

If You Lived Here
You'd Be Driving Less by Now

Moving Forward Montgomery: The
Continuing Transformation of
America's Suburbs

May 9th, 2014



Mobility Lab™



ARLINGTON COUNTY COMMUTER SERVICES
Arlington Transportation Partners | The Commuter Store |
CommuterPage.com | CommuterDirect.com | Bike/Walk Arlington |
Car-Free Diet | Mobility Lab | Capital Bikeshare

SIMPLE SOLUTIONS
Planning & Design, LLC





Source: *Arlington Magazine*



Source: Unknown

Arlington County Commuter Services

TDM for Site Plans

Employer/Multi-Family/Developer Services



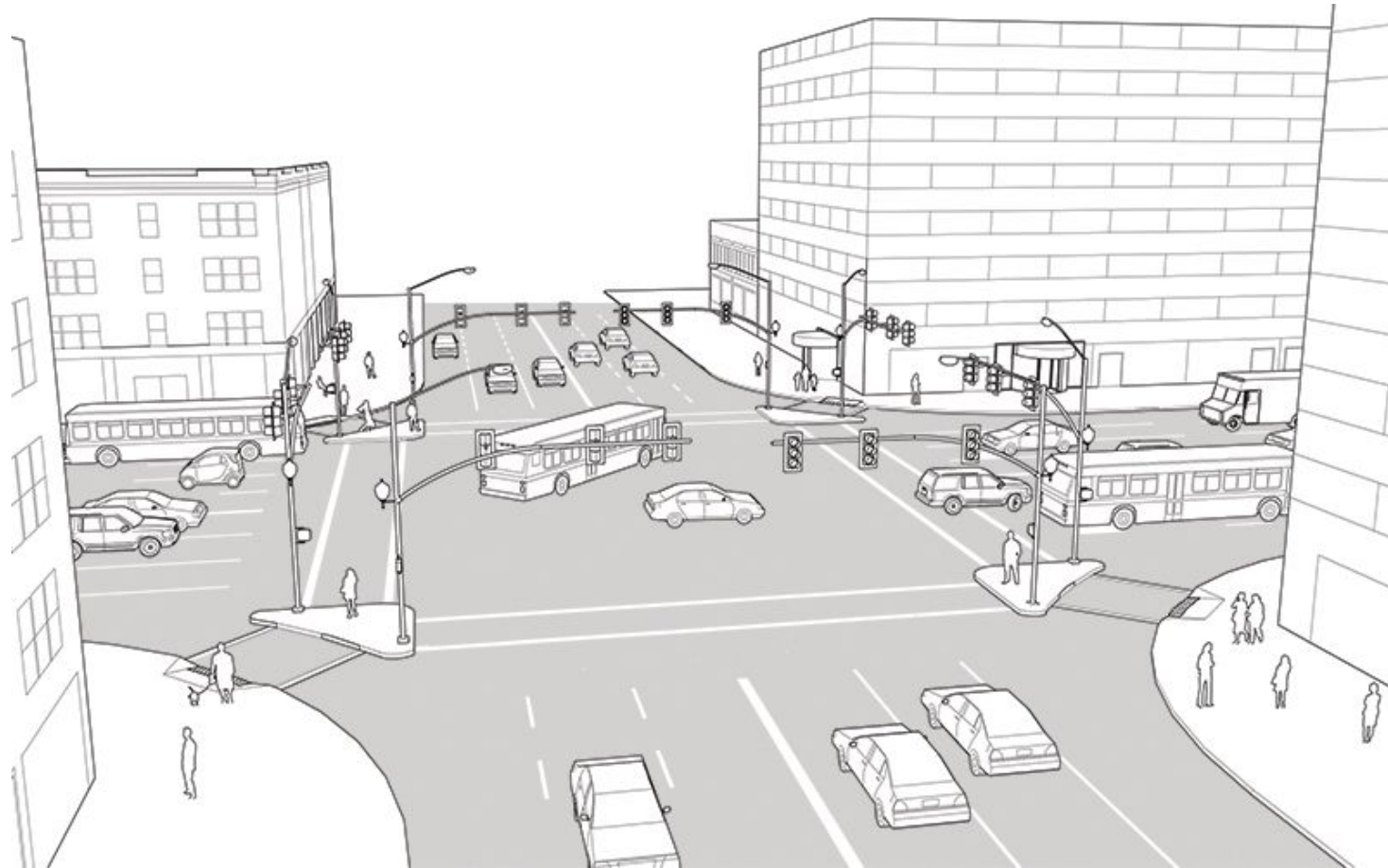
Direct Outreach, Information, and Sales



Bikeshare



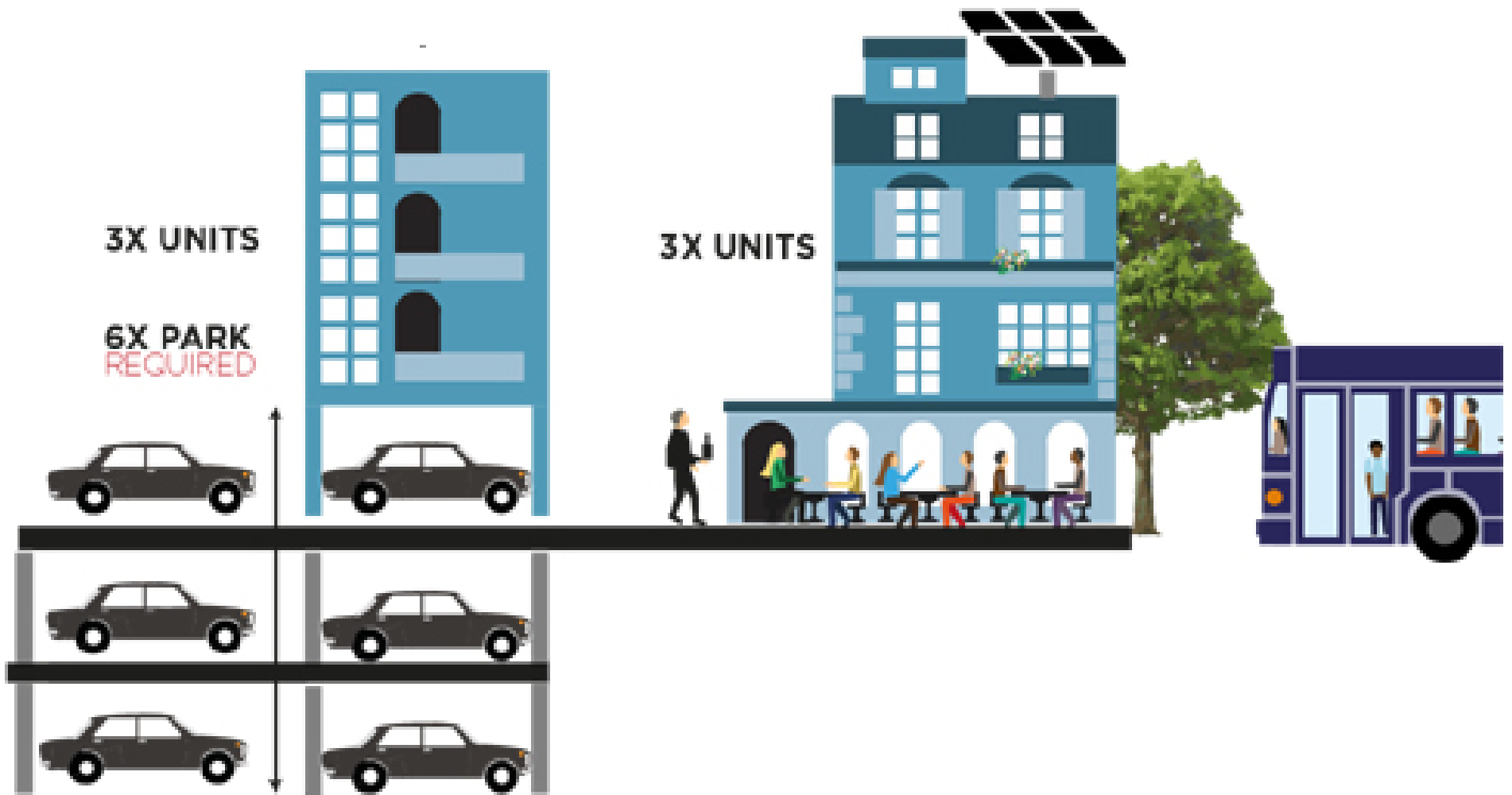
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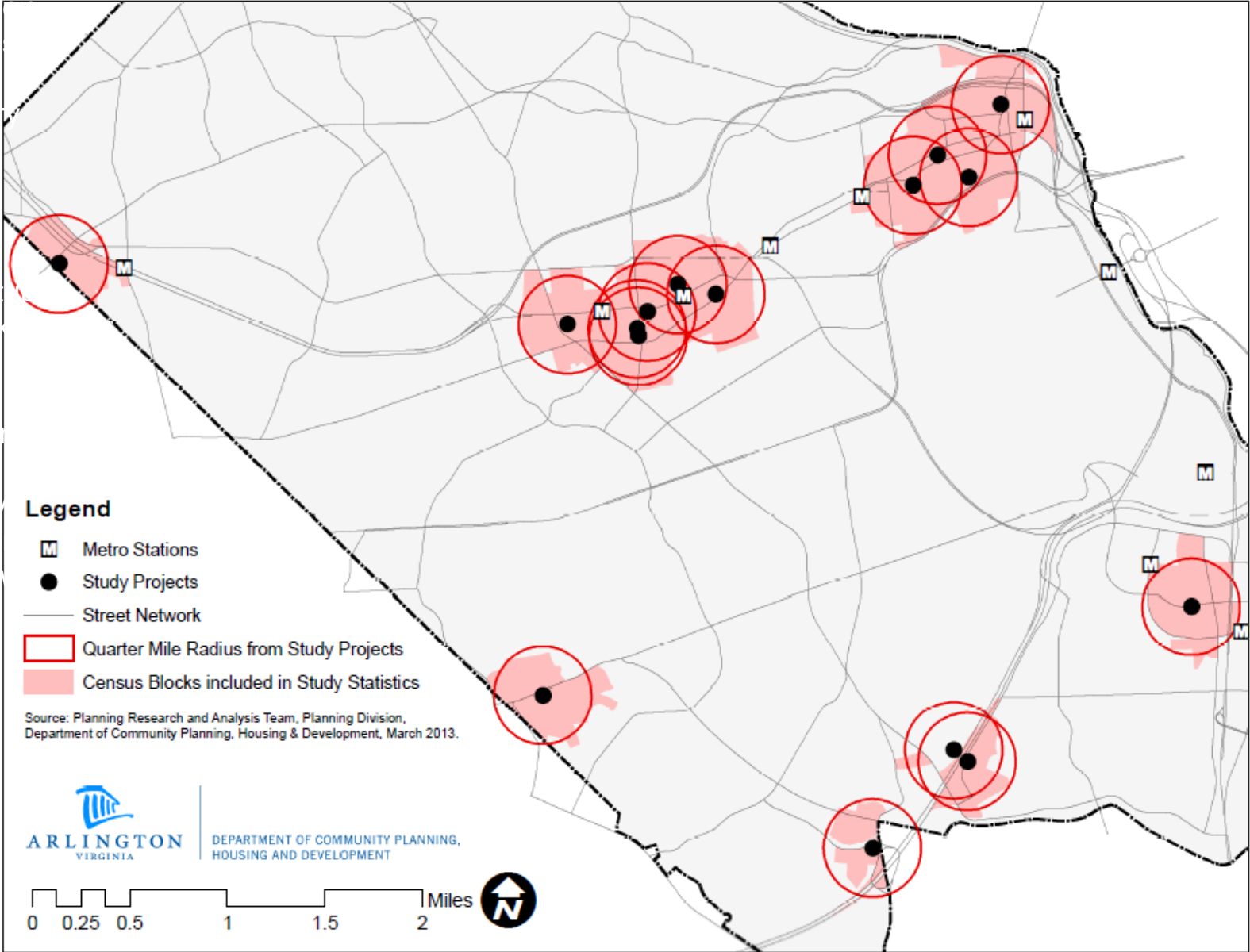
Source: NACTO *Urban Street Design Guide*; <http://www.nacto.org/usdg/>



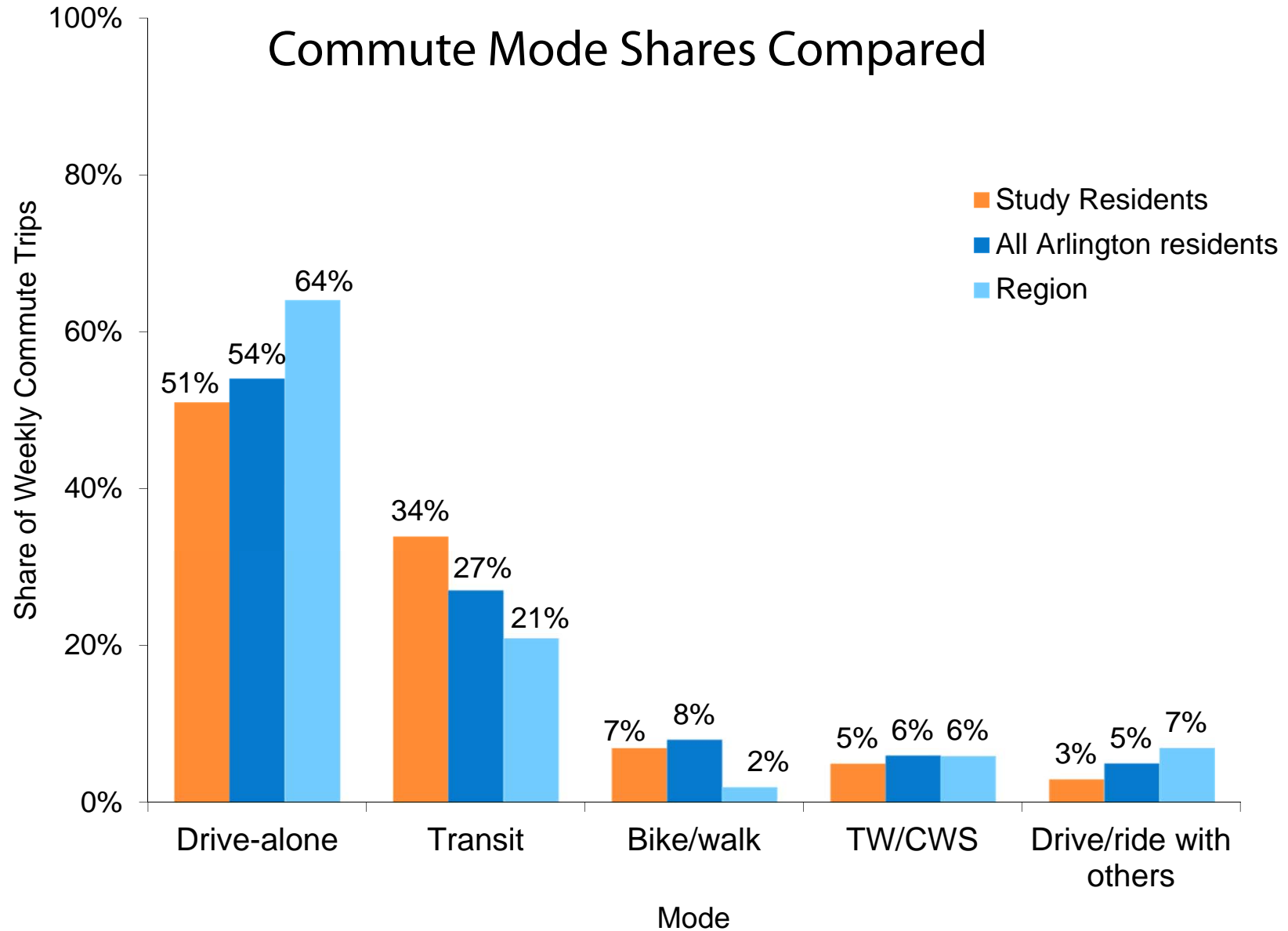
Source: NACTO *Urban Street Design Guide*; <http://www.nacto.org/usdg/>



Study Building Locations

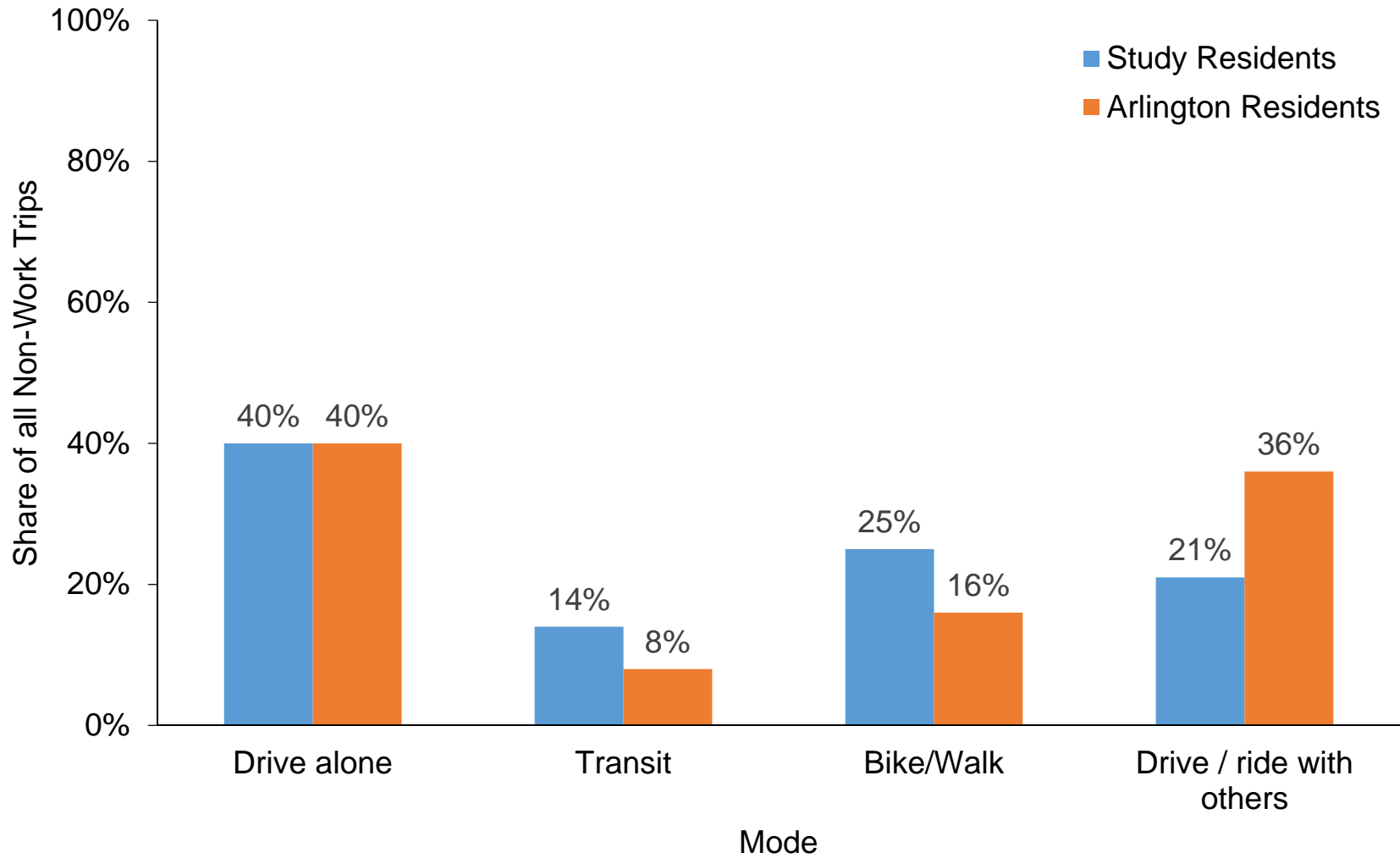


Commute Mode Shares Compared



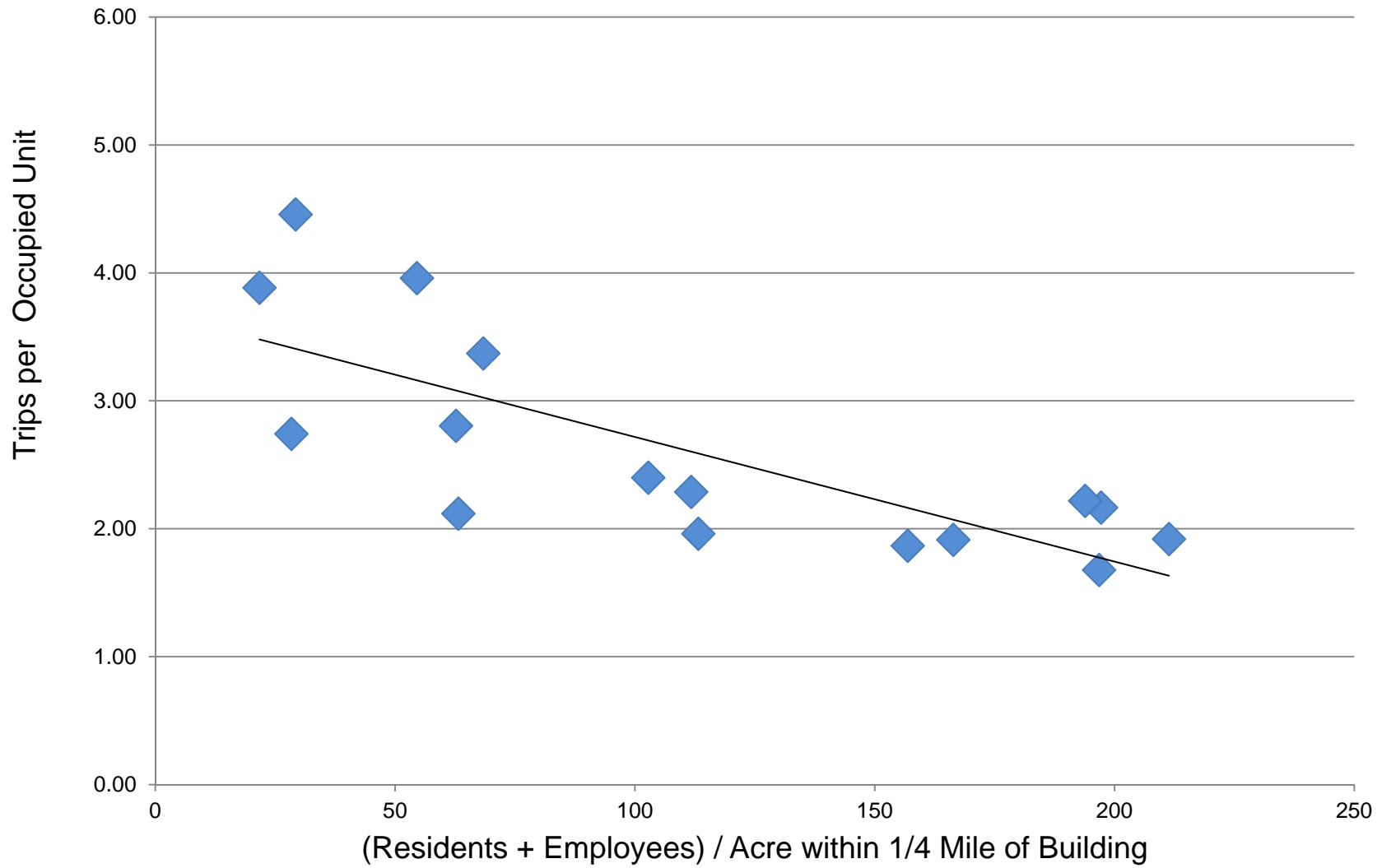
Sources: 2010 Metropolitan Washington Council of Governments *State of the Commute* Survey; Resident Surveys
Sample Sizes: Region, n = 6,050; Live in Arlington, n = 551; Study Buildings, n = 1,283

Non-Work Trip Mode Share

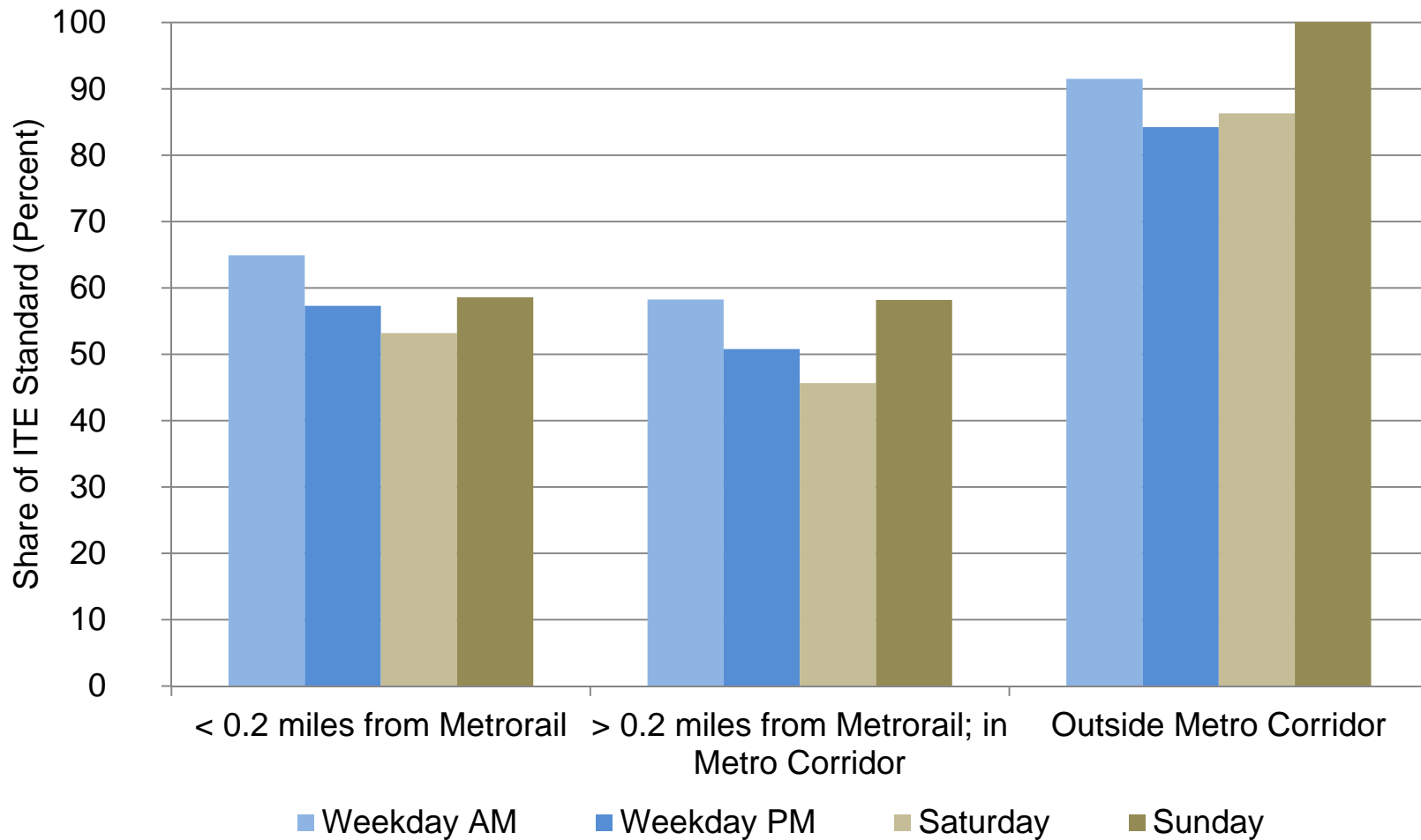


Source: Resident Surveys; 2009 Arlington Resident Survey

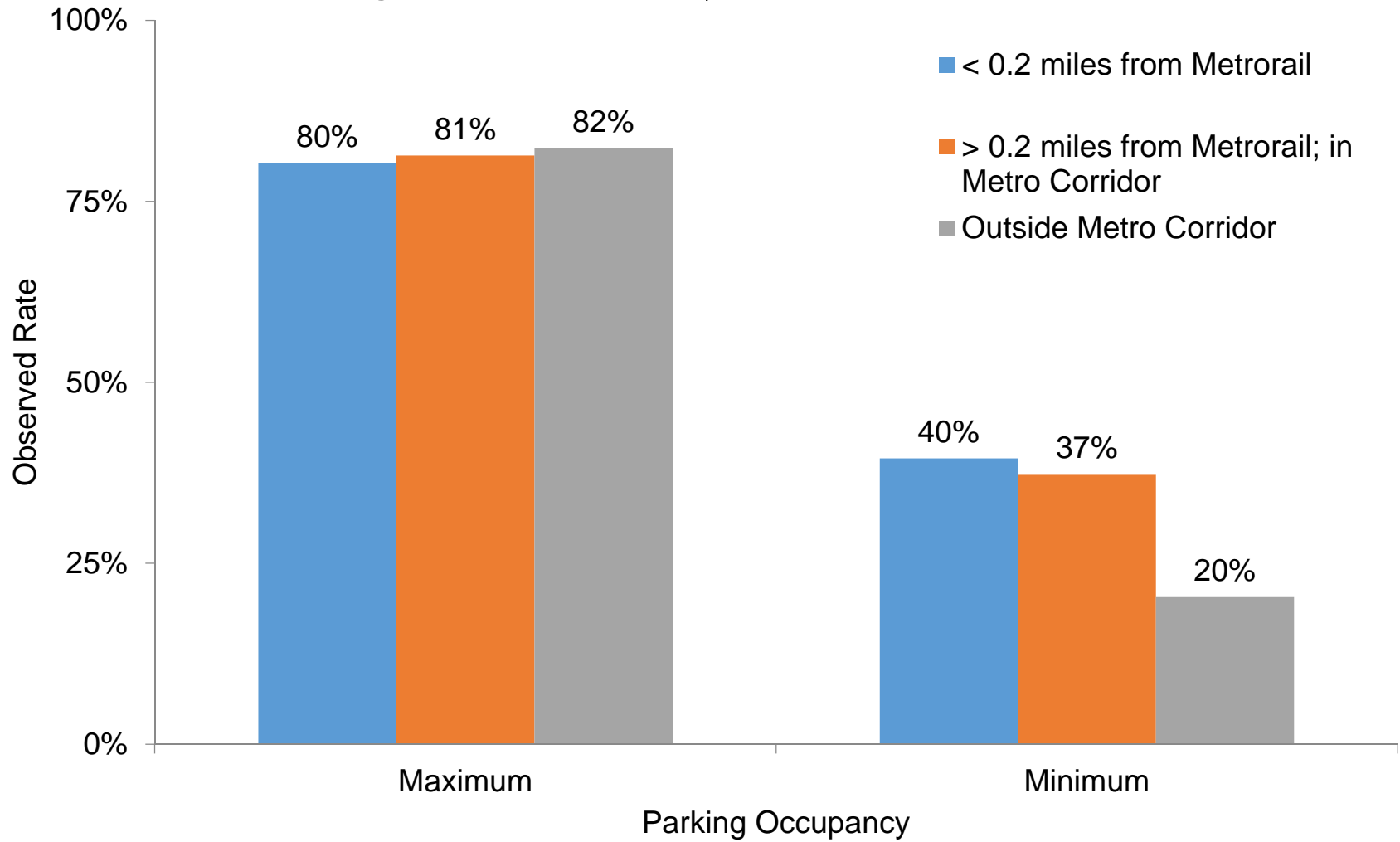
Daily Trips per Occupied Unit (Mon-Thurs) and Neighborhood Intensity



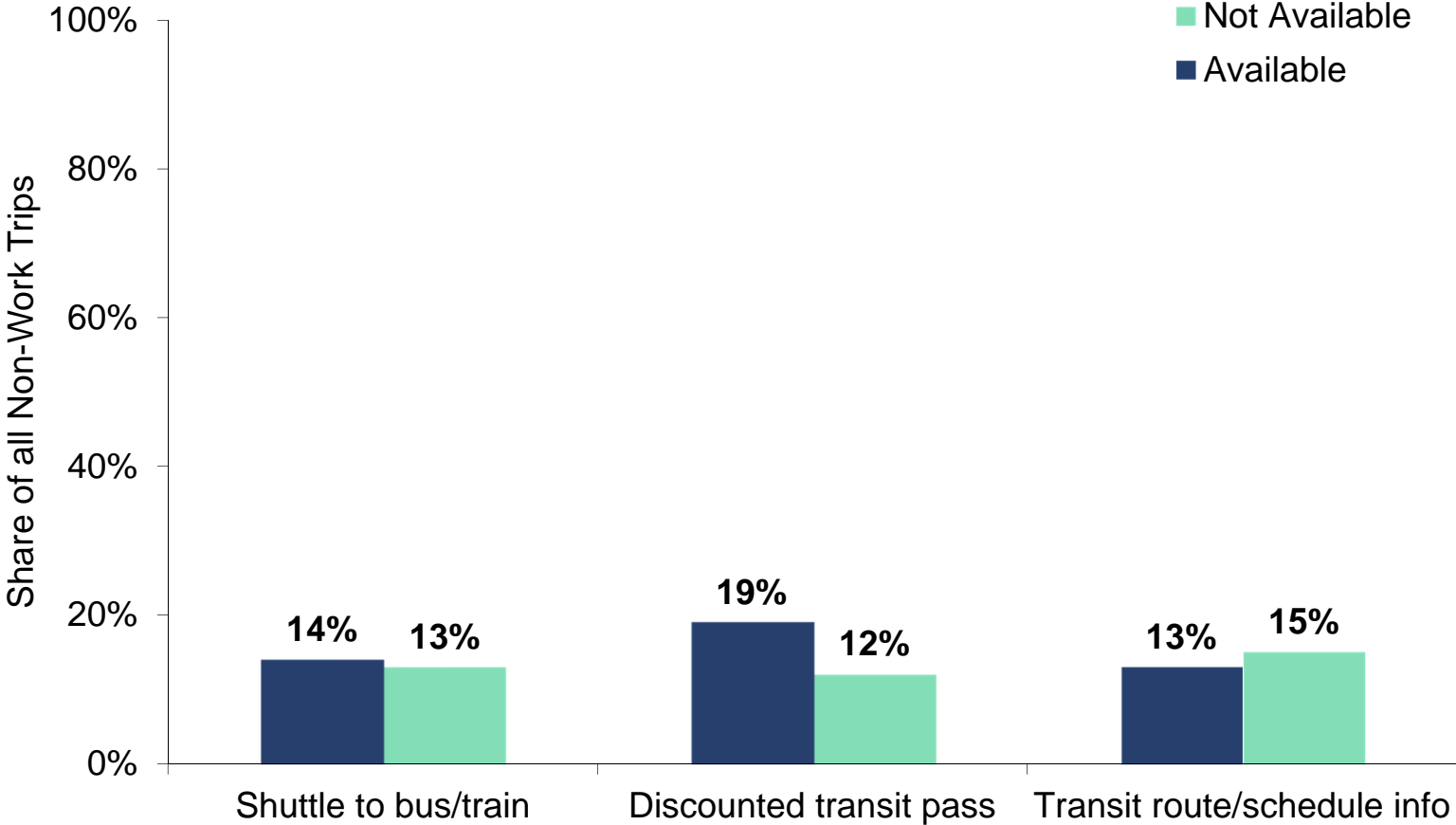
Observed Peak-Hour Vehicle Trip-Generation Rates Compared with ITE Standard Rates, Function of Distance from Metro



Garage Utilization by Distance to Metro



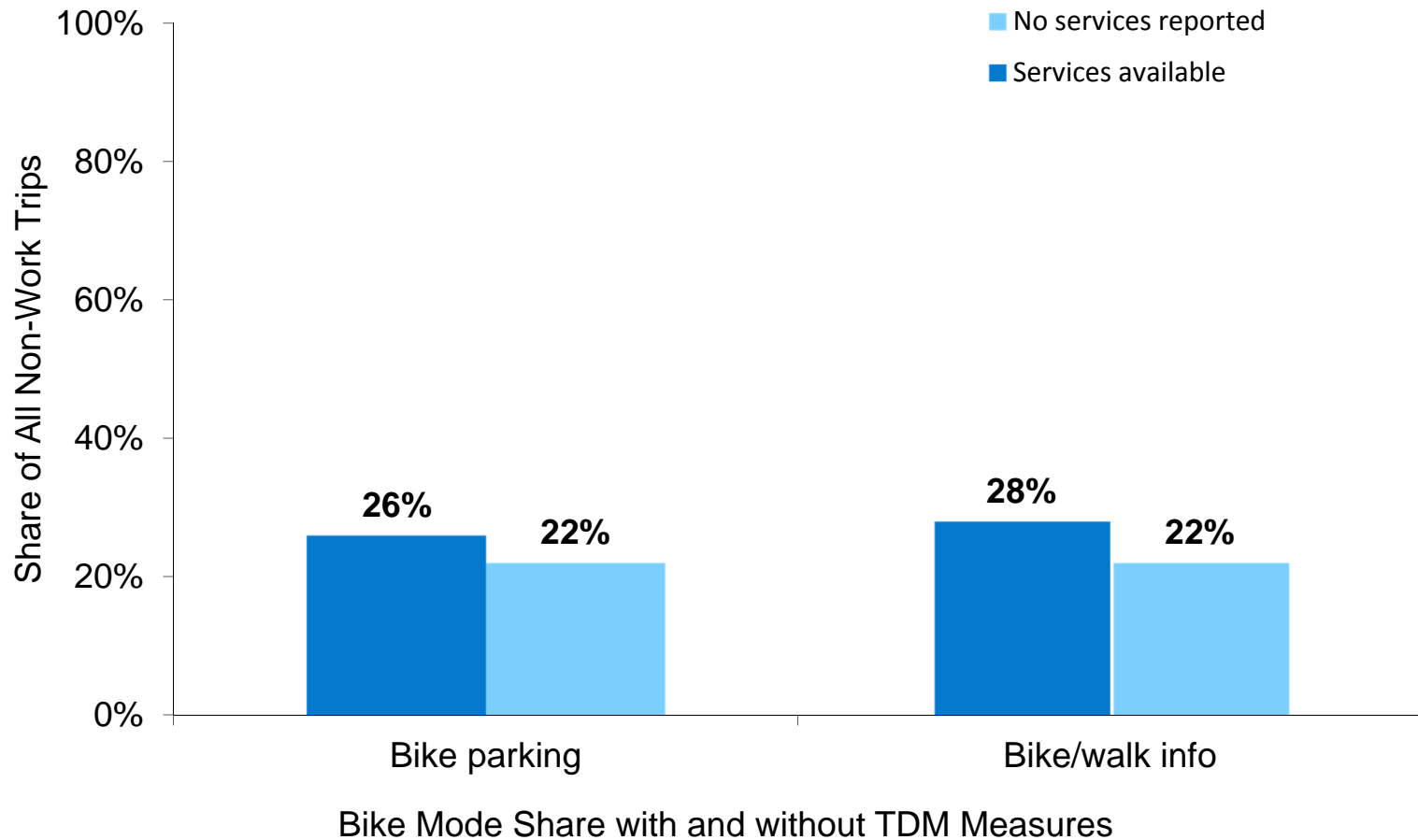
Transit-Focused TDM and Non-Work Mode Share



Transit Mode Share with and without TDM Measures

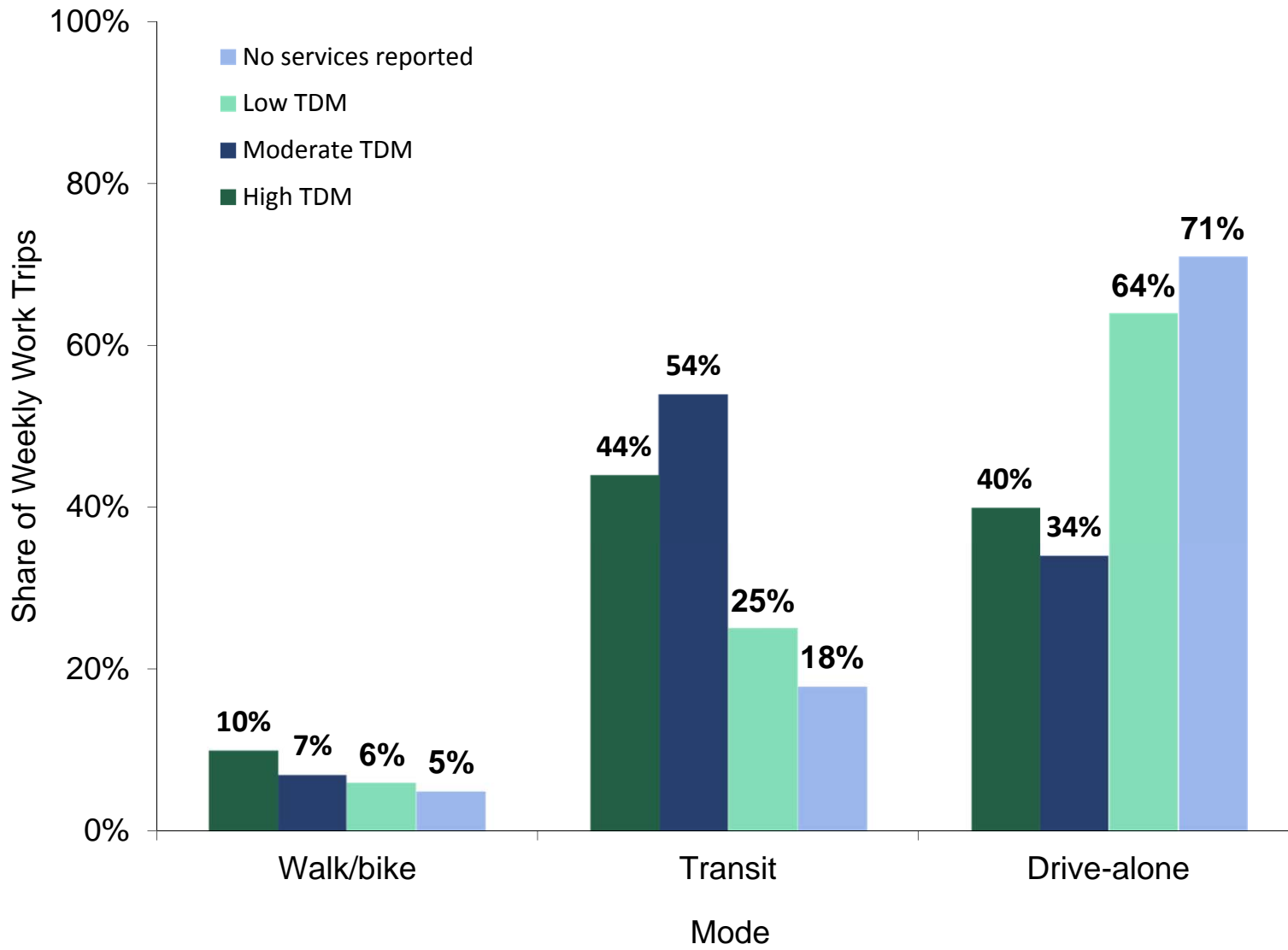
Survey Question Q26 Listed below are travel services or benefits that might be available at the building or in the complex where you live.... For each service or benefit, indicate ... if the service: is available and you have used it, is available and you have not used it, is not available – Transit schedule or route information; Shuttle

Biking/Walking TDM and Non-Work Mode Share



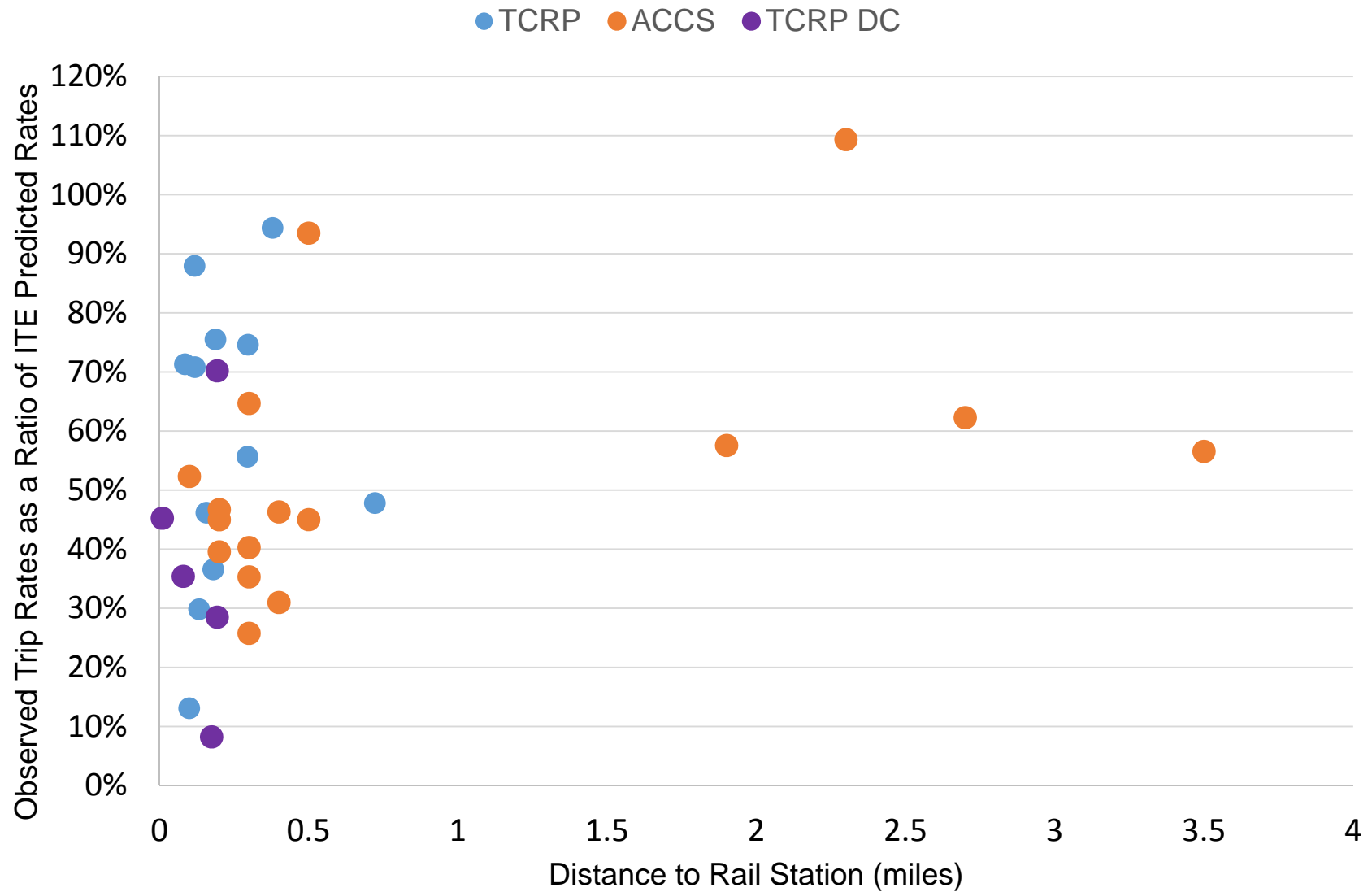
Q26 Listed below are travel services or benefits that might be available at the building or in the complex where you live.... For each service or benefit, indicate ... if the service: is available and you have used it, is available and you have not used it, is not available – Bicycle or walking information; Secure parking for bicycles

Work-Based TDM and Commute Mode Share

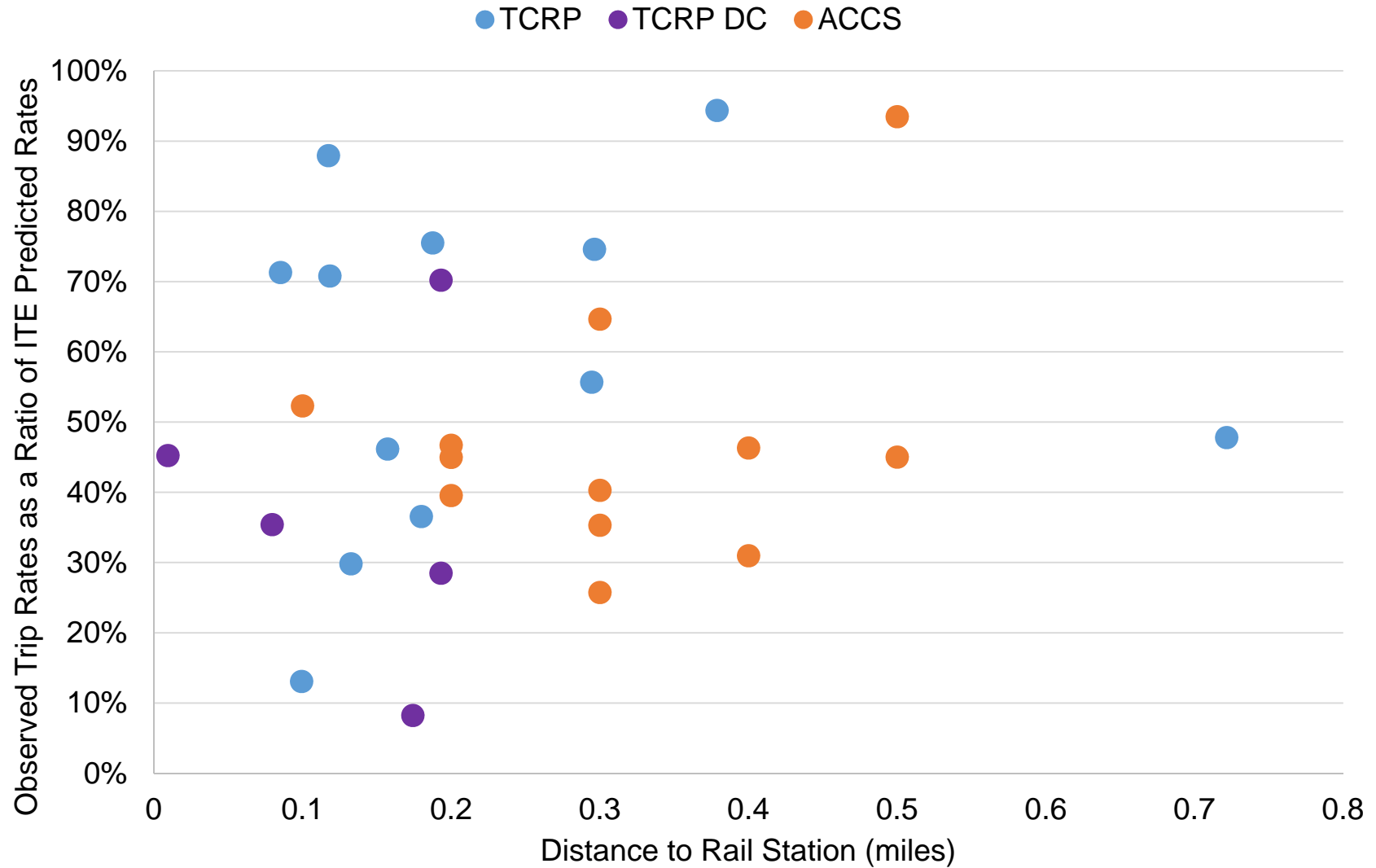


Q25 Listed below are travel services or benefits that might be available at your work. For each service or benefit, indicate ... if the service: is available and you have used it, is available and you have not used it, is not available.

Results from Trip-Generation Studies Compared



Results from Trip-Generation Studies Compared, Buildings Closer than One Mile to Rail



Takeaways

Our Findings

- Vehicle-trip generation lower than ITE predictions.
- Residents use transit, bike, and walk more than other Arlingtonians and regional residents.
- Work-based TDM and land use influence commute mode choice, while residential TDM influences non-work trips.

Implications

- Planning standards are important, but they might over-estimate vehicle trips and parking needs for your development
- TDM mandates help with data collection
- Join the effort to make better standards.

Thank You

Contact me, Stephen Crim, at
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Visit our web site: <http://www.mobilitylab.org>

Twitter: [@mobilitylabteam](https://twitter.com/mobilitylabteam)

Facebook: <https://www.facebook.com/MobilityLabTeam>

Meetup: <http://www.meetup.com/MobilityLab/>

Resources

- Arlington *Residential Building Transportation Performance Monitoring Study*: <http://mobilitylab.org/2013/10/10/residential-building-transportation-performance-monitoring-study/>
- DDOT Study: <http://tiny.cc/DDOT-trip-gen>
- TCRP Report 128:
https://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_128.pdf

Appendix: Building Sample Characteristics

- 3,700 occupied dwelling units (96%)
- 4,840 total parking spaces, all types
- 1.04 – 1.55 residential parking spaces per unit (not including visitor/retail spaces)
- Over 38,000 trips counted
- 11 sites within Metrorail corridors, 5 outside
- 3 sites outside the Metrorail corridors offer shuttle to Metro or ongoing transit subsidy
- East Falls Church is considered outside Metrorail corridors for purposes of this study