



Northern Virginia Transportation Authority

The Authority for Transportation in Northern Virginia

PLANNING AND PROGRAMMING COMMITTEE

Monday, November 1, 2021, 5:00 p.m.

NVTA Office

3040 Williams Drive, Suite 200

Fairfax, Virginia 22031

The meeting will be livestreamed on [NVTA's YouTube Channel](#)

AGENDA

- I. Call to Order/Welcome** Chair

Action

- II. Summary Notes of October 4, 2021, Meeting**
Recommended action: Approve meeting notes

- III. Approval of Goals, Objectives, and Performance Measures for TransAction Update**
Mr. Jasper, Principal, Planning & Programming
Recommended action: Recommend NVTA approval of the TransAction Goals, Objectives, and Performance Measures

Discussion/Information

- IV. TransAction Online Survey: Interim Findings**
Mr. Harrington, Cambridge Systematics, Inc.
- V. TransAction: Preliminary Discussion on Weightings for Performance Measures**
Mr. Jasper, Principal, Planning & Programming
- VI. NVTA Update** Ms. Backmon, CEO

Adjournment

- VII. Adjourn**

Next Meeting: November 29, 2021 at 5:00 p.m.



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PLANNING AND PROGRAMMING COMMITTEE

Monday, October 4, 2021, 5:00 p.m.

Northern Virginia Transportation Authority

SUMMARY NOTES

I. Call to Order/Welcome

- Chairman Wilson called the meeting to order at 5:10 p.m.
- Attendees:
 - **PPC Members:** Mayor Wilson (City of Alexandria); Council Member Snyder (City of Falls Church); Mayor Rishell (City of Manassas Park); Chair Wheeler (Prince William County).
 - **Other NVTa Members:** None.
 - **NVTa Staff:** Monica Backmon (CEO); Keith Jasper (Principal); Sree Nampoothiri (Senior Transportation Planner).
 - **Jurisdiction/Agency Staff:** Proceedings were livestreamed on YouTube Live.
 - **Others:** Dalia Leven (Cambridge Systematics).

Action

II. Summary Notes of July 12, 2021, Meeting

- The July 12, 2021, Planning and Programming Committee meeting summary was approved unanimously.

Discussion/Information

III. TransAction: Public Engagement Activities

- Mr. Jasper updated the Committee on various public engagement activities carried out and ongoing regarding the TransAction update. Activities included online survey, focus group meetings, live chat sessions, pop-up events, etc.
- Online survey conducted in English, Spanish, and Korean received more than 2300 responses from Northern Virginia jurisdictions and surrounding localities including from District of Columbia, Maryland, and other counties in Virginia. Detailed survey results are being analyzed.
- In-person pop-up events were held at locations where we could reach out to equity population to encourage participation. In response to Mayor Rishell's question on the criteria to select certain languages to be supported at the pop-up events, Mr. Jasper noted that the languages were selected by most languages other than English spoken in the nearby areas and people frequented the locations several of which were ethnic shopping areas.

- Four live chat sessions were held by NVTA staff via TransAction website on an experimental basis.
- A stakeholder group is being finalized to communicate with organizations representing citizens and businesses to amplify NVTA's messaging and get feedback on NVTA activities. The group includes organizations such as civic groups, advocacy groups, chambers of commerce, etc. First meeting with the stakeholder group is being planned for end of October 2021.
- In response to Mayor Wilson's question on providing group contacts to the NVTA staff, Mr. Jasper encouraged members to provide details of any groups they are aware of and interested to be part of.
- Eight focus groups totaling 95 participants from a combination of segments such as geographic, equity population, people with and without transit access, age groups, gender, etc. were conducted. Discussion topics included current and future travel trends, core values, priorities, transportation improvements, and emerging travel options. The discussions tried to explore not only their choices but the reasons behind their choices. Main findings from the discussions included:
 - Single occupancy vehicles were chosen as preferred mode for their reliability and flexibility.
 - People without access to transit were willing to explore public transportation if available and understood better.
 - High housing prices near metro stations were pointed out as a concern.
 - The core value of 'equity' was understood as fairness; 'sustainability' as maintenance of infrastructure rather than the environmental concerns; and 'safety' as safety from accidents as well as from crimes.
 - Highest priority across the board was reducing congestion while those without Metro access gave priority to expanding transportation choices.
 - Building new/widened roads was the primary improvements people chose.
 - The range, availability of charging stations, and price of vehicles were the main concerns noted regarding electric vehicle adoption.
- Council Member Snyder noted that the people may consider priority based on what mode they use in short-term and need to explore further to make people think about medium- and long-term needs/priorities.

IV. TransAction: Goals, Objectives, Measures

- Mr. Jasper noted that the Committee is expected to continue discussion of this topic and take action to recommend goals, objectives, and measures to the Authority only at the next meeting. Ms. Leven added that the Committee will need to act on weights after the November Authority meeting.
- Ms. Leven walked the Committee through the approved vision as well as the core values of equity, sustainability, and safety. She noted the feedback received from various committees and how the staff incorporated them. The rationale for feedback being not incorporated were also presented. She noted the revised wording for goals and objectives based on the feedbacks.

- Council Member Snyder requested to add alignment of the goals/objectives with the core values, particularly to the core value of sustainability.
- In response to Mayor Wilson’s question on the need for stratifying Vehicle Miles Traveled (VMT) by speed, Ms. Leven noted that the level and type of emissions depend on speed of vehicles.
- Council Member Snyder opined that greenhouse gas (GHG) emissions need to be included in the analysis. He encouraged to investigate ways to meet the GHG goals for the region. Chair Wheeler reminded that while it is a great goal, that is not the only priority for NVTa. She added that as per enabling legislation, reducing congestion is the primary objective for NVTa and other priorities can be considered as parts of the other priorities.
- Council Member Snyder encouraged to think beyond the urban and suburban/rural differences about VMT. Mayor Wilson encouraged to think about ways other than VMT too to measure emissions. Chair Wheeler agreed and noted that there is a negative connotation with VMT though it may not be bad depending on the situation. Ms. Leven noted that VMT is being considered as a proxy for emissions and not being used itself as a measure.
- In response to the discussion about the measure access to jobs, Ms. Leven elaborated that this measure is primarily looking at the access to jobs, but it is also a proxy on other type of trips since places like malls, and medical offices tend to be places with job concentrations too.
- Mayor Wilson wanted to see how “optionality” (multi-modal options for travelers during an emergency) can be considered as part of resiliency. Ms. Leven noted that that such modal redundancy can be captured but will be complex.

V. NVTa Update

- Ms. Backmon noted that the next Authority meeting is scheduled for October 14, 2021. The Authority will receive a presentation from Virginia Department of Transportation (VDOT) on the progress of projects funded with I-66 Outside the Beltway Concessionaire funds. The Authority is also expected to issue call for projects for the FY2028 CMAQ/RSTP funds. She noted that the application deadline for the FY2022-2027 Six Year Program (SYP) was closed as of October 1, 2021. NVTa staff is reviewing them for completeness and eligibility. A TransAction Work Session for the Authority members is planned for October 28th where this discussion can continue among Authority members. The ribbon cutting for the W&OD dual trail project in City of Falls Church is scheduled for October 6th.

Adjournment

VI. Adjourn

- The next two meetings will be on November 1 and November 29. The meeting adjourned at 7:15 p.m.

TransAction Update

Recommended Goals, Objectives, and Performance Measures

November 1, 2021

presented to

Planning and Programming Committee



NVTA's
TransAction
*Transportation Action Plan
for Northern Virginia*



Agenda

- III. Goals, Objectives, and Performance Measures for TransAction Update
- IV. TransAction Online Survey: Interim Findings
- V. TransAction: Preliminary Discussion on Weightings for Performance Measures

Goals, Objectives & Measures



NVTA's
TransAction
*Transportation Action Plan
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Development & Approval Process

Schedule for Approval of Goals, Objectives, Performance Measures & Weights




- » June: Identification of relevant questions to include in public engagement efforts
- » July: Initial discussions with NVTA committees (PPC, TAC, PCAC)
- » Summer: Public Engagement
- » September: Discuss preliminary results of public engagement with NVTA committees; additional discussion with NVTA committees on goals, objectives, and measures
- » October: NVTA committees recommend goals, objectives, and performance measures to NVTA for action in November
- » November: NVTA committees recommend weights to NVTA for action in December

Goals and Core Values

» Goals: What we want to Achieve

- Enhance Mobility
- Increase Accessibility
- Improve Resiliency

» Core Values: How we want to achieve them

- Equitably 
- Sustainably 
- Safely 

Core Values are associated with multiple goals, objectives, and performance measures.



Objectives & Performance Measures

» Objectives:

- Measurable and targeted actions that result in incremental but tangible advancement towards the goals

» Performance Measures:

- Will be used to evaluate the impacts of policies, programs, projects, and scenarios affecting the transportation system and measure progress towards goals and objectives
- Each performance measure can be weighted differently (to be determined later in the Fall) to reflect the region's priorities

» Performance Measures should:

- Incorporate all modes and project types
- Reflect Core Values
- Be restricted in number to ensure a strong focus on the region's priorities
- Be readily capable of robust and consistent measurement
- Be relatively easy to communicate to, and understood by, the public



Changes Based on Committee Feedback

- » Add a method of analyzing non-motorized projects or aspects of projects for the mobility goal
 - Action: Measures under Objective A: Reduce congestion and delay accounts for reductions related to increases in biking, walking, and transit use
- » Move emissions reduction objective from Mobility to Resiliency goal
 - Action: Emissions moved to Resiliency (see Objective F)
- » Add bicycle accessibility to Objective C: Improve Access to Jobs
 - Action: Performance Measures updated to include bike access to jobs
- » Make the emissions performance measure more explicitly related to emissions. Replace the emissions performance measure with VMT.
 - Action: Performance measure updated to reflect transportation related emission. This is based on VMT at different levels of congestion.
- » Include Pedestrian and Bike modes in the safety measure
 - No Action: safety improvements for all modes are included in the measure.
- » Include a measure of network redundancy under the Resiliency Goal
 - Action: Updated performance measure for Objective G to represent redundancy.



Other Feedback from Committees

- » Include a method for supporting investment in RACs.
 - No change: Improvements in RACs will be considered in Objective D, but all improvements are considered to account for differences in how RACs are defined across the region
- » Add access to other types of destinations to Accessibility Goal
 - No change: Jobs serve as a proxy for a wide range of destination types
- » Change emissions objective to account for all emissions, not just transportation emissions.
 - No change: TransAction is a transportation plan and analysis can only measure transportation emissions.
- » Consider including wait time in calculation of transit delay.
 - No change: Wait time is an expected part of transit travel. Also, increases in transit ridership will increase total wait time, resulting in more transit delay.



Proposed Goals, Objectives & Measures

Goal	Objective	Performance Measure	Alignment with Core Values
Mobility: Enhance quality of life of Northern Virginians by improving performance of the multimodal transportation system	A. Reduce congestion and delay*	A1. Total Person-Hours of Delay in autos	
		A2. Total Person-Hours of Delay on Transit	
	B. Improve travel time reliability*	B1. Duration of Severe Congestion	
		B2. Transit person-miles in dedicated/priority ROW	
Accessibility: Strengthen the region's economy by increasing access to jobs, employees, markets, and destinations for all communities	C. Improve access to jobs*	C1. Access to jobs by car, transit, and bike	
		C2. Access to jobs by car, transit, and bike for EEA populations	
	D. Reduce dependence on driving alone by improving conditions for people accessing transit and using other modes	D1. Quality of access to transit and the walk/bike network	
Resiliency: Improve the transportation system's ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.	E. Improve safety and security of the multimodal transportation system	E1. Potential for safety and security improvements	
	F. Reduce transportation related emissions	F1. Vehicle Emissions	
	G. Maintain operations of the regional transportation system during extreme conditions*	G1. Transportation System Redundancy	

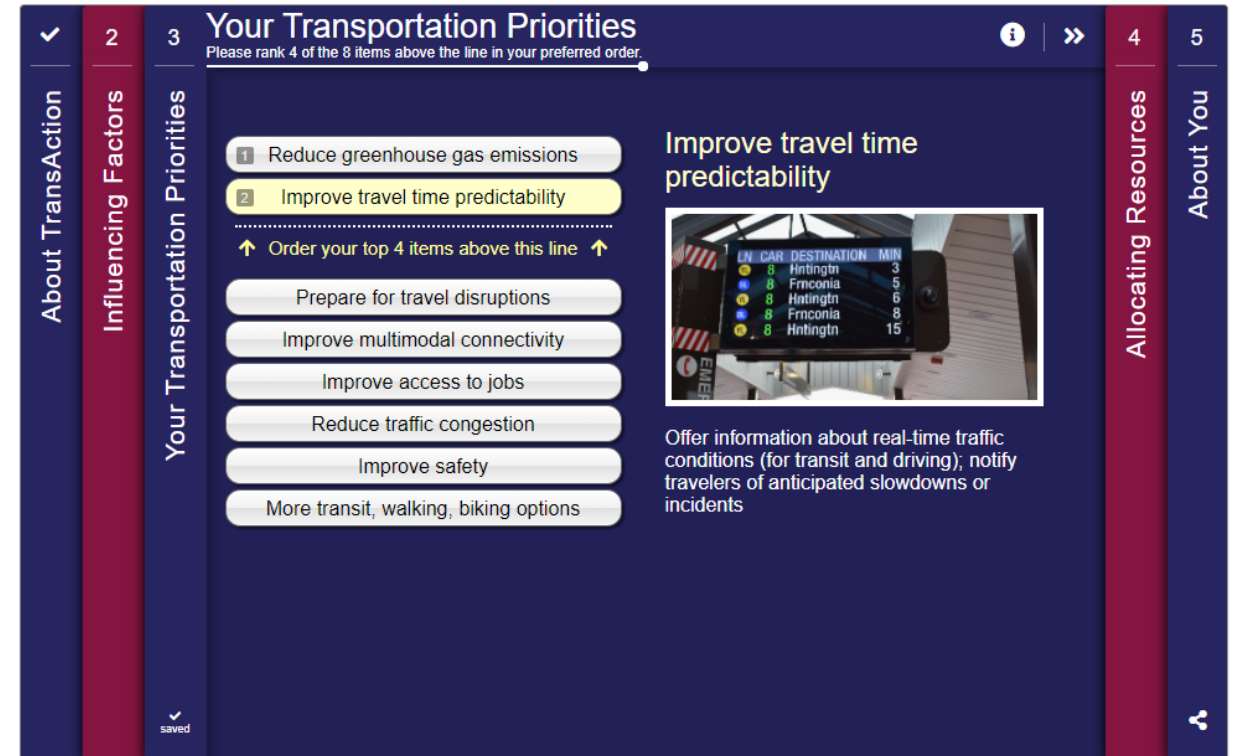
TransAction Online Survey: Interim Findings



2021 TransAction Survey

- » Purpose: to seek feedback on travel behaviors, transportation needs and priorities
- » Format: MetroQuest platform utilizing interactive “gamified” exercises
- » Available languages: English, Korean, and Spanish
- » Dates: August 6th - September 19th
- » Responses:
 - English: 2,164
 - Korean: 89
 - Spanish: 65*
 - TOTAL: 2,318

* At pop-up events, 123 Spanish speakers received assistance completing the survey in English



1 Reduce greenhouse gas emissions

2 Improve travel time predictability

↑ Order your top 4 items above this line ↑

Prepare for travel disruptions

Improve multimodal connectivity

Improve access to jobs

Reduce traffic congestion

Improve safety

More transit, walking, biking options

Improve travel time predictability

Offer information about real-time traffic conditions (for transit and driving); notify travelers of anticipated slowdowns or incidents

The survey did not apply a random sample recruitment method. Therefore, the sample does not statistically represent the population of the NVTa region.

Encouraging Survey Participation

- » Range of engagement activities used to “get the word out” about the survey
- » Traceable links show where participants heard about the survey:

Source	Number of Responses
Website	691
Stakeholder outreach	405
Pop-up events	351
General (not traceable)	252
Paid social media	206
Newsletter	166
LinkedIn	92
Twitter	89
Facebook	65
Geofenced ads	1
Instagram	0

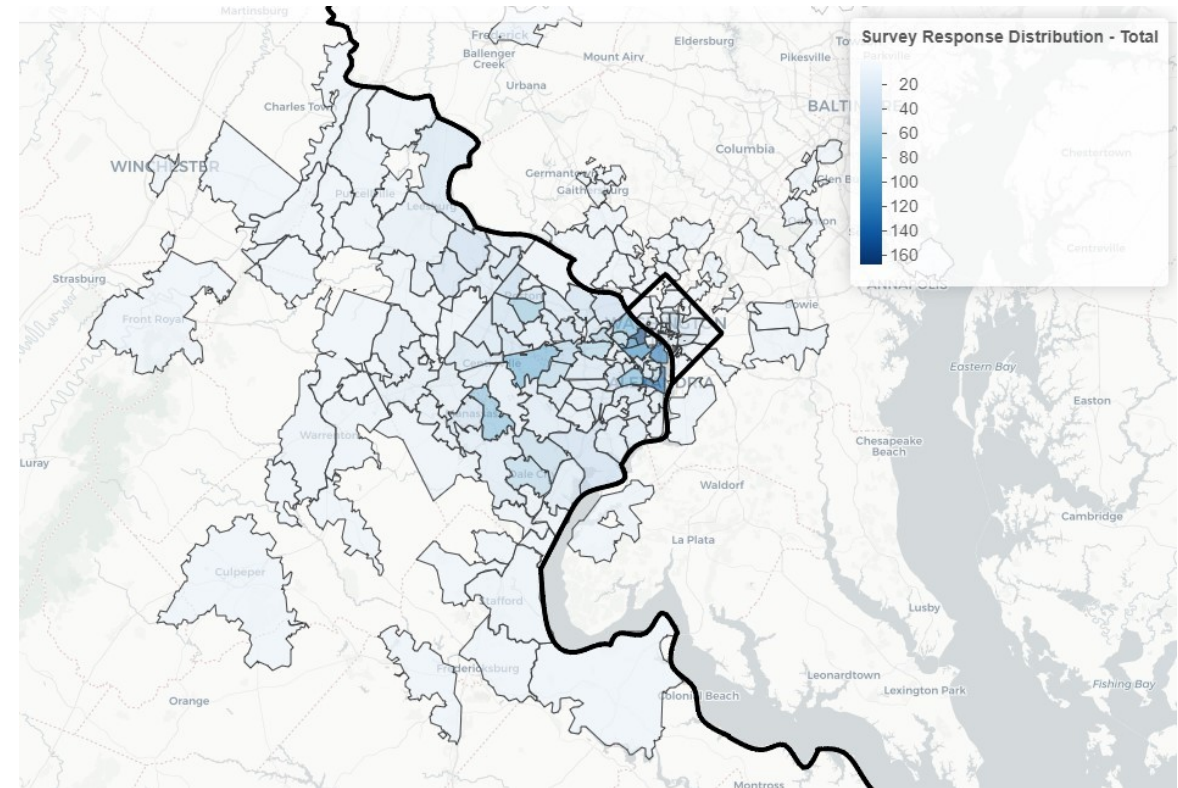


About the Survey Respondents

Counties	Total Responses	NVTA Region Responses
Arlington County + Alexandria City + Falls Church City	41.0%	43.3%
Fairfax County + Fairfax City	35.4%	37.5%
Loudoun + Prince William + Manassas City + Manassas Park City	18.2%	19.2%

Demographics:

- » 12% from households with less than 50k in annual income
- » 31% identified as non-white or Hispanic/Latinx
- » 19% were people 65 years or older

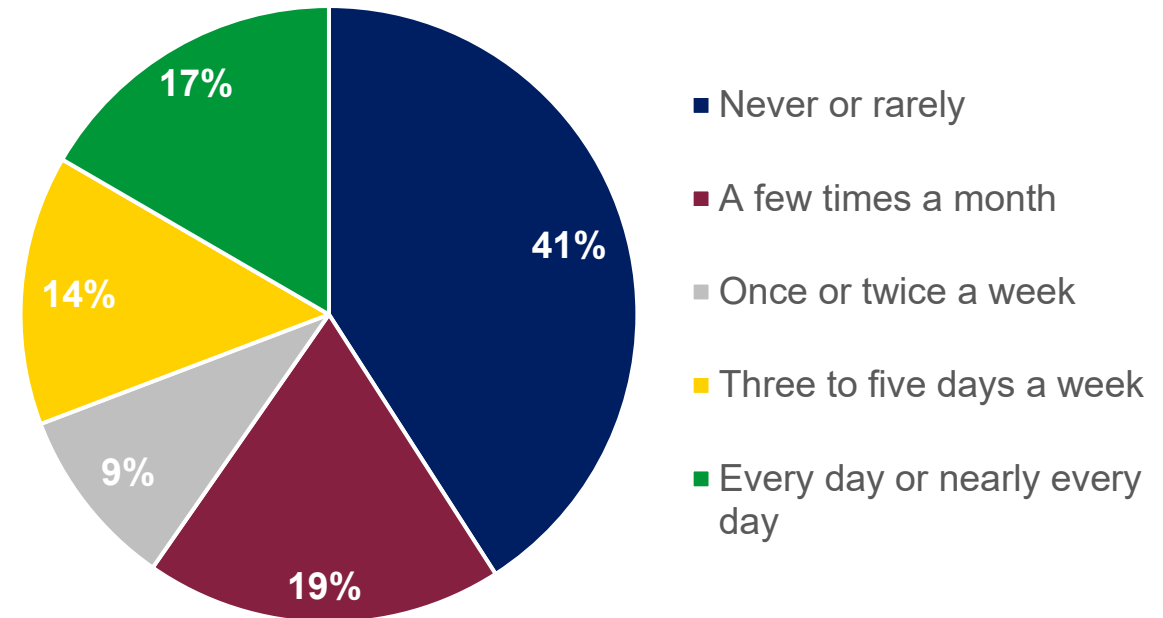


Map of Home Zip Codes of Survey Respondents

Survey Results – Travel Characteristics

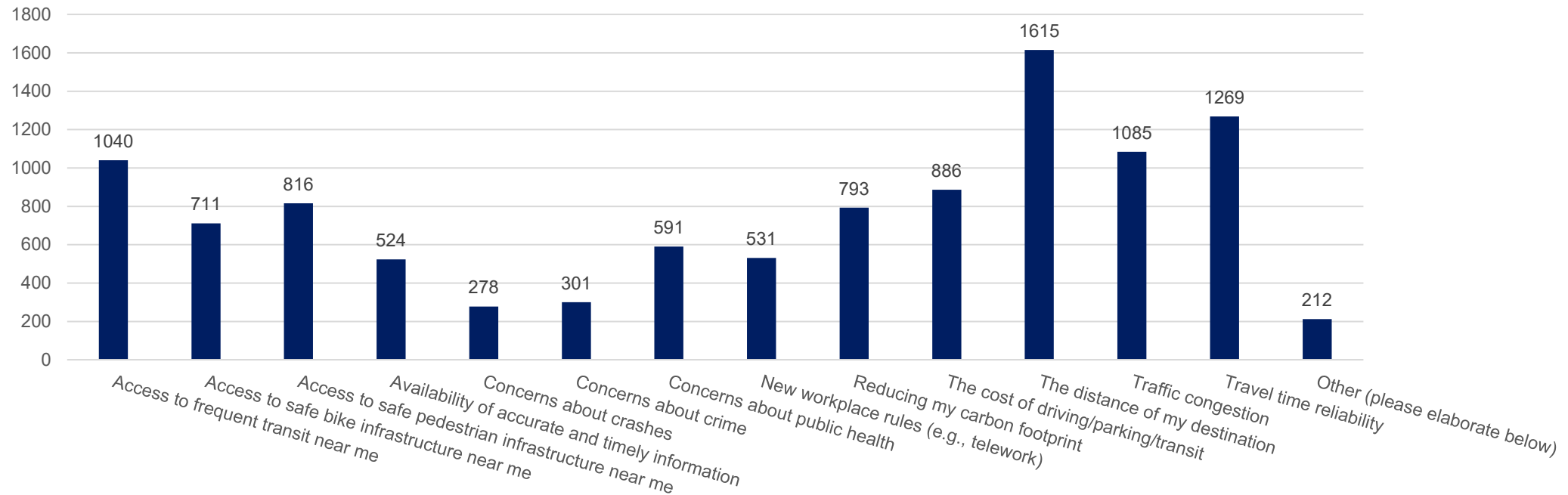
- » Pre-pandemic trips to work/school/other:
 - 31% used transit at least 3 days a week
 - 14% biked at least 3 days a week
 - 28% walked at least 3 days a week
- » About a third of respondents anticipate changing their post-pandemic travel habits compared to pre-pandemic
 - 28% will reduce driving
 - 21% will reduce transit use
 - 8% will reduce biking
 - 6% will reduce walking

Pre-Pandemic Frequency of Taking Transit



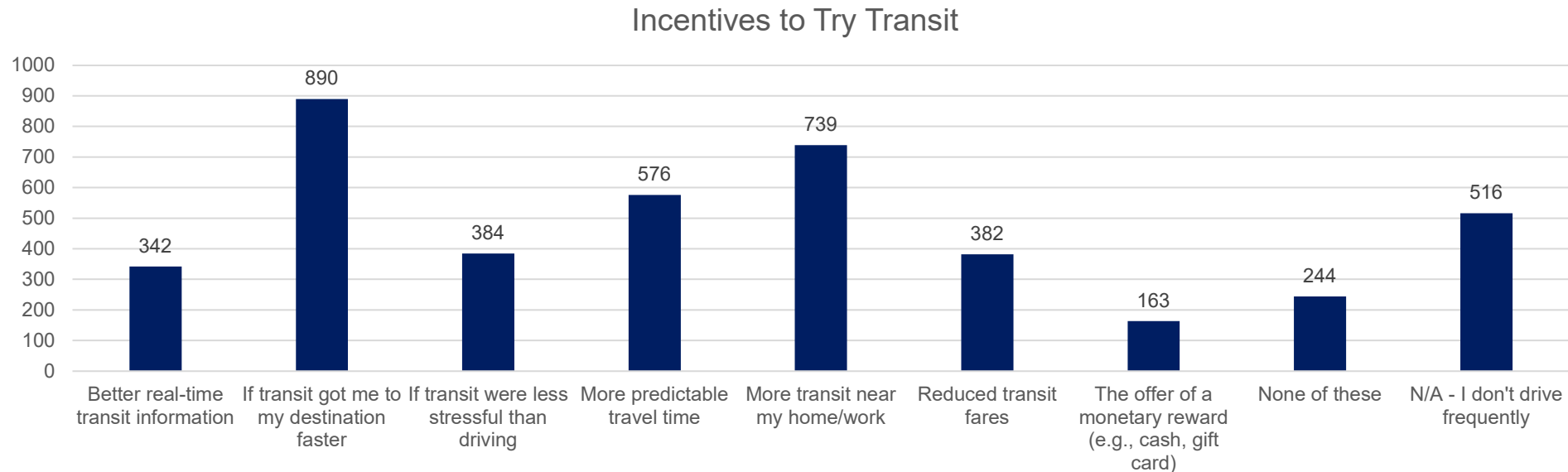
Survey Results – Influencing Factors

Factors That Influence Mode Choice



- Factors that will most affect mode choice: trip distance (76%), travel time reliability (60%), traffic congestion (51%), and access to frequent transit (49%)
- Factor least likely to affect mode choice: concerns about crashes (13%) and concerns about crime (14%).

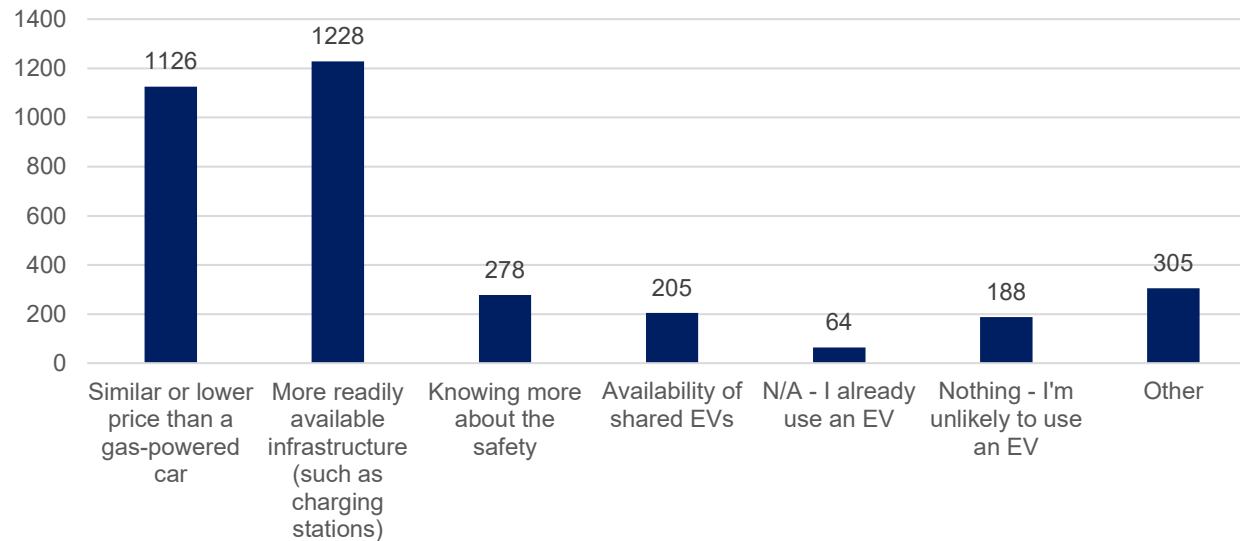
Survey Results – Incentives to Use Transit



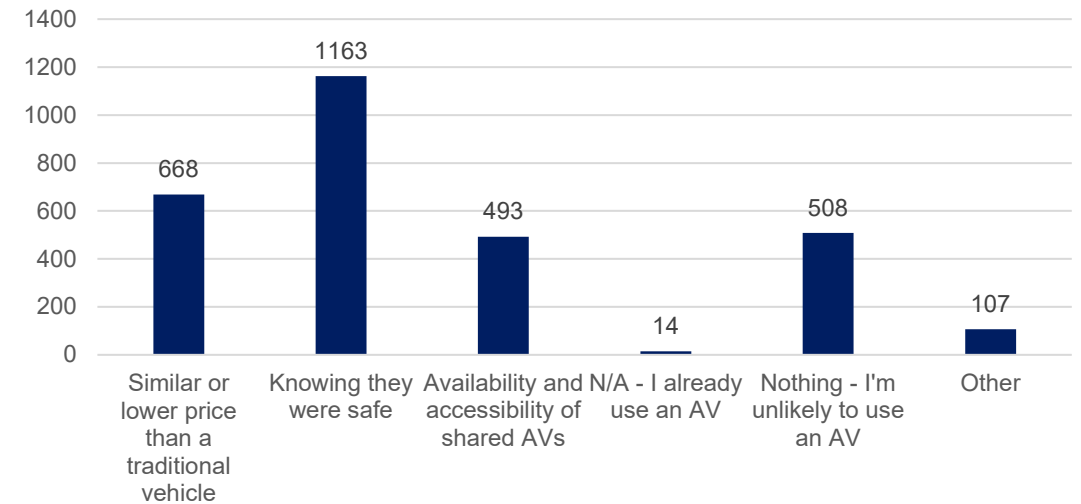
- Would be more likely to try transit if:
 - Got them to their destination faster (44%)
 - More transit near their home and/or work (36%)
 - More predictable travel time (28%)
- Only 12% of respondents reported they were not interested in trying transit

Survey Results – Emerging Technologies

Conditions for Future EV Usage

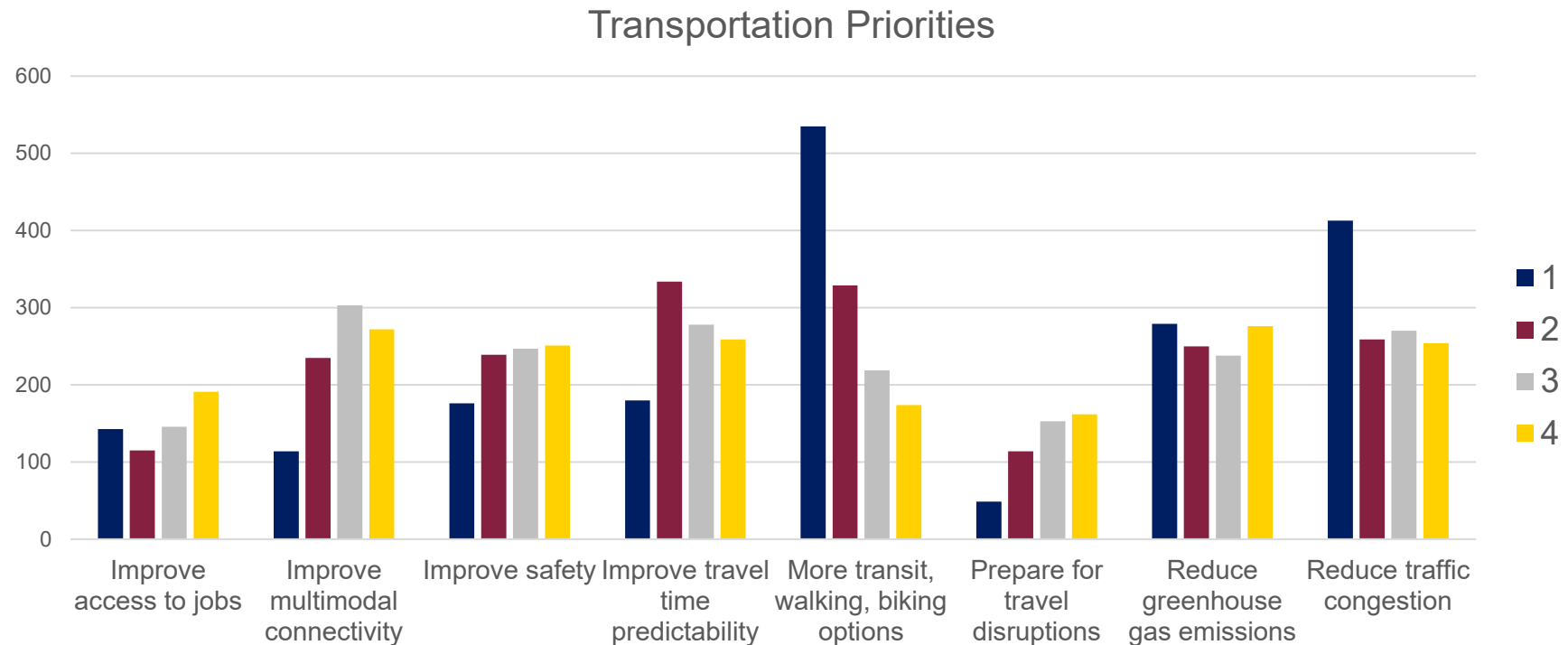


Conditions for Future AV Usage



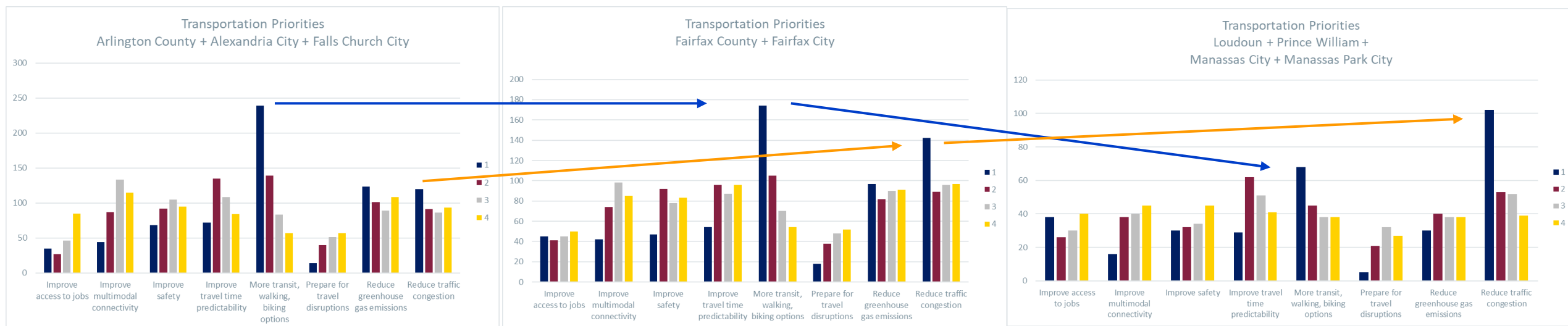
- More likely to consider using an EV once there is more readily available infrastructure (64%) and once the price is similar or lower than the price of a gasoline-powered car (58%)
- More likely to use an AV once they had confidence that AVs were safe (61%)

Survey Results – Transportation Priorities



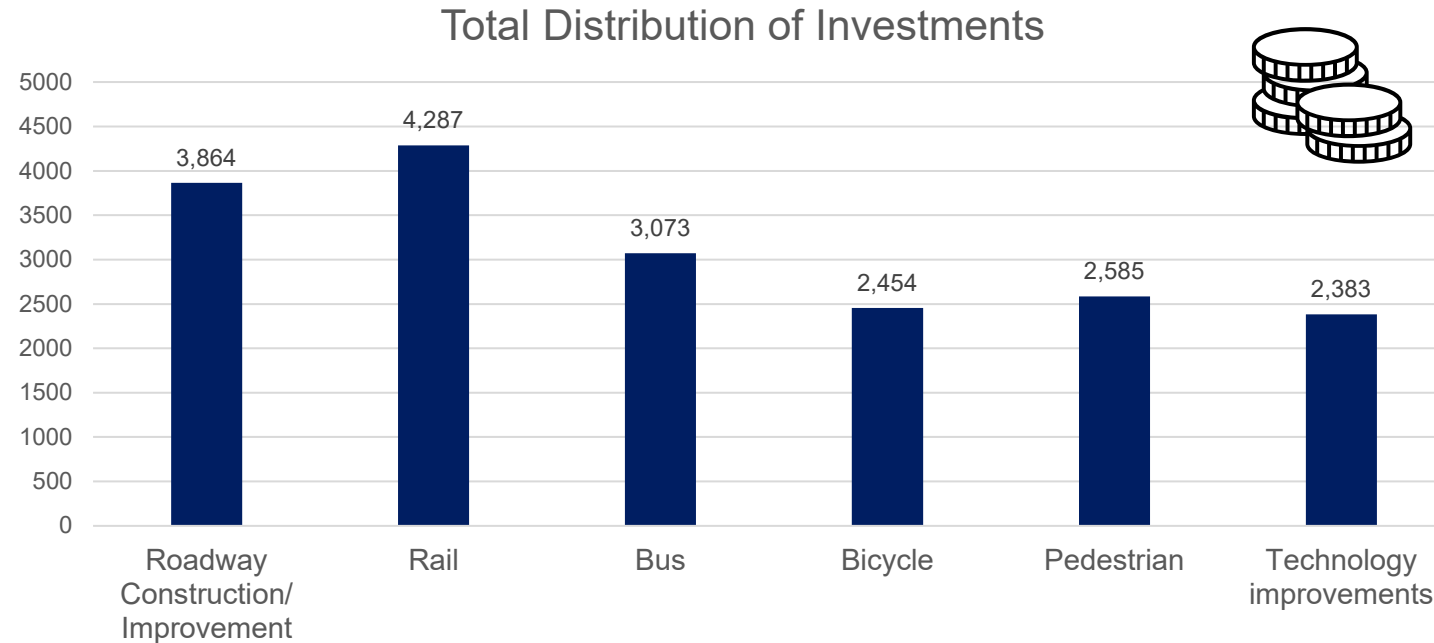
- Priority most frequently ranked 1st, was “more transit, walking, biking options”
- 2nd and 3rd most commonly selected priorities were “reduce traffic congestion” and “improve travel time predictability”

Survey Results – Transportation Priorities by Geographic Area



- Survey respondents from inner jurisdictions selected “more transit, walking, biking options” as the top priority
- Survey respondents from outer jurisdictions selected “reduce traffic congestion” as top priority
- Other objectives showed less variability between different geographic areas – “improve travel time reliability” was typically the 2nd ranked priority

Survey Results – Allocating Resources

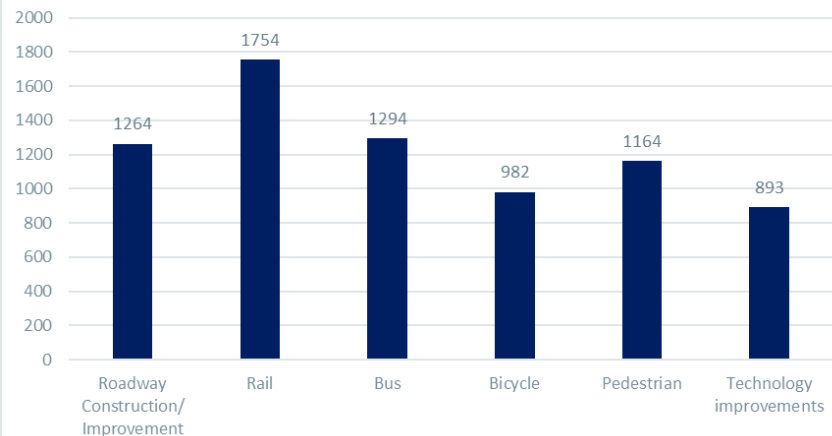


- Respondents were given 10 hypothetical coins, each representing \$1 million, and asked to distribute them between six different project types
- Rail projects received the most investments (total “coins”), followed by roadway construction/improvement and bus

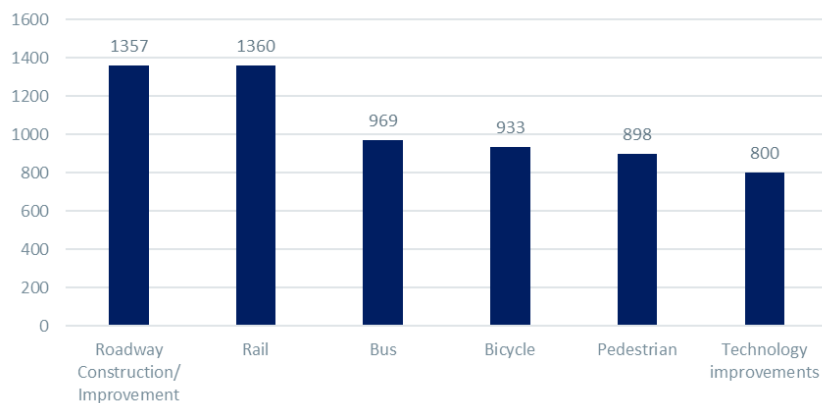
Survey Results – Transportation Priorities by Geographic Area



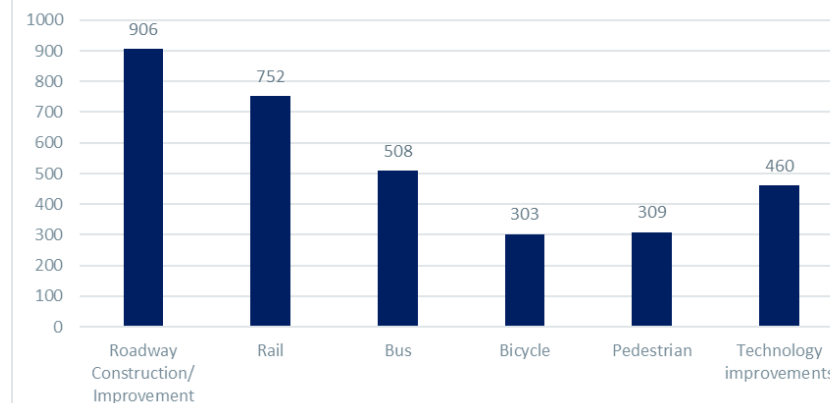
Total Distribution of Investments
Arlington County + Alexandria City + Falls Church City



Total Distribution of Investments
Fairfax County + Fairfax City



Total Distribution of Investments
Loudoun + Prince William +
Manassas City + Manassas Park City



» Home location of respondents did influence selection of type of investments needed:

- Inner jurisdictions allocated resources to rail (1st) and bus (2nd), before roadway improvements (3rd)
- Fairfax County/City allocated resources about evenly between roadway and rail, then bus
- Outer jurisdictions allocated the most resources to roadway construction/improvement, followed by rail (2nd) and bus (3rd)



Survey Results – Key Findings

- » The top priorities were “more transit, walking, biking options”, “reduce traffic congestion” and “improve travel time predictability”, but the order varied by geographic area
 - Focus groups more typically had cited “reduce traffic congestion” and “improve travel time predictability” as top priorities
- » When allocating hypothetical investment \$ in transportation, roadway and rail improvements were given the highest allocation by survey respondents
 - People who do not drive frequently placed a higher importance on non-roadway investments than regular drivers
 - Regular drivers did allocate the most resources to roadway improvements, but did also allocate significant resources to rail and bus improvements

TransAction: Preliminary Discussion on Weightings for Performance Measures



NVTA's
TransAction
*Transportation Action Plan
for Northern Virginia*

Process for Weighting Performance Measures



- » Each committee will be asked to recommend weights for each approved measure, these will be averaged, and then rounded to the nearest 5%
- » Weights for individual measures will effectively be summed for each core value, additionally reflecting the priority associated with each
- » Measure weights to be recommended to NVTA in November
- » NVTA may accept or modify these recommendations prior to approval in December

Comparison of Recommended Objectives and Survey Responses



Recommended Objective	Corresponding Priority in Online Survey	% of Weighted Score – Region	% of Weighted Score – Core jurisdictions	% of Weighted Score – Inner jurisdictions	% of Weighted Score – Outer jurisdictions
A. Reduce congestion and delay	Reduce traffic congestion	17%	14%	18%	22%
B. Improve travel time reliability	Improve travel time predictability	14%	14%	13%	14%
C. Improve access to jobs	Improve access to jobs	7%	6%	7%	10%
D. Reduce dependence on driving alone by improving conditions for people accessing transit and using other modes	Improve multimodal connectivity	11%	11%	11%	10%
	More transit, walking, biking options	20%	23%	20%	17%
E. Improve safety and security of the multimodal transportation system	Improve safety	12%	12%	11%	10%
F. Reduce transportation related emissions	Reduce greenhouse gas emissions	14%	15%	15%	11%
G. Maintain operations of the regional transportation system during extreme conditions	Prepare for travel disruptions	5%	5%	5%	6%