 - Canopy reroofing
 - Station lighting upgrades
 - Pavement repair/renewal
 - Locomotives & railcars



26





VRE FINANCIAL PROCESS

- Annually adopted operating and capital budget
- Six-year financial forecast
- Six-year Capital Improvement Program (CIP)

	"Dedicated" Revenue Sources		Discretionary Capital Revenue Source
	OPERATING	CAPITAL	
Passenger fares	✓		State rail programs - REF, IPROC
Federal 5307/5337		✓	SMART SCALE
State – incl. track access fees	✓	✓	NVTA six-year program
Local jurisdiction subsidy	✓	✓	Federal – CMAQ, RSTP
Commuter Rail Operating and Capital fund	✓	✓	Federal – BUILD, CIG, INFRA



31

VRE STAFF INTERACTION AND COMMENTS ON POSTER BOARDS

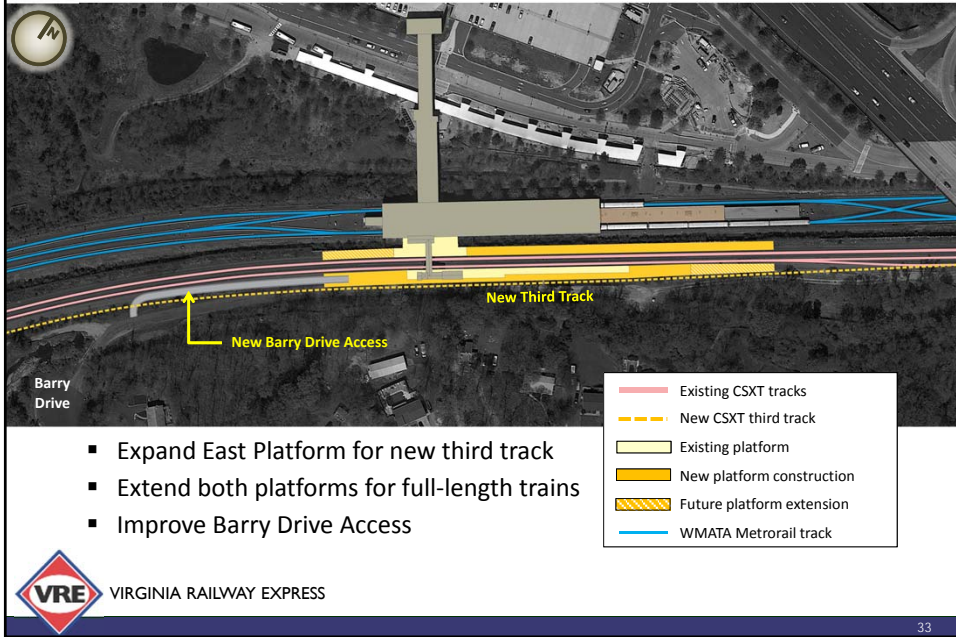
Please use the stickies to provide feedback specific to your jurisdiction or a VRE line or station.

In what ways can localities incorporate VRE into their programs?

What are the critical needs in your jurisdiction for VRE to meet?



FRANCONIA-SPRINGFIELD STATION IMPROVEMENTS





Appendix C:
Transit Asset Management Plan

The 2018 Transit Asset Management Plan for Virginia Railway Express may be found on the VRE website via the following link:

<https://www.vre.org/about/transit-asset-management-plan>





Appendix D:
Audited Financial Statements

Audited financial statements from 2004-2018 for Virginia Railway Express may be found on the VRE website via the following link:

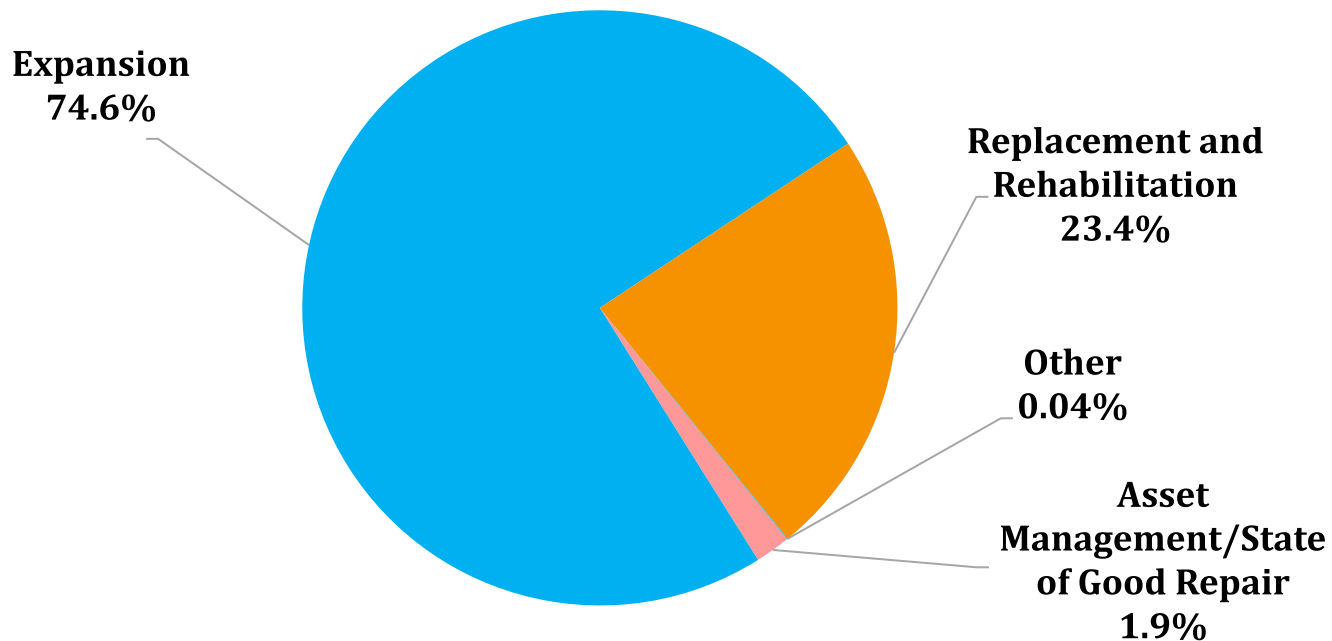
<https://www.vre.org/about/financial-information/>





Appendix E:
FY 2020-2025
Capital Improvement Plan Summary

FY 2020 - FY 2025 CIP BY PROJECT TYPE (\$813 million)



(amounts in millions)

PROJECT TYPE	PROJECT COST	FUNDED	UNFUNDED
Asset Management	\$15.6	\$15.6	
Expansion	607.0	528.1	78.9
Replacement and Rehabilitation	190.6	159.8	30.8
Other	0.3	0.3	
Total	\$813.5	\$703.7	\$109.8



Six-Year CIP Investment By Program Area (in thousands)

Program Name	Project Name	Project ID	Life-To-Date	FY 2019 Amended	FY 2020 Recommended	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Asset Management/State of Good Repair	Automatic Parking Counters	AM-1	140	610							750
	Automatic Passenger Counters	AM-2	25	2,085	790						2,900
	EMV Compliance - Fare Collection System	AM-3	300	1,418							1,718
	Enhancement Grant - Security	AM-4	626	105	105	105	105	105	105	105	1,361
	Equipment Asset Management Program	AM-5	3,298	4,132	4,749	6,615	5,840	3,290	1,133		29,057
	Facilities Asset Management Program	AM-6	3,089	5,630	3,335	1,150	1,000	1,030	1,280		16,514
	Positive Train Control	AM-7	10,231	3,961							14,192
	Realtime Multimodal Traveler Information	AM-9		3,481							3,481
	Security Cameras	AM-8	559	1,000	19	150	150		250	250	2,379
Asset Management/State of Good Repair Total			18,267	22,423	8,998	8,020	7,095	4,425	2,768	355	72,352
Information Technology	ERP Implementation	IT-2		2,550	200						2,750
	Mobile Ticketing Phase II	IT-4		179							179
	TRIP /VMS Upgrade	IT-3		1,000							1,000
Information Technology Total			3,729	200							3,929
Passenger Station Facilities	Alexandria Station Improvements	ST-1	2,183	1,383	9,344	7,690	5,923	5,752			32,275
	Backlick Road Station Improvements	ST-4				275	1,725	500			2,500
	Brooke Station Improvements	ST-5	256	191	1,543	7,677	6,862	6,862			23,391
	Crystal City Station Improvements	ST-8	365	1,045	2,000	2,000	14,844	14,843	14,843		49,940
	Franconia-Springfield Station Improvements	ST-9	327	1,233	5,720	5,720					13,000
	Leeland Road Station Improvements	ST-10	225	223	1,162	4,549	4,549	4,549			15,257
	L'Enfant Station Improvements	ST-11	50	1,957	1,220	3,000	15,144	24,640	24,640		70,650
	Lorton Station Second Platform	ST-13	389	1,110	7,325	7,325					16,150
	Manassas Station Improvements	ST-21			521	4,427	4,177				9,125
	Quantico Station Improvements	ST-14		7,173	10,327		873				18,373
	Rippon Station Improvements	ST-15	272	197	1,094	7,536	7,536				16,635
	Rolling Road Station Improvements	ST-17	362	1,638							2,000
	Washington Union Station Improvements	ST-18	5,000	5,000	5,000	10,000	10,000	10,000	10,000	10,000	65,000
	Woodbridge Station Improvements	ST-19					1,000	1,300	600	16,420	19,320
Passenger Station Facilities Total			9,429	21,149	45,256	60,200	72,634	68,446	50,083	26,420	353,616
Rolling Stock Equipment	Fleet Expansion Coaches - Manassas	RS-3			28,120						28,120
	Fleet Expansion Coaches - Fredericksburg	RS-5						34,294			34,294
Rolling Stock Equipment Total					28,120			34,294			62,414
Station Parking	Leeland Road Parking Improvements	PK-3				512		2,395			5,519
	Manassas Park Parking Improvements	PK-4	610	1,890	5,871	11,742	5,871				25,983
	Quantico Station Parking Improvements	PK-5				1,705					1,705
Station Parking Total			610	1,890	5,871	13,446	6,383	2,612	2,395		33,207
Track and Signal Infrastructure	Alexandria Station Track 1 Access (Slaters Lane)	TS-1	91	1,100	5,809						7,000
	South Manassas Third Track and Signal	TS-11		970	1,000	22,480	22,480	11,240			58,170
Track and Signal Infrastructure Total			91	2,070	6,809	22,480	22,480	11,240			65,170
Train Maintenance and Storage Facilities	Broad Run Expansion (BRX)	OT-2	4,227	3,485	9,911	24,545	24,545	12,347			79,060
	Crossroads MSF - Land Acquisition	MS-2	285	2,665							2,950
	Crossroads MSF - Storage Expansion, Short-term	MS-3					1,091	7,275			8,366
	L'Enfant Train Storage Track - South	MS-5	1,659	2,306							3,965
	Life-Cycle Overhaul and Upgrade Facility	MS-6	2,126	4,731	18,294	13,033					38,184
	New York Avenue Midday Storage Facility	MS-7	4,829	7,059	23,130	27,609	27,040				89,667
	Train Maintenance and Storage Facilities Total			13,127	20,245	51,335	65,186	52,676	19,622		
Misc. (Multiple Categories)	Forklifts purchase	OT-4		264	5	5	5	5	5		290
	Office Renovation - Suite 201	OT-3		285							285
Misc. (Multiple Categories) Total				549	5	5	5	5	5		575
CIP Six-Year Total			41,524	72,055	146,594	169,337	161,273	140,645	55,251	26,775	813,454



Capital Improvement Program by Funding Source (in millions)

Federal/Non-Federal	Funding Type	Life-To-Date	FY 2019 Amended	FY 2020 Recommended	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Federal Formula Grants	Federal Formula Grants	97.2	23.3	17.9	17.6	20.3	20.4	16.9	6.3	219.9
	State Match to Federal Grants	29.0	11.1	8.3	8.3	6.2	6.2	5.5	3.4	78.2
	VRE Local Match	5.8	1.4	1.1	1.1	1.1	1.1	0.9	0.4	13.0
Federal Formula Grants Total		132.0	35.8	27.3	27.0	27.7	27.8	23.4	10.1	311.0
Non-Federal	Federal CMAQ/STP/RSTP	25.4	4.4	2.2	3.5	2.6	1.6			39.8
	I-66 OTB Concession	128.5								128.5
	IPROC	13.6								13.6
	NVTA	43.6		4.0						47.6
	State - REF	18.8	4.9							23.7
	State - Smart Scale	8.8	3.4	2.1	4.0	46.9	27.5			92.6
	VDOT - LAP	8.7								8.7
	VRE - State REF Local Match	0.3								0.3
	C-ROC		15.0		15.0					30.0
	VRE Capital Reserve/Other	3.3	4.3	0.2						7.8
Non-Federal Total		251.0	32.0	8.5	22.5	49.6	29.2			392.7
Grand Total		383.0	67.7	35.8	49.5	77.2	56.9	23.4	10.1	703.7



FY 2020 - FY 2025 CIP: Sources of \$704 million Committed Funding

