



# Strategic Plan

## Future Trends & Themes Summary

Presented to Executive Steering Committee:  
April 12, 2017

*The region and the Prince William area share the following key themes:*



Preparing for the impact of demographic and economic trends that will reshape the entire region.



Creating a sense of place to attract new high-quality workers, who in turn attract high-quality employers.



Adapting travel patterns for an improved quality of life.



Supporting multimodal travel and high-capacity transit networks to connect jurisdictional activity centers, and to connect to the region's core.



Supporting transit-oriented growth.

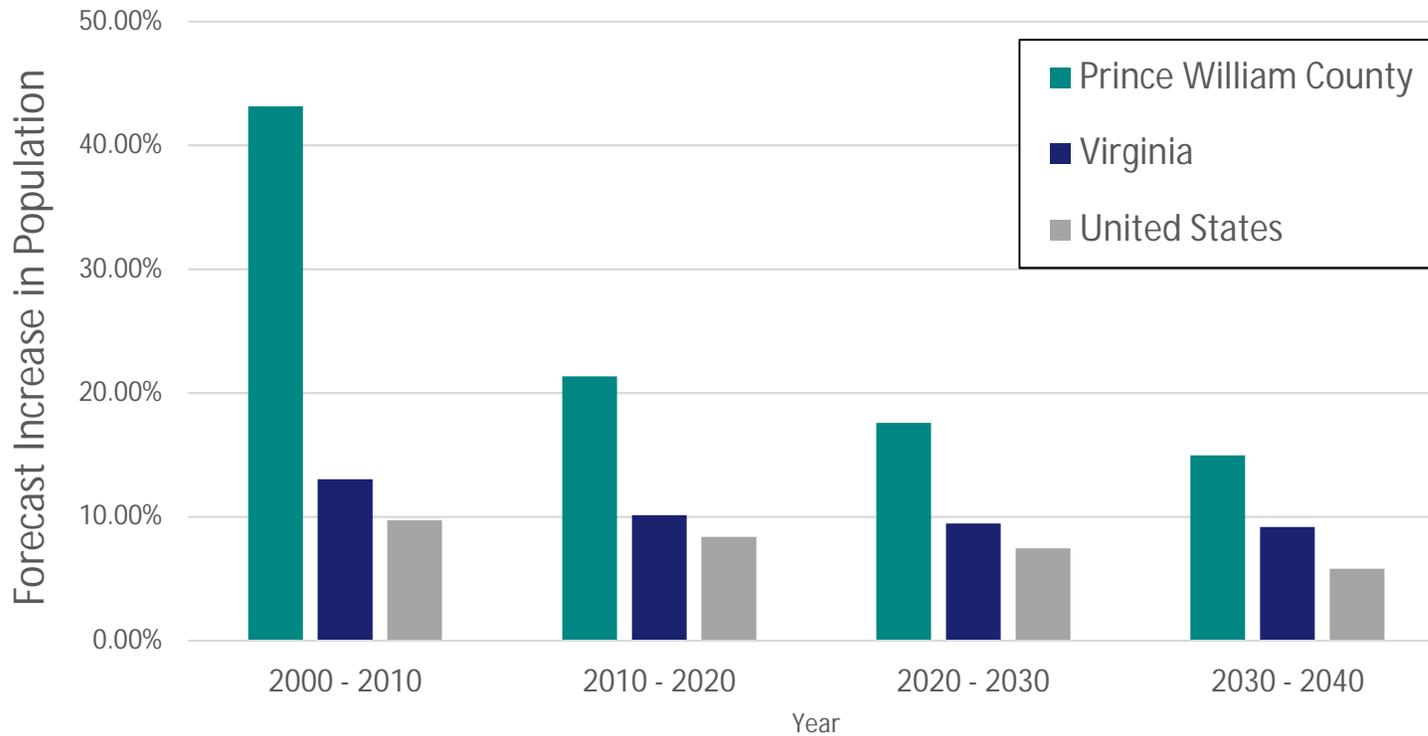


The Regional/Local themes and supporting information from National/industry trends provide important insight into the future facing the PWC area and PRTC.





## *Significantly higher population growth rate*

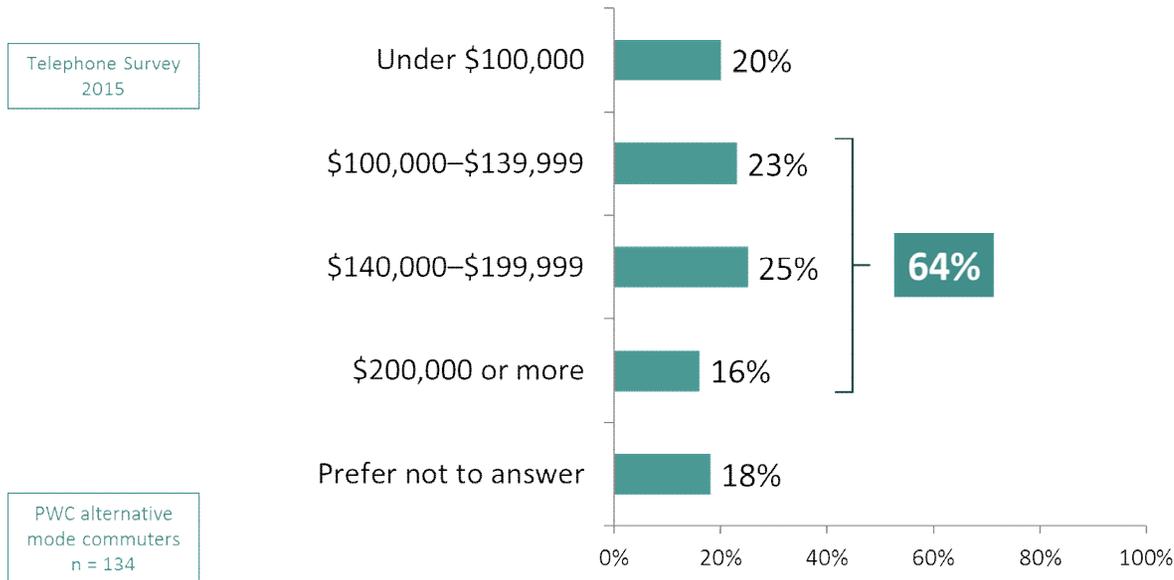




## *Lack of affordable housing in the DC Core forcing out even high wage earners*

### About Two-Thirds of PWC Area Alternative Mode Commuters Have Household Incomes of \$100K or More

*Average Annual Household Income Is \$140,000*



2015 Telephone Q124a and Q124b. Please stop me when I reach the category that best represents your household's total annual income. Is it...



## *Competitive employment market, strong economy*



Source: Virginia Employment Commission, Economic Information & Analytics



# Preparing for demographic and economic trends

## Diverse Economy

*(Top Five Industries in Prince William County Area)*

1. *Local and Federal Government*
2. *Retail Trade*
3. *Accommodation and Food Services*
4. *Construction*
5. *Health Care and Social Assistance*

## Data Center Investment

- *\$2.4 Billion in Capital investment and 370 new jobs (2011-2016)*
- *10,000 acres identified as Data Center Opportunity Zone in 2016*



SENTARA®



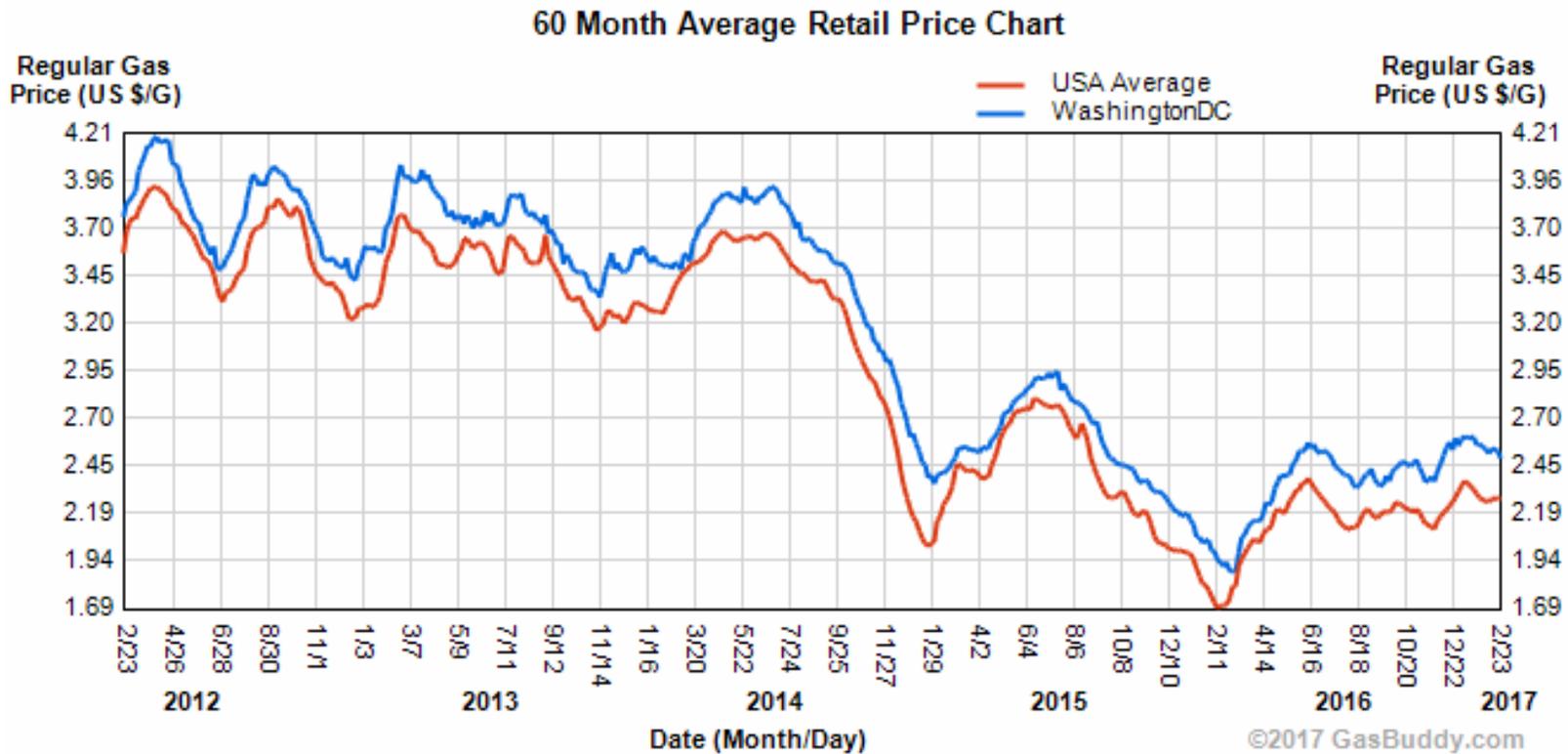
Walmart 





# Preparing for demographic and economic trends

*Fuel price decline has leveled off and prices are likely to increase*

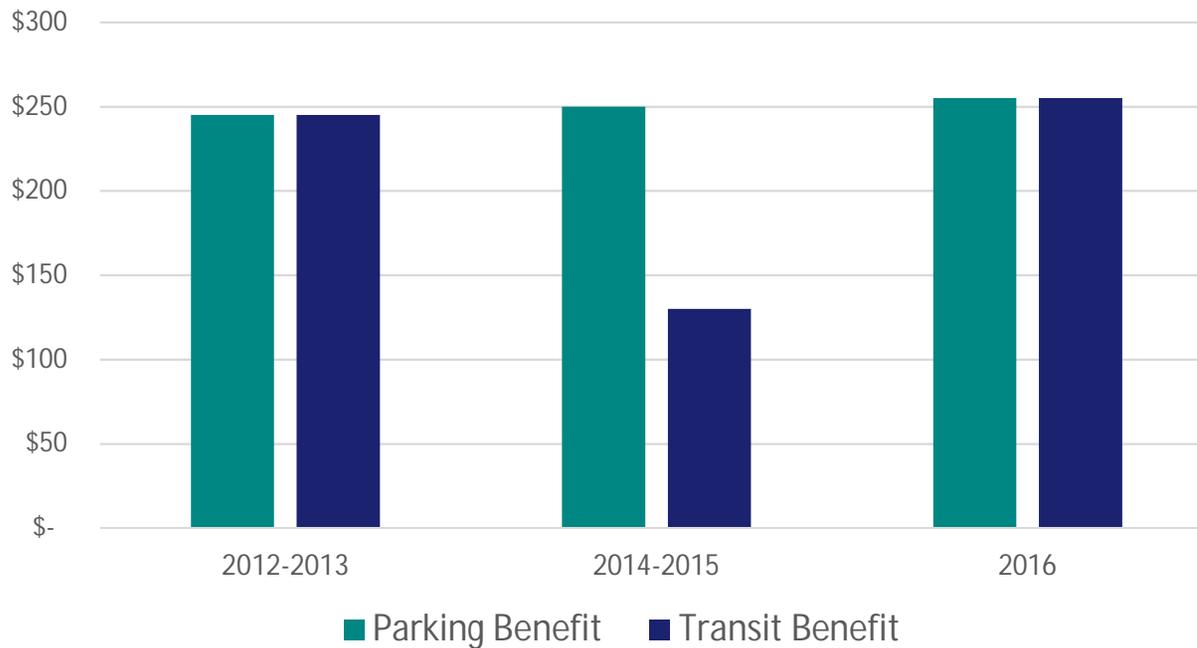


Source: Virginia Employment Commission, Economic Information & Analytics



## *Commuter benefits will remain on par with parking benefits*

Federal Transit and Parking Monthly Benefits





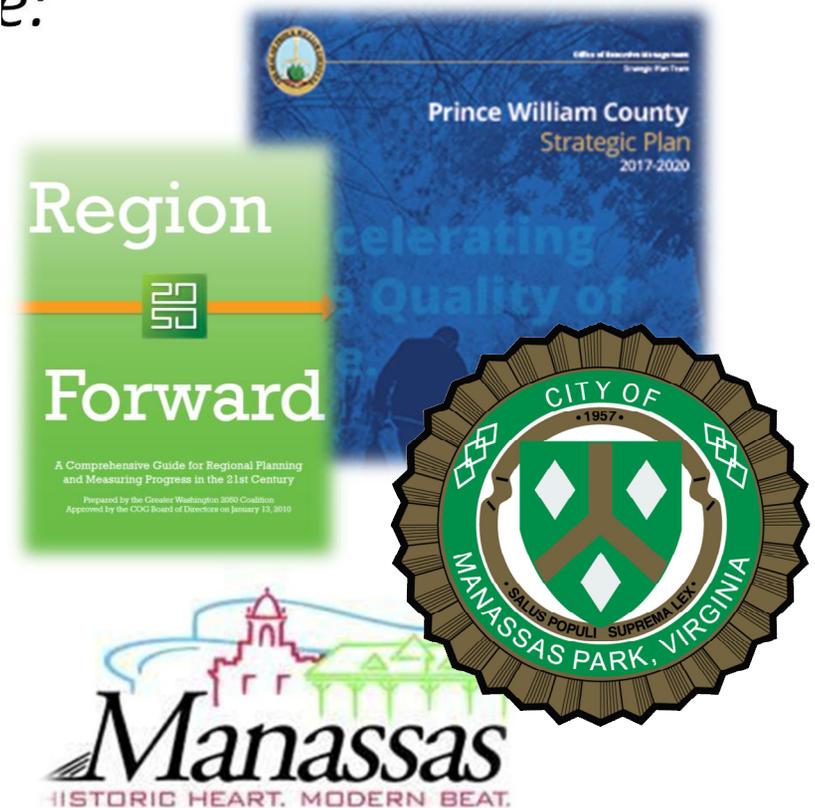
## Creating a sense of place





*Common regional and local objectives and strategies to help create communities of choice:*

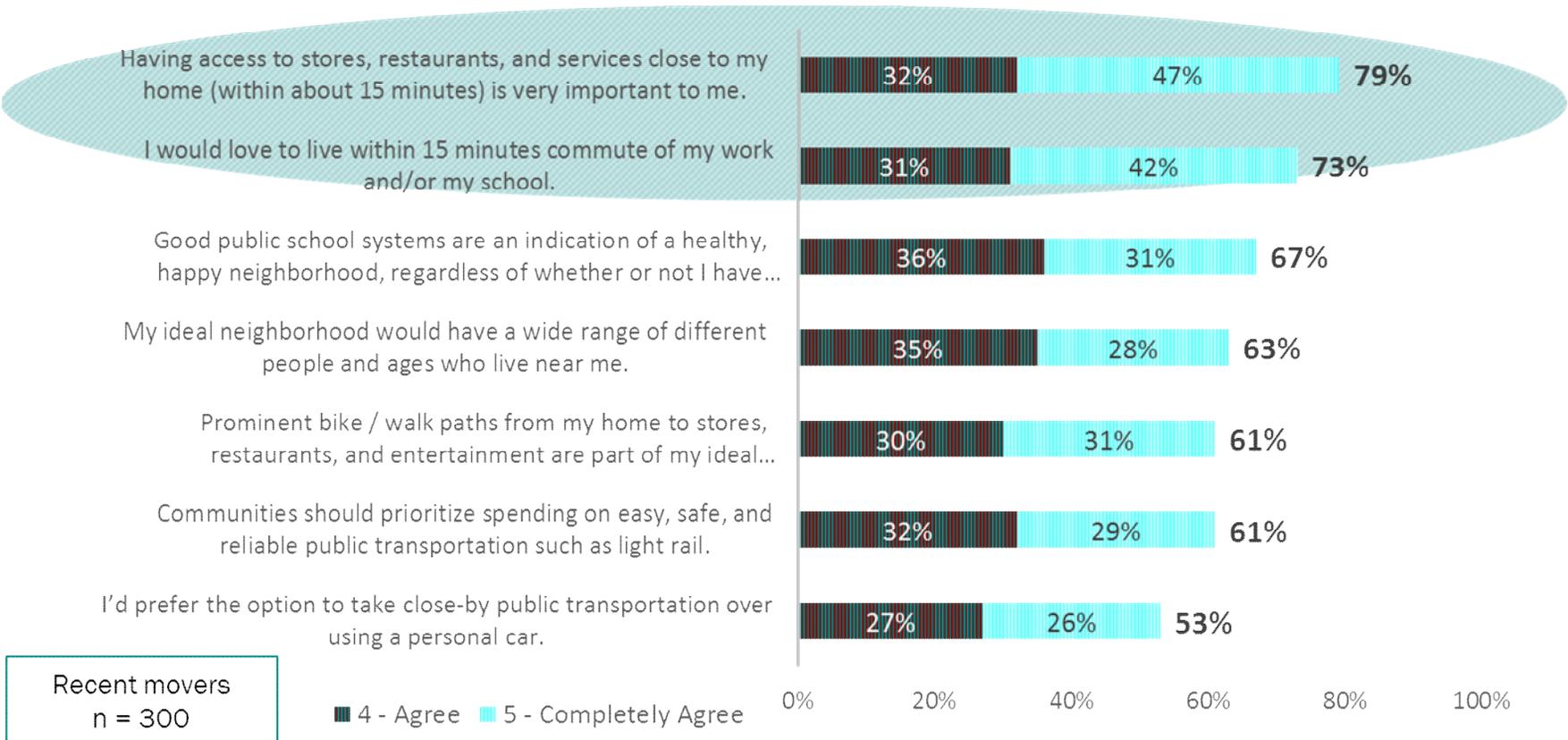
- Attracting high-quality workers to attract high-quality employers
- Mixed-used walkable communities
- Promoting residents working close to home
- Attracting new companies and businesses to targeted development areas
- Emphasizing strategic redevelopment opportunities





# Creating a Sense of Place

*Four out of five RECENT move respondents say that having stores, restaurants, and services within 15 minutes of home is very important*





## Significantly more Millennial and Gen X respondents than Boomer respondents agreed with most placemaking statements

Having access to stores, restaurants, and services close to my home (within about 15 minutes) is very important to me.

I would love to live within 15 minutes commute of my work and/or my school.

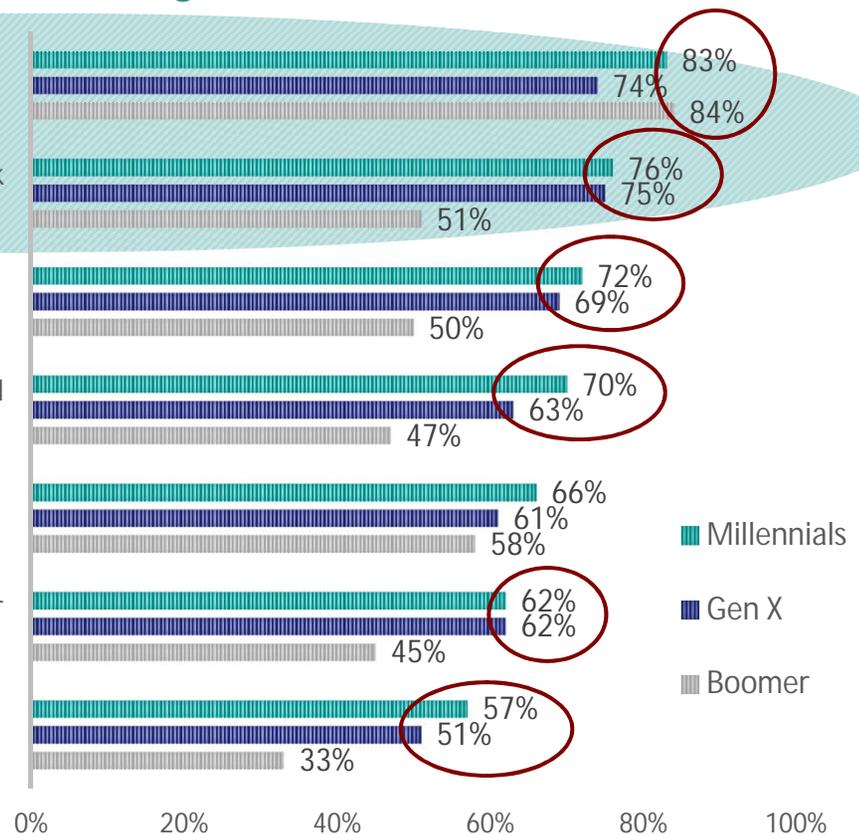
My ideal neighborhood would have a wide range of different people and ages who live near me.

Communities should prioritize spending on easy, safe, and reliable public transportation such as light rail.

Prominent bike / walk paths from my home to stores, restaurants, and entertainment are part of my ideal neighborhood.

I'd prefer the option to take close-by public transportation over using a personal car.

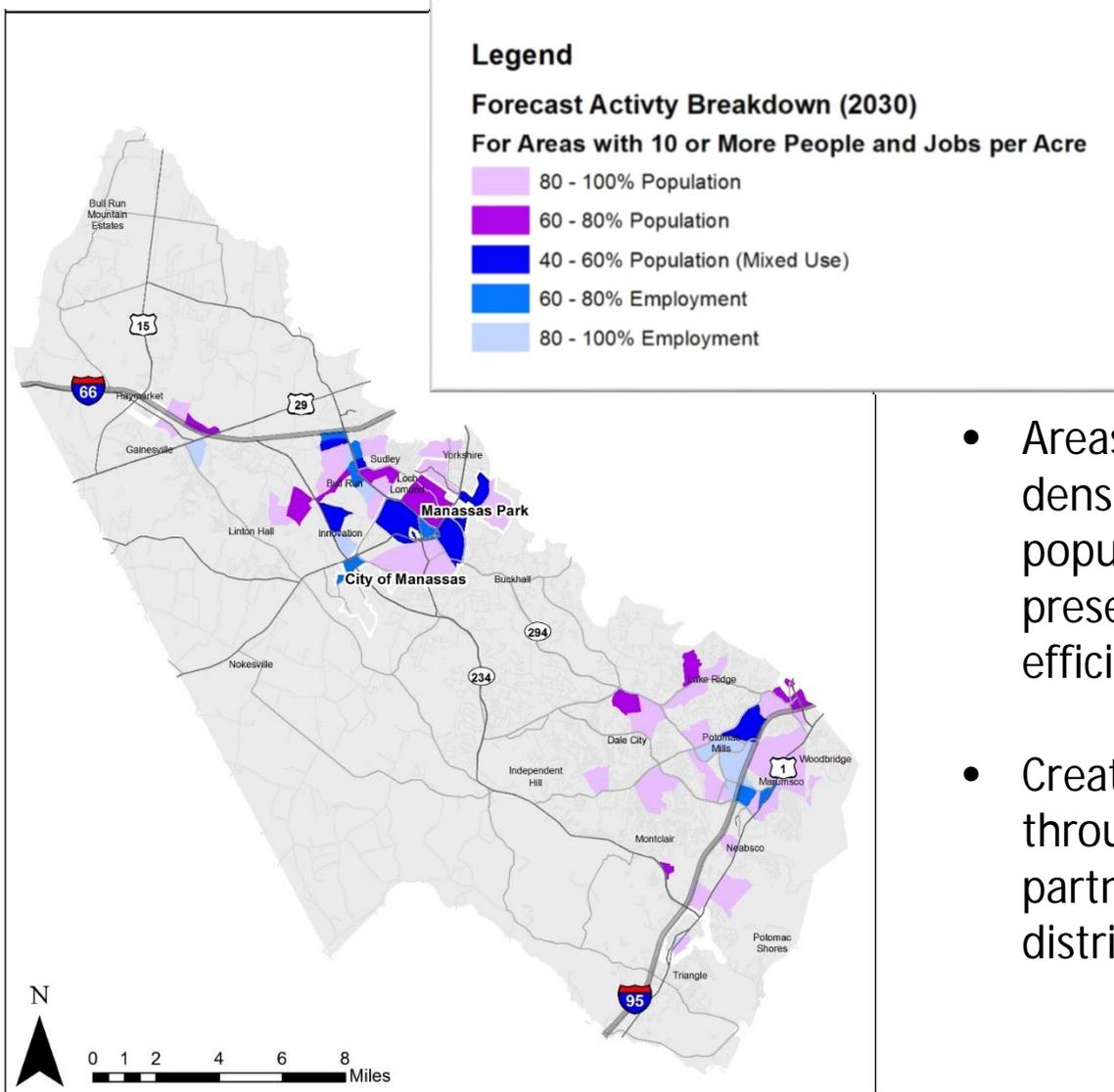
Good public school systems are an indication of a healthy, happy neighborhood, regardless of whether or not I have school-age children.



n = 600



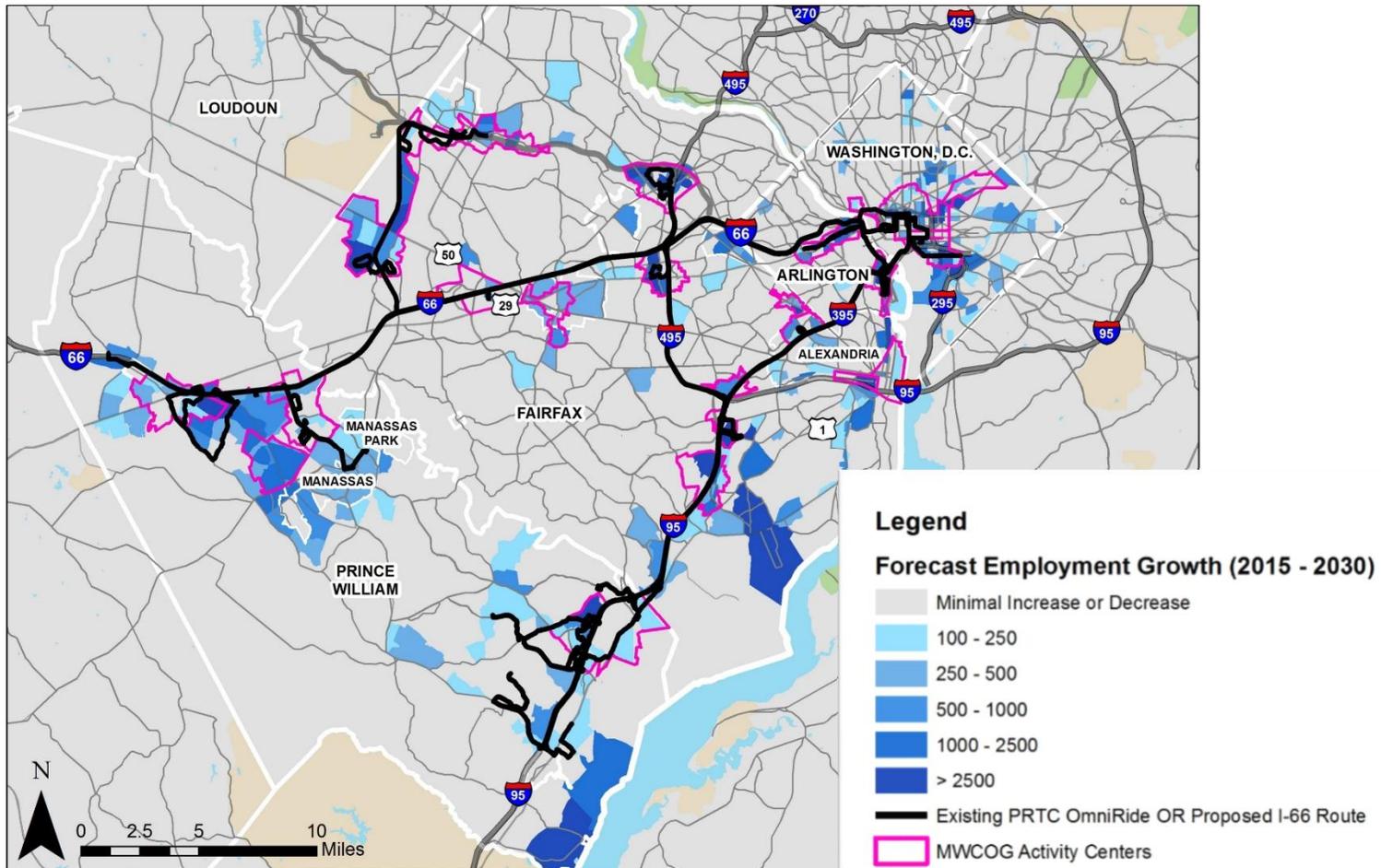
# Creating a Sense of Place



- Areas with higher forecast densities and a relatively even population /employment split present best opportunities for efficient local transit service
- Creates financial opportunities through public-private partnerships and/or specific tax districts



*PRTC is well positioned with existing/future services targeted in areas of high-forecast employment growth*





**30%**  
of Virginians  
between the  
ages of 18 and 25  
who could have  
a driver's license  
choose not to or  
don't have one

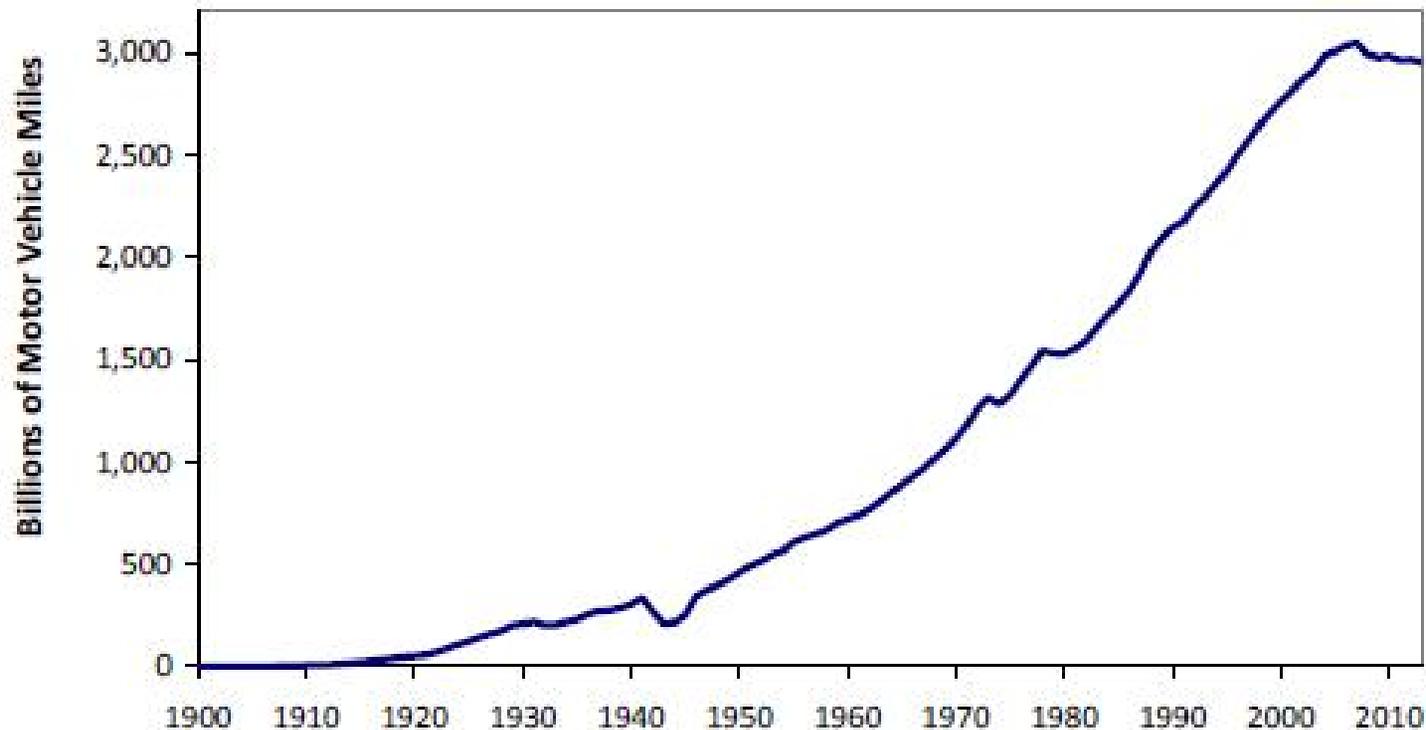
# Adapting travel patterns for an improved quality of life





# Adapting travel patterns

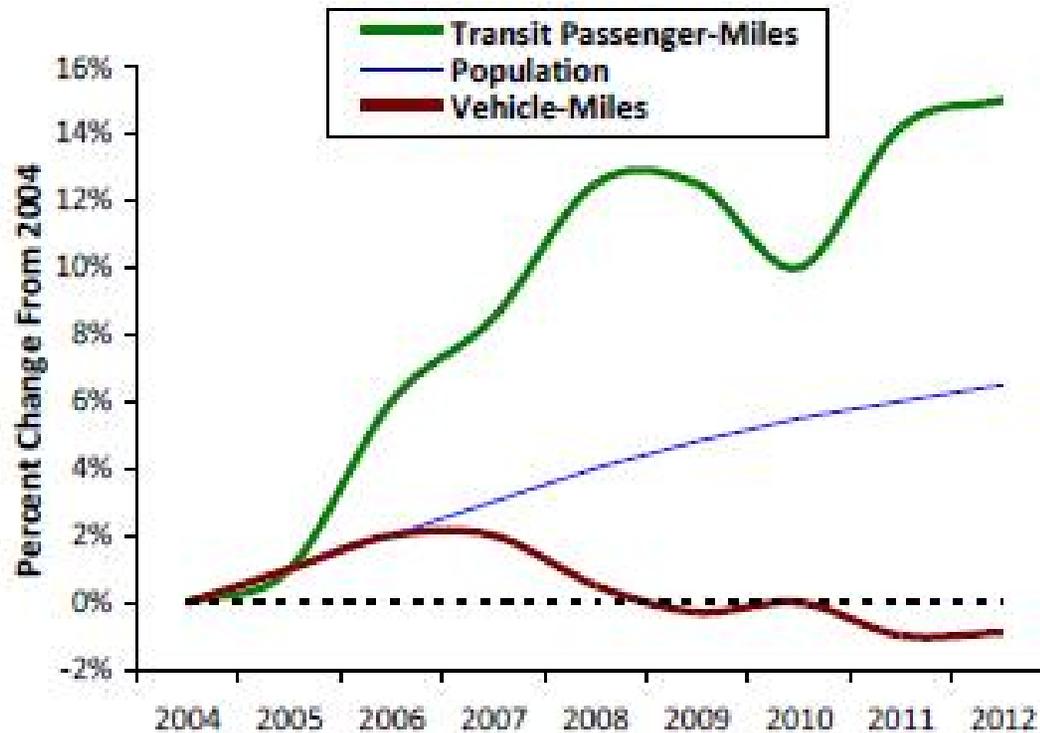
*US vehicle travel grew steadily during the Twentieth Century, but peaked in 2006 and has declined since.*





# Adapting travel patterns

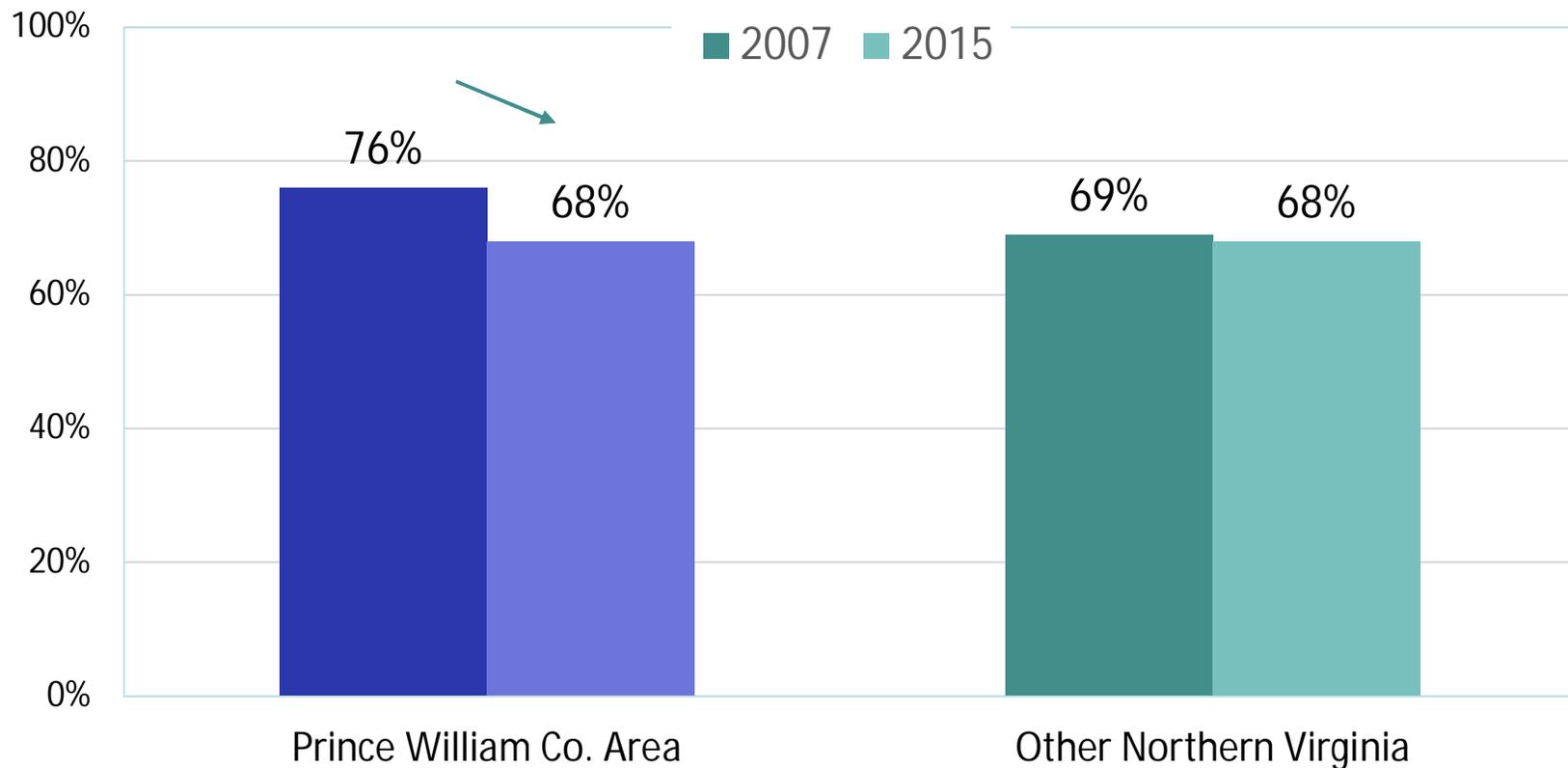
*At the same time, transit use nationally has increased significantly*



Source: APTA 2013

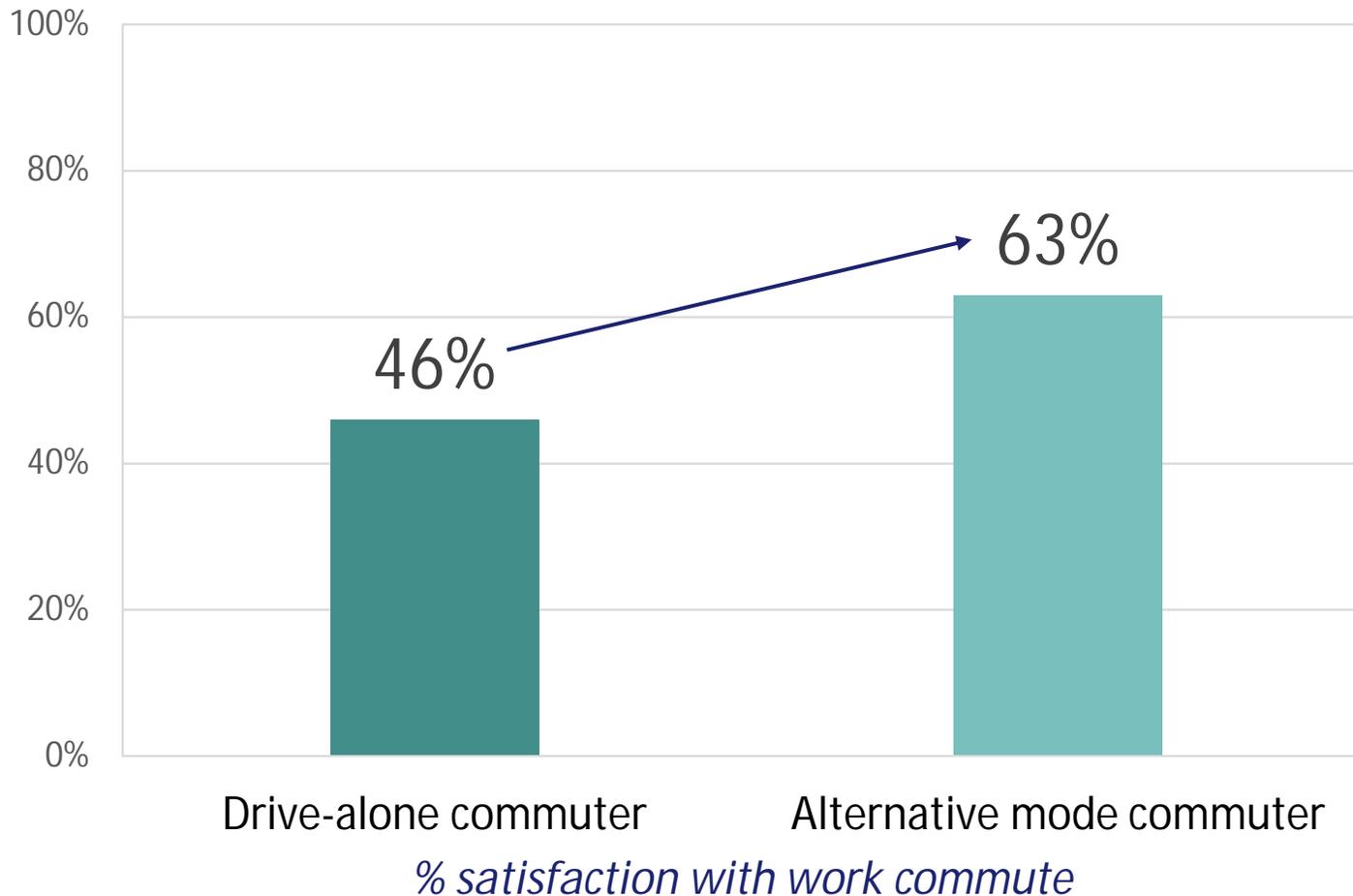


## *PWC Area's Reduction in Driving Alone Outperformed Other Northern Virginia Rideshare Markets*





## *Alternative Mode Commuters are Significantly More Satisfied with their Trip to Work*



Source: Virginia Travel Survey

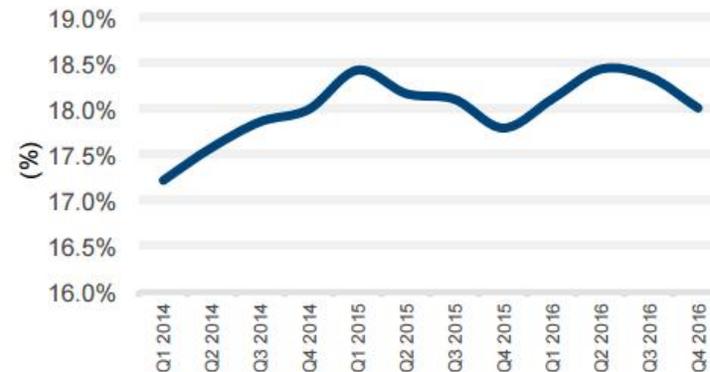


## Adapting travel patterns

*Workplace habits are changing. Fewer people are going into the office on a daily basis*

- PRTC and VRE have experienced lower ridership on Mondays and Fridays
- Many employers offer flexible “hoteling” space in place of assigned desks
- Alternative work schedules are becoming more popular to balance personal commitments
- Office vacancy rates have generally increased over the past couple of years
- About 3% of the workforce now works from home at least half of the time

Vacancy Rate



Source: Colliers International, CoStar Group



# Adapting travel patterns

*Transit agencies around the country are partnering with TNCs on pilot programs to subsidize trips or provide connections for the “first and last mile”*



+





# Adapting travel patterns

*Research and pilots of connected and autonomous vehicles are becoming more prevalent but significant impacts to mobility are still years away*

SAE level	Name	Narrative Definition	Execution of Steering and Acceleration/Deceleration	Monitoring of Driving Environment	Fallback Performance of Dynamic Driving Task	System Capability (Driving Modes)
<b>Human driver monitors the driving environment</b>						
<b>0</b>	<b>No Automation</b>	the full-time performance by the <i>human driver</i> of all aspects of the <i>dynamic driving task</i> , even when enhanced by warning or intervention systems	Human driver	Human driver	Human driver	n/a
<b>1</b>	<b>Driver Assistance</b>	the <i>driving mode</i> -specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	Human driver and system	Human driver	Human driver	Some driving modes
<b>2</b>	<b>Partial Automation</b>	the <i>driving mode</i> -specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	<b>System</b>	Human driver	Human driver	Some driving modes
<b>Automated driving system ("system") monitors the driving environment</b>						
<b>3</b>	<b>Conditional Automation</b>	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> with the expectation that the <i>human driver</i> will respond appropriately to a <i>request to intervene</i>	System	<b>System</b>	Human driver	Some driving modes
<b>4</b>	<b>High Automation</b>	the <i>driving mode</i> -specific performance by an automated driving system of all aspects of the <i>dynamic driving task</i> , even if a <i>human driver</i> does not respond appropriately to a <i>request to intervene</i>	System	System	<b>System</b>	Some driving modes
<b>5</b>	<b>Full Automation</b>	the full-time performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> under all roadway and environmental conditions that can be managed by a <i>human driver</i>	System	System	System	<b>All driving modes</b>

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# Supporting multimodal travel and high-capacity transit networks





## Supporting Multimodal Travel

### National/Regional Trends

- Connecting centers within jurisdictions and connecting to the regional core
- Interconnected regional network of Express Lanes
- High-capacity transit implementation

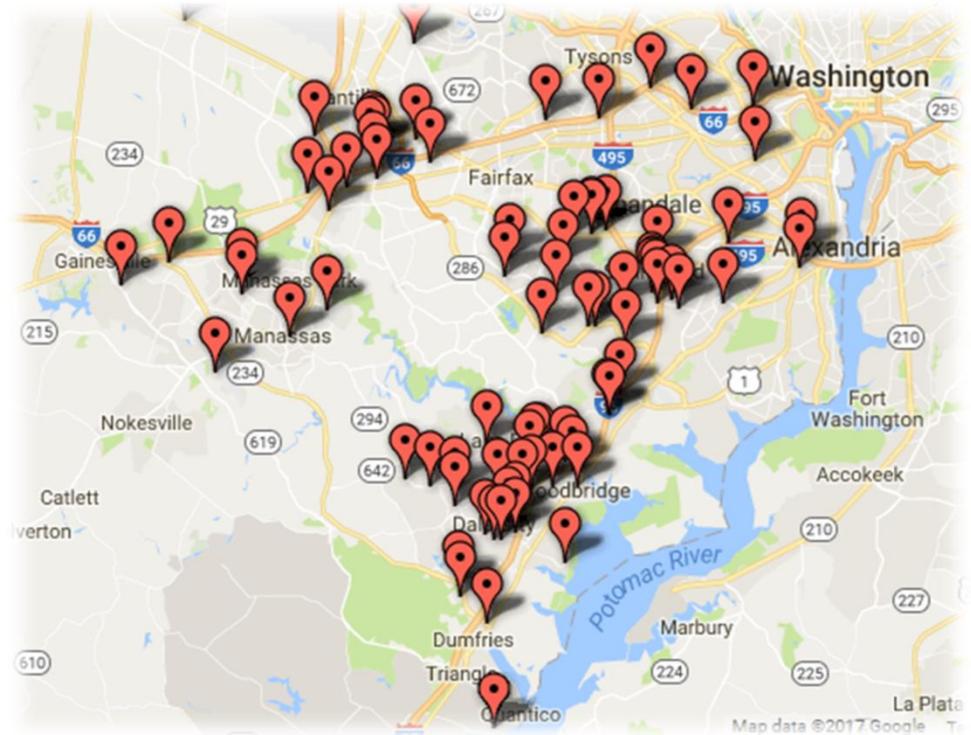
### Common Local Objectives & Strategies

- Increase percentage of citizens using transit
- Provide access to alternative transportation choices
- Reduce the need for automobile usage
- Support technology for use in making travel decisions



# Supporting Multimodal Travel

*Urban areas that are reaching the “built out” point are focusing on optimizing highway operations / maximizing throughput (e.g. express lanes, rideshare / transit).*



Source: VDOT



# Supporting Multimodal Travel

*PRTC will continue to play a major role in partnering on transportation initiatives at all government levels*

Regional Multimodal Project	PRTC Role		
	Description	Partner in Planning	Operating Service
Transform 66: Inside the Beltway	New commuter bus service	☑	☑
Transform 66: Outside the Beltway	New and expanded commuter bus service, expanded park-and-ride lots, and new TDM strategies	☑	☑
I-395/I-95 Express Lanes	Currently operating commuter bus service; ongoing study of additional improvements	☑	☑
Richmond Highway (US 1) BRT	Proposed bus rapid transit	☑	--
Rail Expansions	Planning for VRE and Metrorail expansions	☑	--



# Supporting Multimodal Travel

*Locally, the Prince William County area has envisioned a future network of high-capacity transit*

Prince William County  
Proposed Future Transit Alternatives

### VRE Rail

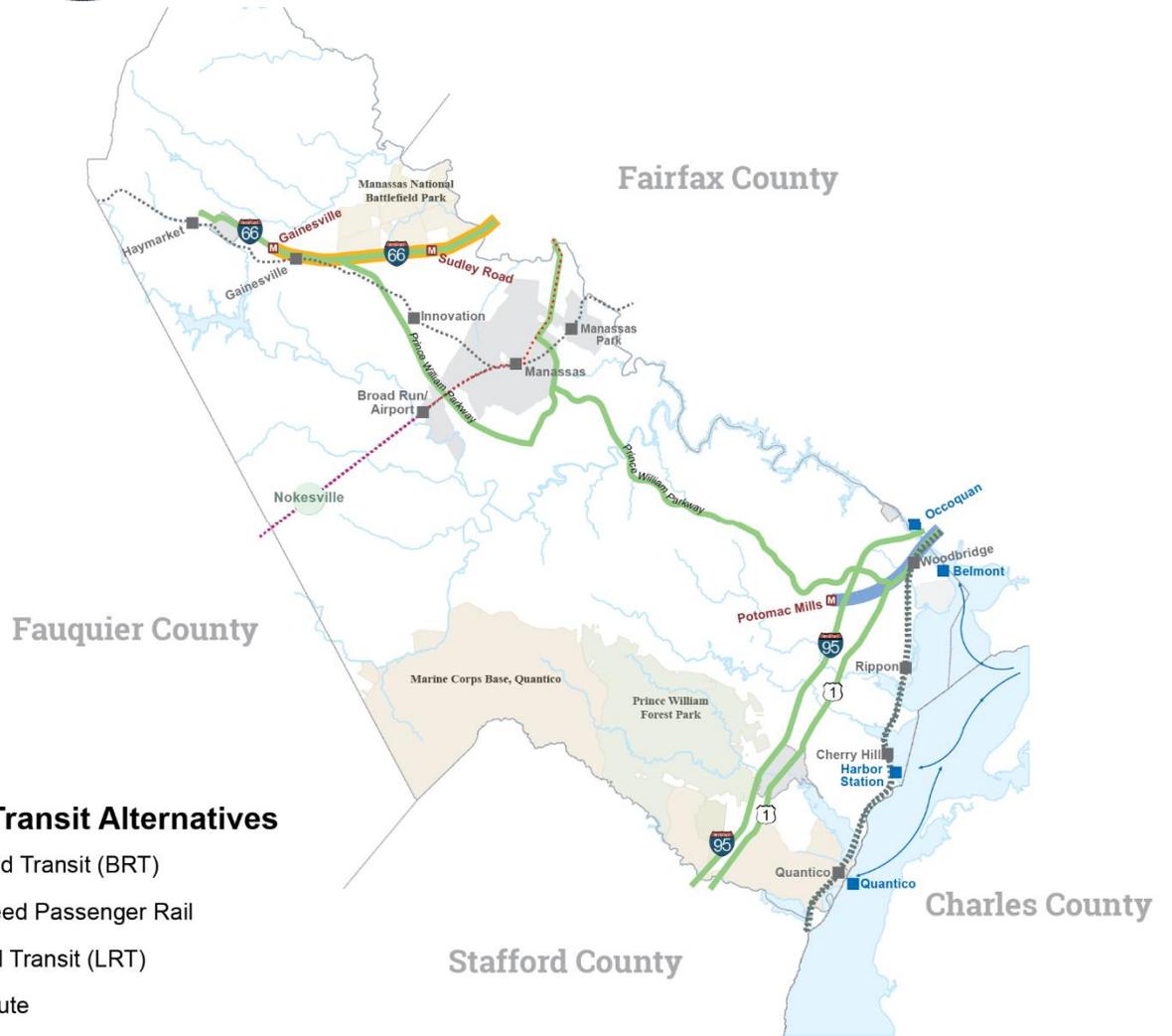
- Potential Station
- Existing or Planned Station
- Existing or Planned Line
- Future Line

### METRO Rail

- Station
- Blue Line Extension
- Orange Line Extension

### Additional Transit Alternatives

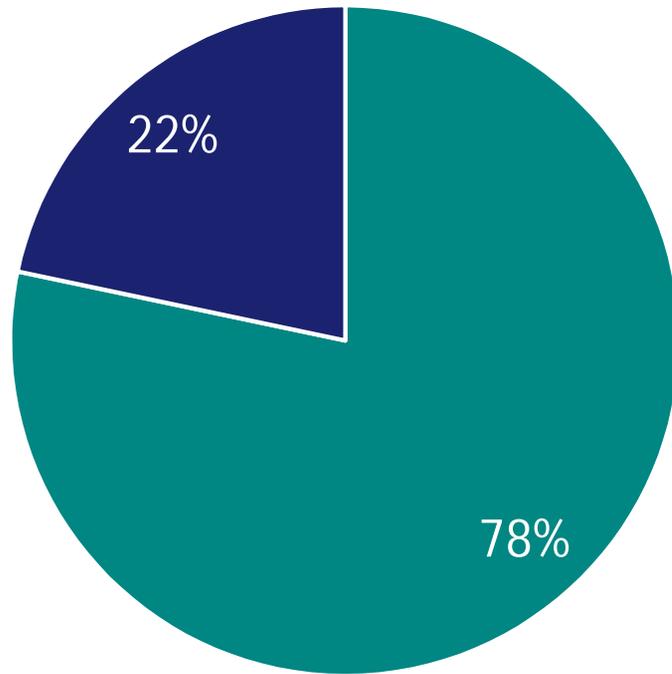
- Bus Rapid Transit (BRT)
- High Speed Passenger Rail
- Light Rail Transit (LRT)
- Ferry Route
- Ferry Terminal





## Supporting Multimodal Travel

Park-and-Rides with PRTC Service (2016) –  
Approximately 9,300 spaces

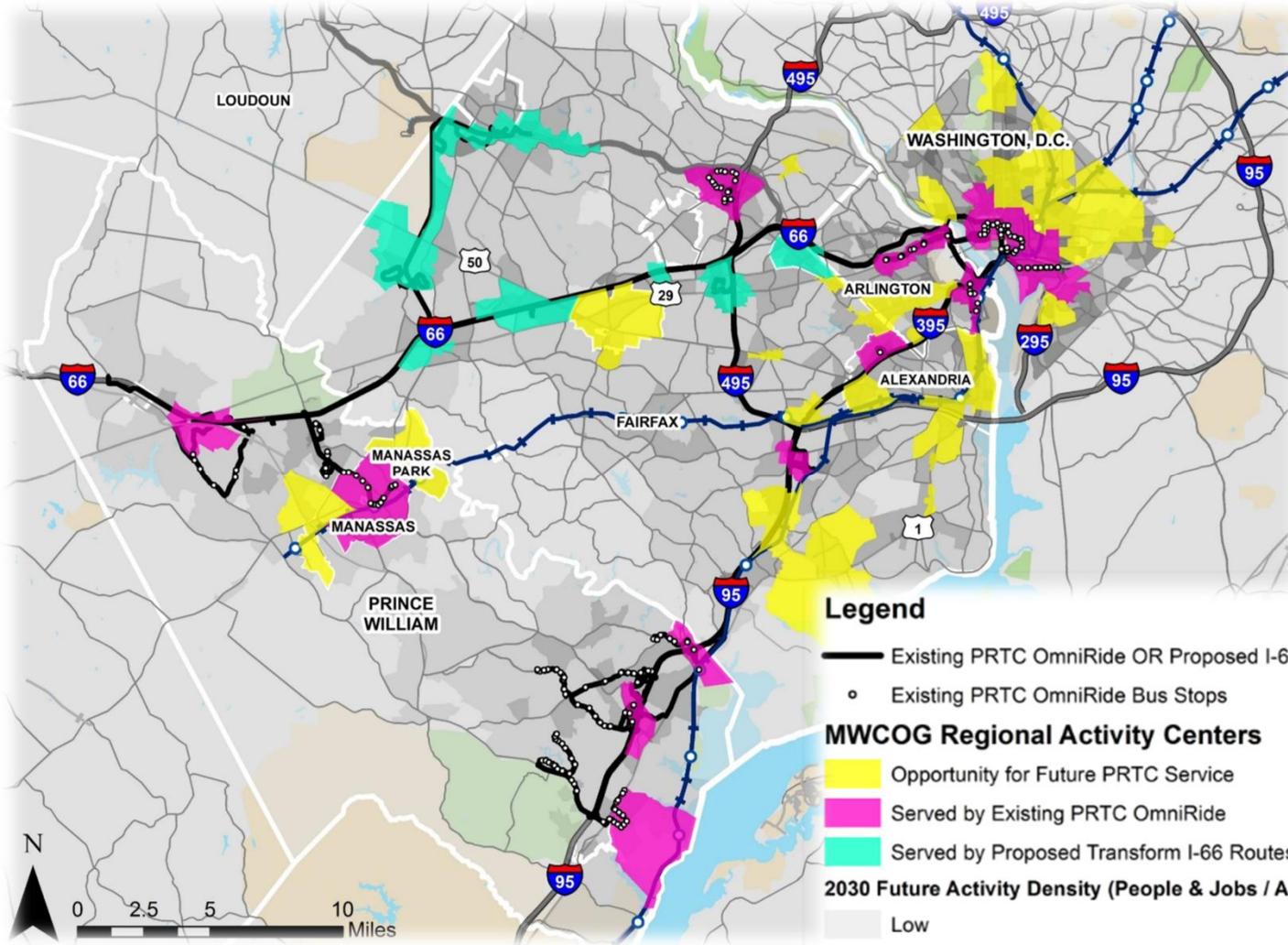


■ Occupied ■ Non-Occupied

- *Park-and-Ride lots with PRTC bus service are well-utilized, especially ones closest to interstates*
- *The Transform 66 Project includes approximately 4,000 new spaces along the I-66 Corridor with direct access to new Express Lanes*
- *Park-and-Ride lots also used for carpooling, vanpooling, and slugging*



# Supporting Multimodal Travel



*PRTC has the potential to increase its already extensive coverage of the region's activity centers*

**Legend**

- Existing PRTC OmniRide OR Proposed I-66 Route
- Existing PRTC OmniRide Bus Stops

**MWCOG Regional Activity Centers**

- Yellow: Opportunity for Future PRTC Service
- Pink: Served by Existing PRTC OmniRide
- Cyan: Served by Proposed Transform I-66 Routes

**2030 Future Activity Density (People & Jobs / Acre)**

- Light Gray: Low
- Dark Gray: High



# Supporting transit-oriented growth



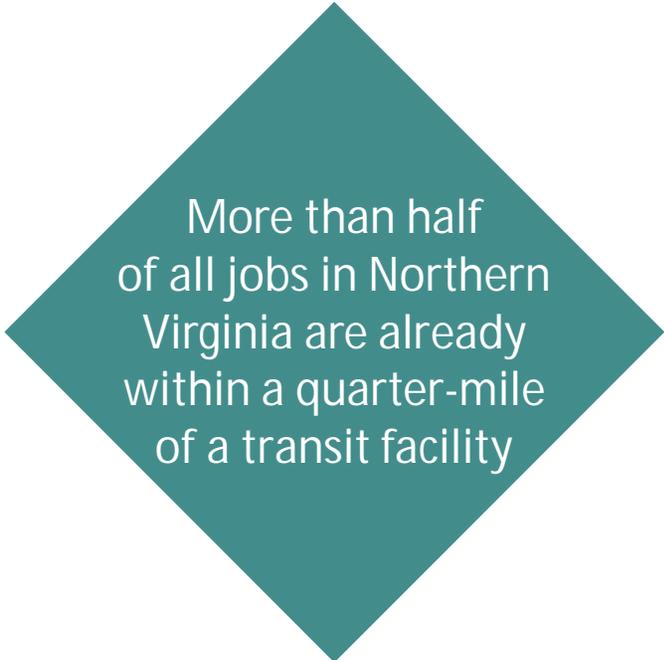


## National/Regional Trends

- Mixed-use activity centers
- Decrease in auto-focused development

## Common Objectives & Strategies

- Standards for new development to ensure accessibility to transit
- Complete Street policies
- Targeted growth areas

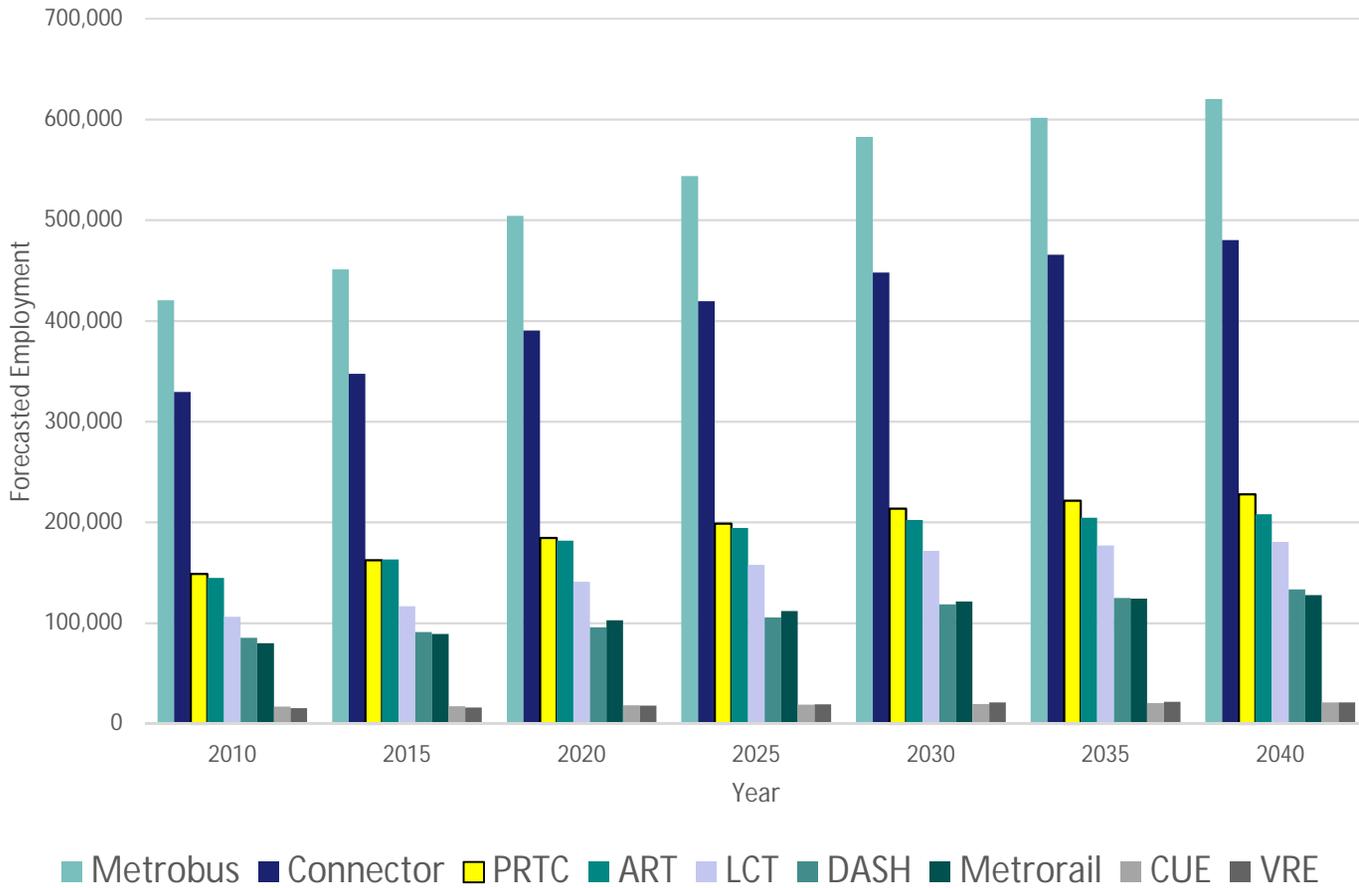


More than half  
of all jobs in Northern  
Virginia are already  
within a quarter-mile  
of a transit facility



# Supporting Multimodal Travel

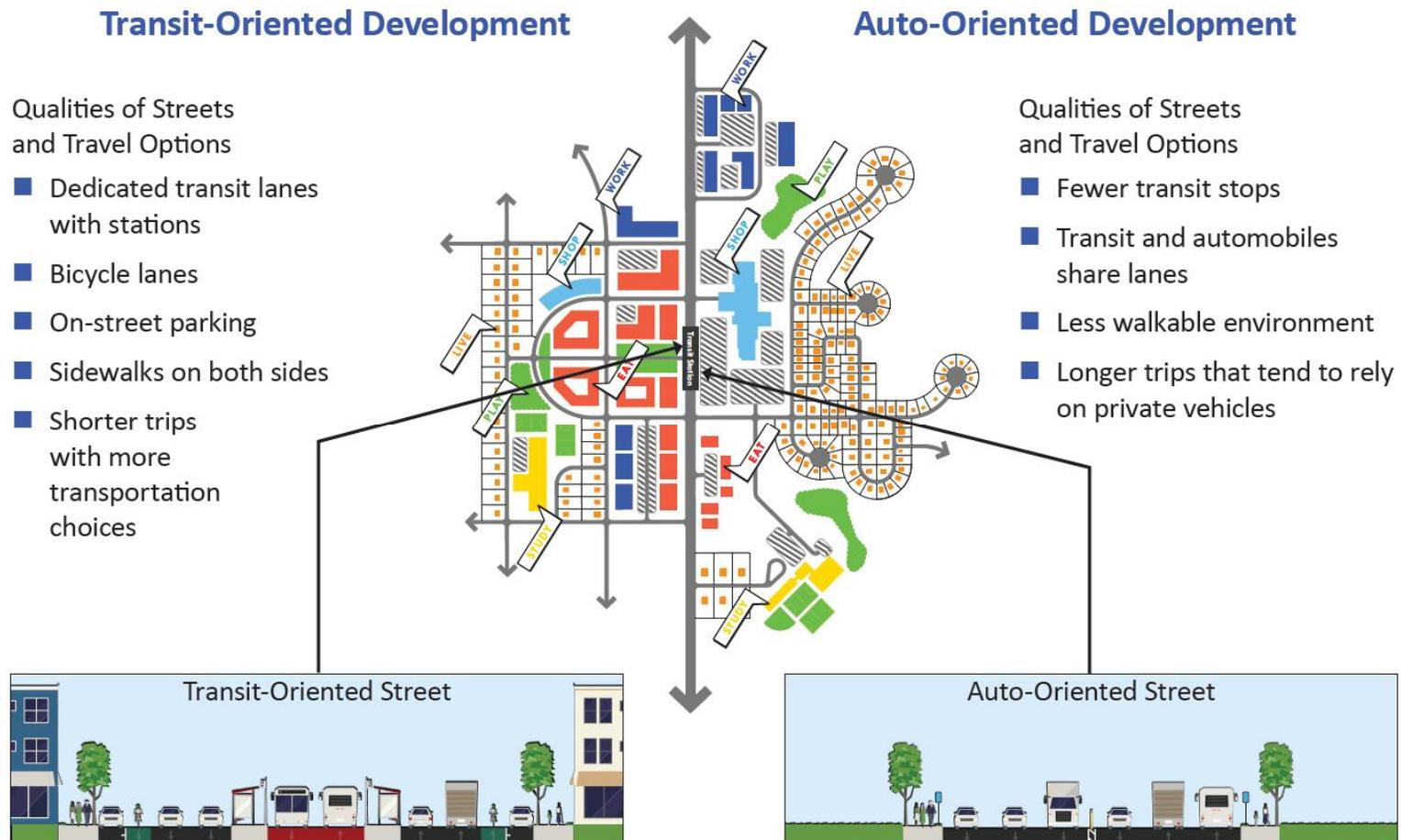
Forecasted Transit-Accessible Employment (MWCOC)



*The number of jobs within PRTC service area is among the highest of Northern Virginia bus systems and is expected to grow*

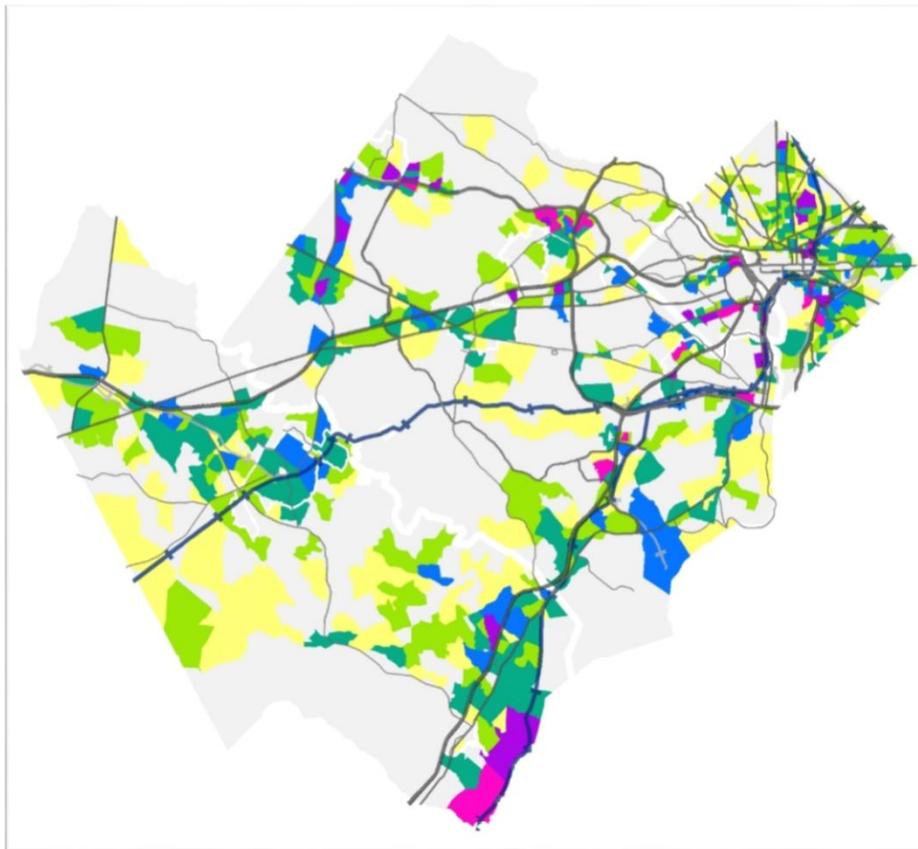


*Nationally, regionally, and locally, jurisdictions and private developers are favoring a transit-oriented, mixed-use development approach (decreased emphasis on cars)*





*Localities with high growth must continue to put in place firm policies linking transportation and land use*



**Forecast Increase in Activity (Jobs + People)**

**2015 - 2040**

- Fewer than 250
- 250 - 500
- 500 - 1,000
- 1,000 - 2,500
- 2,500 - 5,000
- 5,000 - 7,500
- More than 7,500

**1.38M**

forecasted new jobs and people within the PRTC bus service area by 2040

**69%**

forecasted growth in employment for PWC, Manassas, and Manassas Park

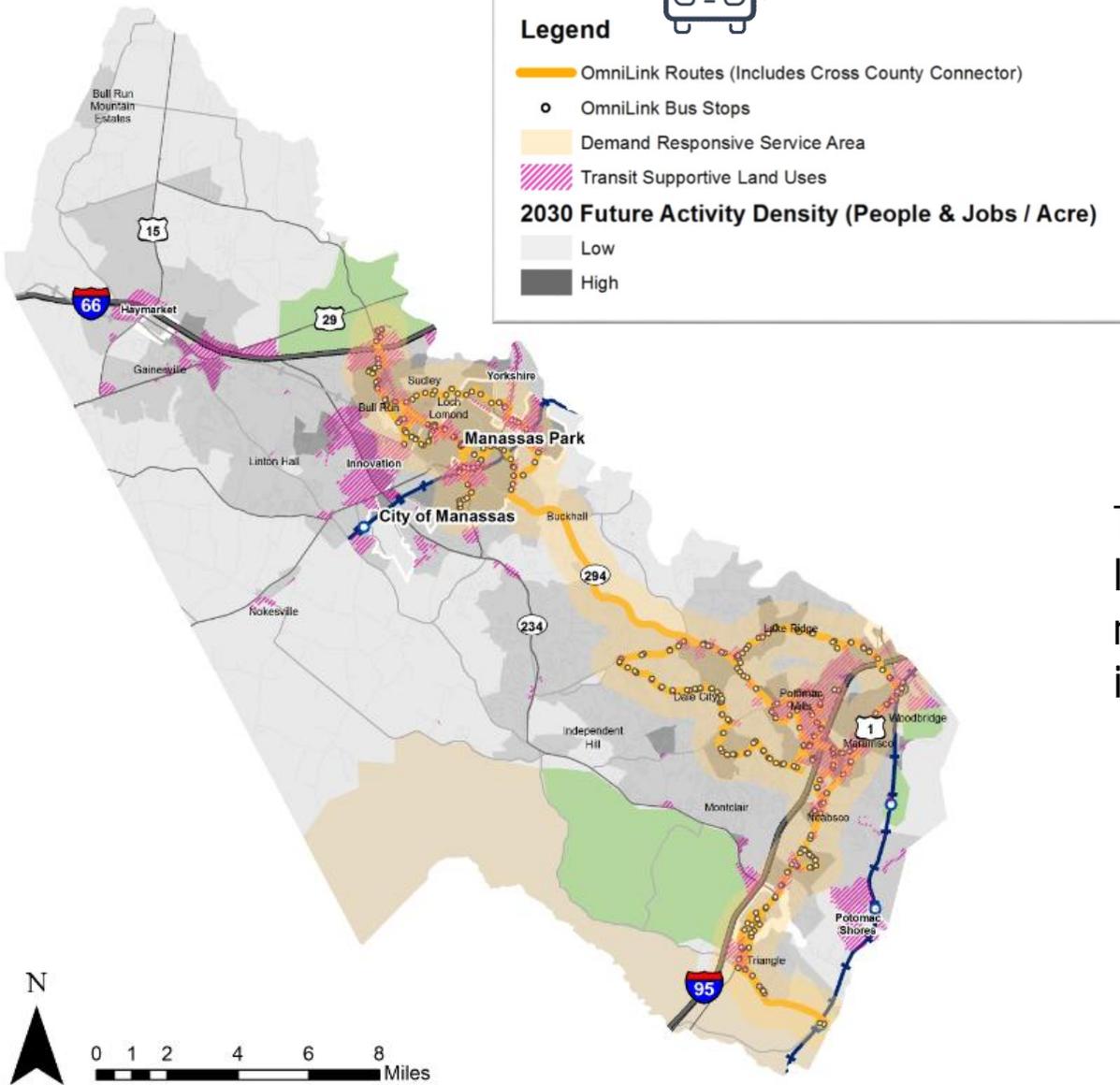
Source: MWCOG Round 8.4 Forecasts



*Local entities around the Northern Virginia Region, including Prince William County, are adopting design guidelines to foster transit oriented growth*

- Complete Streets
- Transit Service Level Requirements
- Lower Parking Minimums
- Enhanced Pedestrian and Bicycle Accommodation
- ADA Compliance





Transit-supportive areas in localities' future land use plans represent potential areas for increased transit service

