



Northern Virginia Transportation Authority

The Authority for Transportation in Northern Virginia

TECHNICAL ADVISORY COMMITTEE

Wednesday, October 19, 2022, 7:00pm

3040 Williams Drive, Suite 200

Fairfax, Virginia 22031

(In person meeting and live streamed via [YouTube¹](#))

AGENDA

- I. **Call to Order/Welcome** Chair Boice

Action

- II. **Summary Notes of September 21st, 2022, Meeting** Vice Chair Ciccarelli
Recommended action: Approve meeting notes

Discussion/Information

- III. **Status of TransAction Plan Update** Mr. Jasper, Principal,
Transportation Planning
and Programming
- IV. **NVTA Updates** Ms. Monica Backmon,
Chief Executive Officer

Adjournment

- V. **Adjourn**

Next Meeting

November 16th, 2022

¹ If technical difficulties arise, the meeting may be audio or video recorded. Any recordings will be made available on the [Technical Advisory Committee meetings'](#) webpage.



Northern Virginia Transportation Authority
The Authority for Transportation in Northern Virginia

TECHNICAL ADVISORY COMMITTEE
Wednesday, September 21st, 2022, 7:00 pm
Northern Virginia Transportation Authority
Virtual Meeting held on Zoom
Live-streamed on [YouTube](#)

MEETING SUMMARY

I. Call to Order/Welcome

- Vice Chair Ciccarelli called the meeting to order at 7:06 PM over Zoom. Vice Chair Ciccarelli read a synopsis of the Policy 26 legislation that had recently passed by the Authority allowing for virtual meetings for the committees of the NVTA.
- **Attendees:**
 - **TAC Members:** Karen Campblin, Michelle Cavucci, Armand Ciccarelli, Kerianne Masters, Amy Morris, Frank Spielberg, and Shangjiang Zhu.
 - **NVTA Staff:** Monica Backmon, CEO; Keith Jasper, Principal, Transportation Planning and Programming; Dr. Sree Nampoothiri, Senior Transportation Planner; Harun Rashid, Regional Transportation Modeler; and Ian Newman, Regional Transportation Planner.
 - **Others:** Tom Harrington (Cambridge Systematics), Meeting was also live streamed on YouTube.

II. Summary Notes of June 14th, 2022, Meeting

- Vice Chair Ciccarelli called for a motion to approve the June 14th meeting summary notes from a member who was present at the meeting. Motion to approve the summary notes of the June 14th meeting was made by Ms. Morris. Seconded by Dr. Zhu. The motion passed unanimously.

III. Status of the TransAction Plan Update

- Mr. Jasper started the presentation with an update on TransAction activities and schedule since November/December of 2021. He mentioned that over the Summer, the Public Comment period commenced. Staff are currently reviewing testimony from the TransAction Public Hearing held on September 8th, and comments received during the public comment period, which ended on September 18th. This public feedback will help to identify the need for any potential changes

to the draft TransAction Plan and Project List prior to NVRTA adoption in December. Potential changes may include both the need for additional analysis and identification of any opportunities to better communicate TransAction content. For example, we have identified that the scenario analysis work in the draft plan could be described more clearly in Section 7. We will be seeking feedback from our statutory and standing committees during September and October to accomplish this in the most transparent way possible. We will also update NVRTA at its meeting on October 13th.

- Dr. Nampoothiri then reviewed the structure of the public comment avenues/methods including a structured online comment form, as well as the materials shared on the website for review, which included the draft Plan summary, project list (both PDF and a sortable table), online interactive map, as well as other supporting information. The draft summary and comment forms were made available in English, Korean and Spanish.
- Dr. Nampoothiri presented how many, and where, the public comments were received. He mentioned that 193 comments came through the web comment form, 21 from the public hearing (both in-person and virtually), six letters, two emails, and one voicemail. He mentioned that 222 comments were received in English and one in Korean, and there were 205 unique commenters meaning that 18 people commented multiple times. He shared that one-third of public commenters mentioned they heard about the survey from email, news or social media; one-fourth from community/interest groups; and the rest came from other sources.
- Dr. Nampoothiri then shared that the most common theme of the comments is focused against new roadway or roadway widening projects, but other common themes focused on improving bike-ped routes, the environment and increasing/improving transit. He then mentioned that overall, 65% of comments were negative, and 35% were judged as either neutral or positive. Of the total number of comments, about 75% of comments were just comments and about 25% were action-based suggestions.
- Ms. Campblin asked about the more commonly mentioned modes being transit/bike ped if the comments were in a favorable light. Dr. Nampoothiri answered that based on preliminary analysis, many people were against road projects, and in support of transit and bike-ped projects, but that more analysis would be necessary.
- Mr. Harrington then overviewed various model-based analyses conducted in support of TransAction update. First, he described the details of the build-network versus no-build network across the metrics of auto person trips, transit person trips, non-motorized person trips, total person trips, person miles traveled (PMT) and vehicle miles traveled (VMT). He pointed out that the number of transit trips increases by 12% due to significant investment in proposed transit projects in the

build scenario and that total person trips remain almost the same between the 2045 Build and No-Build analyses.

- In addition, Mr. Harrington shared that there are big improvements on congestion, person-hours of delay, and job accessibility between the build vs. no-build analyses. He also mentioned that emissions and VMT impacts are highly dependent on the deployment/adoption of electric vehicles (EVs).
- Mr. Harrington mentioned that these metrics were also examined by sub-regions by central jurisdictions, inner suburbs and outer suburbs. Transit trips show the largest percentage increase in the outer-suburb; VMT changes vary considerably by sub-region; and reductions in person-hours of delay are distributed more evenly throughout the region. Mr. Harrington then showed two maps comparing traffic volumes and delay patterns between the build and no-build scenarios. He then showed two additional maps showing job accessibility gains throughout the region with the build versus no-build scenarios for auto and transit, respectively.
- He continued by noting the results of model runs for highway projects only and transit projects only. He noted that the findings show that the transit projects and highway projects appear to be serving different markets and are rarely in competition with each other, and that roadway projects have a bigger impact on reducing congestion in the region than other modes.
- Dr. Zhu asked if any project in TransAction contributes to the increase in EV adoption, to which Mr. Harrington responded that there are EV projects on the project list (investment in EV infrastructure). Dr. Zhu asked if there is a way to isolate the benefits or if this is a “mixed-bag” with the national trend to adopt to more EVs. Mr. Harrington mentioned that this is a more mixed-bag result. Dr. Zhu then made a comment that the maps should include units to which Mr. Harrington agreed.
- Mr. Jasper noted that scenario analysis is one of the more complex analytical components of TransAction and the most difficult to communicate in a simple but comprehensive manner. For example, the definitions for two of the three scenarios listed on page 20 of the draft TransAction Plan (‘Technology’ and ‘Incentives/Pricing’) should have mentioned that these scenarios included the assumptions related to the trip changes for the ‘New Normal’ scenario described on the same page. While the scenarios could have been clarified further, the outcomes remain the same.
- Mr. Harrington reiterated the three basic scenarios, alongside the standard forecast. These include the Post-Pandemic New Normal scenario, Technology scenario, and Incentives and Pricing scenarios. He gave a brief and high-level overview of what each one discusses.
- The New Normal scenario witnessed a decrease in VMT and emissions as well as person-hours of delay decreases. The Technology scenario witnessed significant

person-hours of delay, congestion, transit trips, and emissions decreases. Incentives and Pricing scenario saw an increase in transit trips as well as decreases in VMT, person-hours of delay and severe congestion. All results were derived from the No-Build analysis.

- In the Build analysis, Mr. Harrington noted that the increase in transit trips in the New-Normal and Incentives and Pricing were greater than in the standard forecast. The projects have a similar impact on congestion in the alternative future scenarios. He also mentioned that TransAction projects have the biggest impacts in the Incentives/Pricing scenario, increasing transit trips by 21%, decreasing emissions up to 61% and resulting in the smallest increase in VMT of any of the four future scenarios that were considered.
- Dr. Zhu asked if the improvements in emissions reduction are not as significant as in the build scenarios because of the emissions reduction achieved through technology adoption in the no-build scenario. Mr. Harrington affirmed that that is correct as a percentage, due to EV adoption being considered in the No-Build analysis.
- Mr. Jasper mentioned that the draft public comment report is expected to be shared at the October Authority meeting. He noted that the same will be shared with TAC at the next meeting. He invited the members to provide the staff any suggestions and comments for things to do better, additions, reductions, and items to conduct further analyses.

IV. NVTA Updates

- Ms. Backmon mentioned that NVTA is in the process of finalizing TransAction assuming the Authority adopts its update in December. NVTA anticipates conducting a Call for Regional Transportation Projects in May for the next Six Year Program update based on the adopted TransAction being worked on now. Lastly, the development of the draft 2023 legislative program is underway. The protection and restoration of Authority's revenues is anticipated to remain the top legislative priorities.

V. Adjournment

- The meeting adjourned at 7:53 pm. The next meeting is scheduled for October 19th at 7:00 PM in-person.

TransAction

Proposed Enhancements

October 19, 2022

presented to

Technical Advisory Committee



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



Topics

1. TransAction Overview
2. Feedback from NVTA and Committees
3. Proposed Enhancements to the Draft Plan and Project List
4. Next Steps

Reference Slides

- » Summary of Public Comments

TransAction Overview



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



TransAction is...

- » A long-range multimodal transportation plan (horizon year 2045) that includes a list of 429 multimodal candidate projects, whose performance related to congestion reduction and other factors is evaluated using ten weighted performance measures, approved by NVTA in November and December 2021
- » Fiscally unconstrained, meaning that TransAction intentionally includes more projects – focused on transportation needs – than can be reasonably funded by the region
- » Geographically unconstrained, meaning that TransAction intentionally includes projects beyond NoVA that, if funded, would support the plan's vision and goals
- » Compliant with the Code of Virginia



TransAction is not...

- » A land-use plan, although it does incorporate MWCOCG's cooperative planning forecasts
- » A road-building plan
- » A funding document and does not commit NVTA to funding any project (NVTA's Six Year Program selects projects for funding using NVTA's regional – 70% – revenues)
- » A project/modal prioritization or ranking tool, but TransAction does provide information that could subsequently be used for project evaluation



Key Takeaways (1)...

- » TransAction provides jurisdictions and agencies with a diverse range of multimodal project options (but not commitments) for future funding requests (via updates to NVTA's Six Year Program)
- » Subject to project funding, TransAction supports its vision and goals (mobility, accessibility, resiliency), and takes account of NVTA's core values (equity, sustainability, safety)
- » TransAction's project list is multimodal (many projects include more than one mode)
 - Transit (\$44.5B)
 - Roadway, Intersections & Interchanges, HOV/HOT, and Parking (\$28.91B)
 - Non-Motorized (\$1.5B)
 - Technology and TDM (\$0.785B)
- » Includes regional BRT system to provide alternatives to driving alone while anticipating Metrorail improvements on a longer timescale – highly supportive of vision, goals, and core values
- » Identifies how transportation technologies can be leveraged



Key Takeaways (2)...

- » Evaluates two external (i.e., largely beyond NVTA's control) scenarios that are supportive of vision and goals
 - New Normal
 - Technology (aggressive action on EV infrastructure will help reduce emissions)
- » Evaluates a third scenario that is also supportive, but would require coordinated actions by multiple layers of government (including NVTA)
 - Incentives/Pricing
- » Due to the diversity of Northern Virginia, achieving the goals of TransAction may look different from locality to locality
- » TransAction acknowledges the inter-relationship of land use and transportation, using MWCOCG's Cooperative Planning Forecasts
- » TransAction is compliant with the Code of Virginia



If endorsed/adopted, TransAction will...

- » Provide a range of multimodal transportation options for NVTA member jurisdictions and other eligible applicants
- » Provide initial funding eligibility (until TransAction is next updated) for any of the 429 multimodal projects that are wholly located in NoVA
 - Projects that are partially located in NoVA may be eligible for partial funding subject to acceptable cost-sharing arrangements/agreements with all neighboring jurisdictions
 - NVTA cannot legally fund projects that are entirely outside NoVA
- » Provide analytical information to support the evaluation of candidate projects for subsequent Six Year Program update cycles

Feedback from NVTA and Committees



NVTA's
TransAction
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TAC (September 21, 2022)

- » Were bike/ped comments favorable?
- » Does any TransAction project contribute to the increase in Electric Vehicle adoption?
- » Can you isolate the benefits of EV adoption from TransAction Projects?
- » Maps should include units.
- » Are the improvements in emissions reduction not as significant as in the build scenarios because of the emissions reduction achieved through technology adoption in the no-build scenario?



PCAC (September 28, 2022)

- » In western Loudoun County, TransAction lists projects that potentially will impact residential communities. Will these be addressed in the Plan?
- » In the Build scenario, a 54% reduction in emission is shown, that's a substantial improvement. Please explain with EV penetration rate assumptions.
- » In any of the scenarios, were weather events considered?
- » In all scenario results, we observe substantial improvements across all performance measures. Why should we consider spending \$75 billion on 429 projects?



PPC (October 3, 2022)

- » Can we measure if NVTA achieved its legislative mandate?
- » How to address the issue of criticism of focusing on roadway?
- » Where do we (the region) want to be in 5 years? (e.g. is the region truly EV-supportive?)
- » Need to get to the overall/larger picture
- » Need to say things like we will do BRT along RT1 to PWC; NVTA is not the only funding entity; Plan will reduce VMT, increase transit trip, etc.
- » Success looks different in different jurisdictions
- » What is the definition of Build and No-Build?
- » Would like to see the difference between now and 2045 (2022+under construction + fully funded) - different from current no-build
- » Provide a list of major projects that are in the No-build (e.g. Silver Line Extn)



NVTA (October 13, 2022)

- » Remove 54% reduction bar from the chart [page 17]
- » Better link goals with results.
- » Ensure we make known the negative comments were heard
- » Are we achieving environmental goals (are we moving the needle in the right direction)?
- » Tell a story of moving people and show that NVTA is not a road-building entity.
- » Region's diversity is reflected in the plan. We can't solve all the problems

Proposed Enhancements to the Draft Plan and Project List



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Section 6 (Plan Impacts)

- » Page 17
 - Modify chart regarding F1 Measure and update text accordingly
- » See next slide for related enhancements



Section 7 (Scenario Analysis)

- » Incorporate this section as a subsection in Section 6
 - Focus on plan performance related to uncertainty in long-range transportation planning
- » Improve content communication
 - Clarify scenario assumptions
 - What scenario analysis is and what it is not:
 - different potential futures; not different packages of projects
 - Focus more on the findings and less on the mechanics of scenario analysis
- » Highlight how the ‘incentives/pricing’ scenario is different to ‘new normal’ and ‘technology’ scenarios
- » Revisit land use analysis in current TA and mention land use=>transportation=>land use relationship?



Section 8 (Regional Benefits)

- » Renumber to Section 7
- » Emphasize:
 - Major takeaways – see ‘Overview’ slides above
 - “So what?”
 - Limitations and external factors
- » Address what ‘success’ might look like



General

- » Does the document communicate what TransAction is and what we found?
- » Emphasize what TransAction is and is not
- » Consider “carbon pollution” as an alternate term for “emissions” and “green house gas”
 - <https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation>
- » Compare/contrast with MWCOCG environmental goals
- » Beautification of the Plan document
- » Address jargon



Project List

» Remove duplicates

- IDs 64 & 230 – Overpass between RT28 @ New Braddock Rd and Stone Rd @RT29
 - Retain ID 64
- IDs 412 & 441 – Trail along VRE Manassas Line. From Landmark to City of Manassas
 - Combine the descriptions to include farthest extents
- IDs 424 & 425 – Euclid Avenue Full Extension & Euclid Avenue Southern Extension.
 - Retain ID 424 with minor modifications to description

Note: No additional model runs are expected



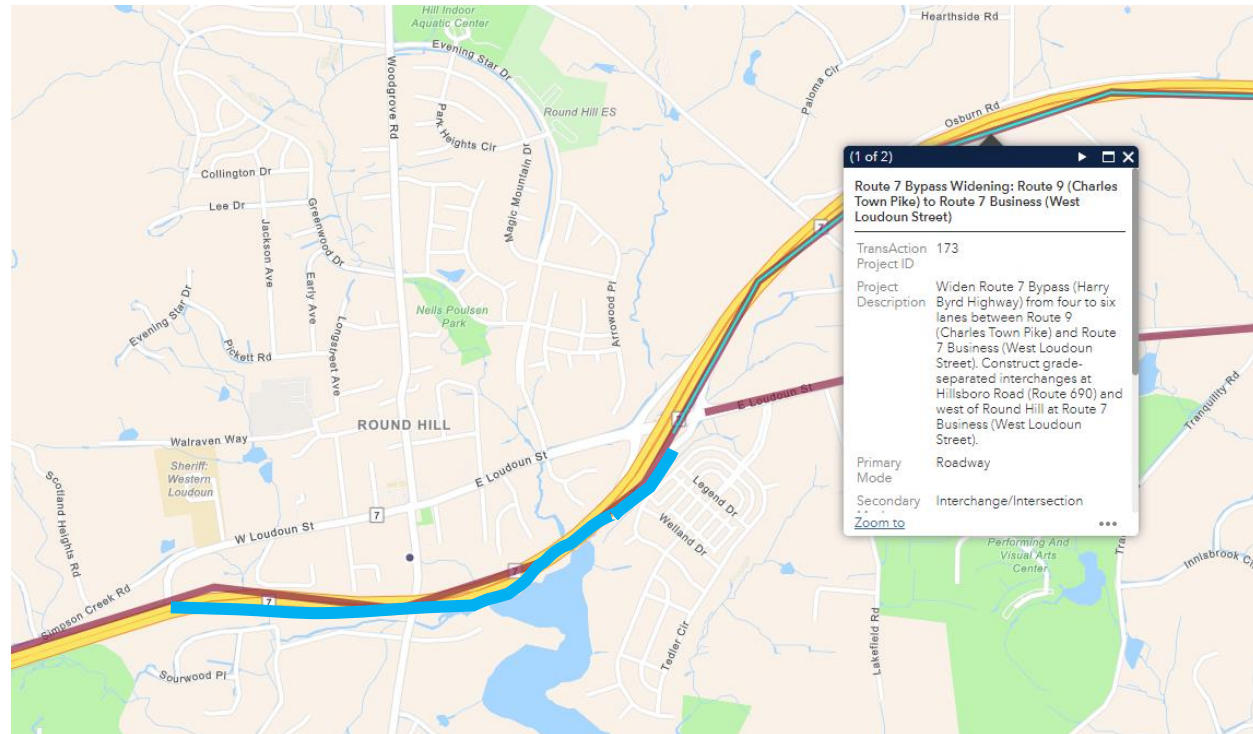
Project List

- » Change project sponsor
 - ID 32 – Route 28 Corridor High Capacity Transit – Fairfax County to Top-down
 - ID 411 – Nokesville to Calverton Double Track – VRE to VPRA
- » Change project location
 - ID 32 – Route 28 Corridor High Capacity Transit. Fairfax Co to Multi-jurisdictional
 - ID 403 – Huntington Metro station ADA improvement. From Alexandria to Fairfax County
 - ID 424 – Euclid Avenue Full Extension. From Manassas Park to Multi-jurisdictional
- » Remove project under construction or in TIP
 - ID 77 – I-495 HOT Lanes: Route 267 to George Washington Memorial Parkway
 - ID 337 – I-495 HOT Lanes: American Legion Bridge to I-270

Note: No additional model runs are expected

Interactive Map

- » ID 173 – Route 7 Bypass Widening: Route 9 (Charles Town Pike) to Route 7 Business (West Loudoun Street)
 - Extend Western terminus from Route 7/East Loudoun Street interchange to Route 7 and West Loudoun St



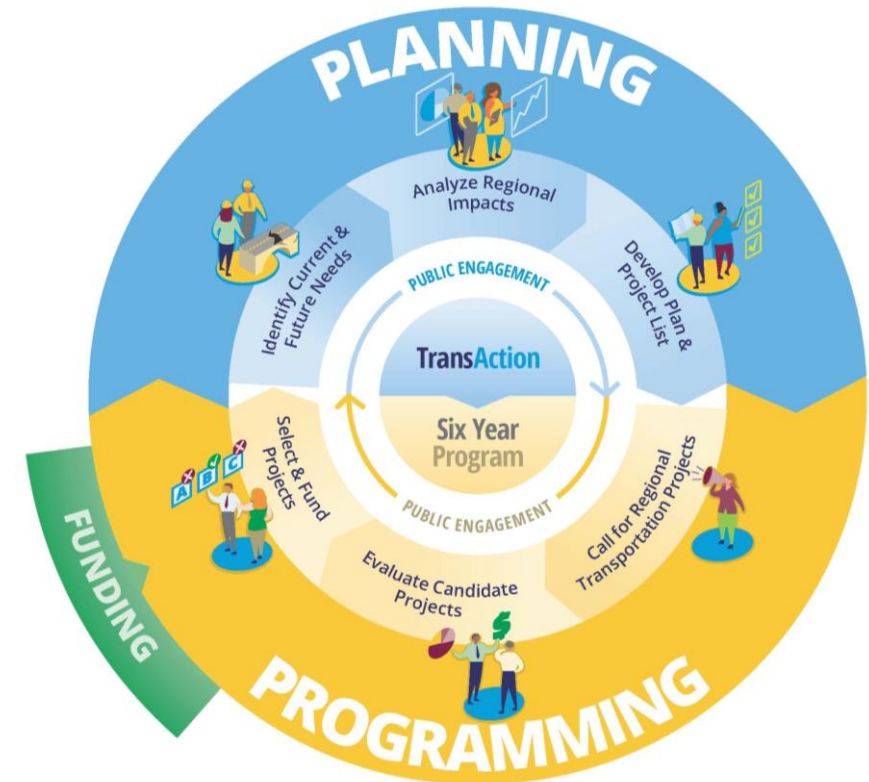
Next Steps



NVTA's
TransAction
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TransAction Activities and Schedule

- » Nov/Dec 2021: NVTA approved TransAction goals, objectives, performance measures, and weights
- » Winter/Spring 2022: Transportation Perception Survey, web post series, TransAction project modeling and analysis
- » Summer 2022: Public comment period – August 1 – September 18th
- » Fall 2022: Finalization of plan and project list based on public comments and NVTA/committee feedback
- » November 2022: Anticipated committee endorsement of final draft of TransAction Plan and Project List
- » December 2022: Anticipated NVTA adoption of TransAction



Thank you!



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

Reference Slides: Summary of Public Comments



TransAction Public Engagement 2022

- » Public comment period: August 1 – September 18th
 - Detailed on-line comment form
 - TransAction Plan 2022 Update – Draft Summary
 - TransAction Plan 2022 Update – Draft Project List, containing 429 projects
 - Other supporting information
- » Draft Summary document and comment form available in English, Spanish, and Korean



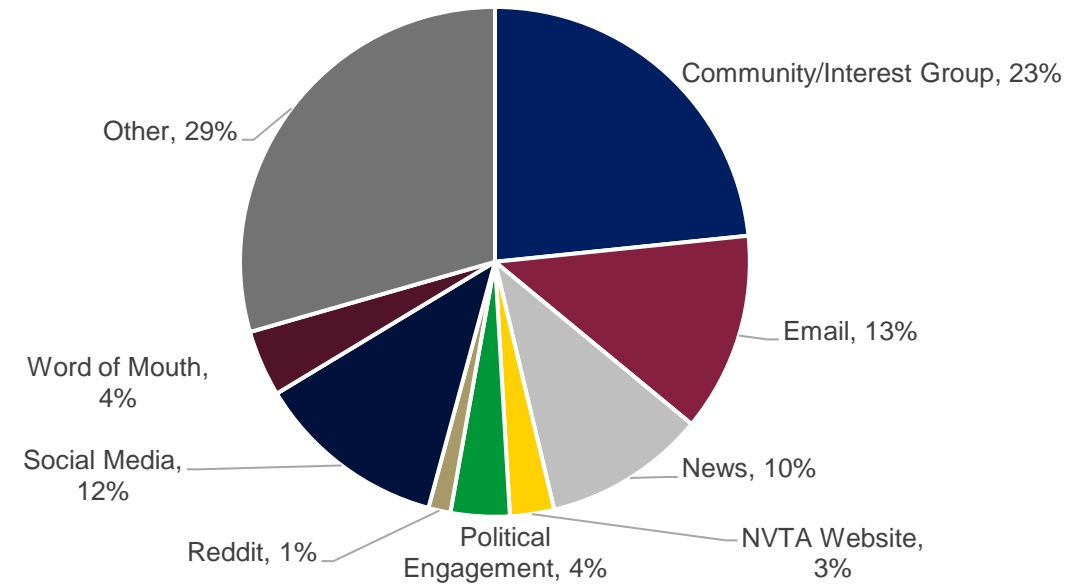


Public Comments Received

» Total Comments Received

- 223 comments received
 - 193 comments through web comment form
 - 21 comments heard at public hearing
 - 6 letter responses
 - 2 emails
 - 1 voicemail
- 222 comments in English, 1 in Korean
- 201 unique commenters

» Where public heard about TransAction Comment Period

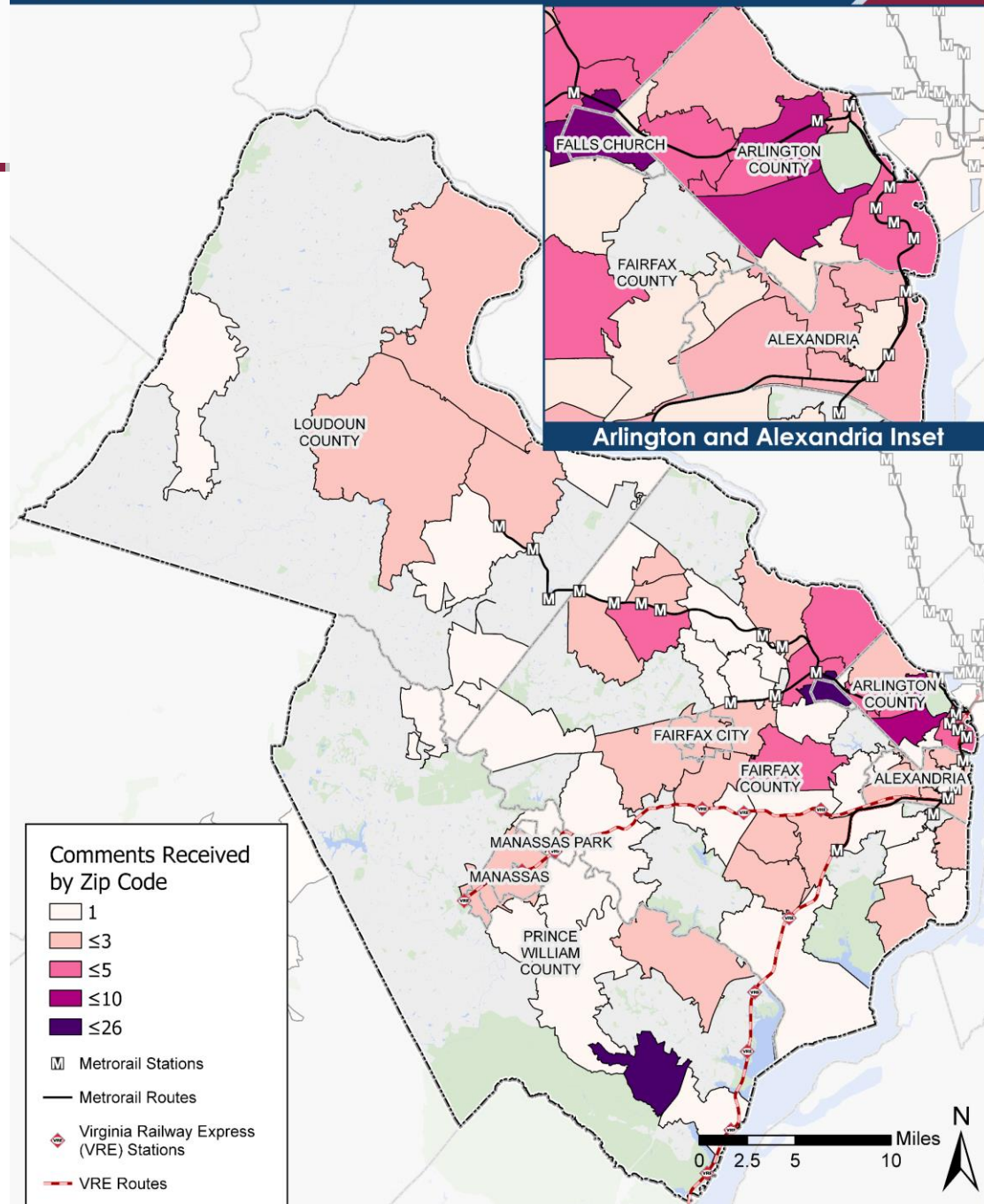


Comments Received by ZIP Code

Comments Received



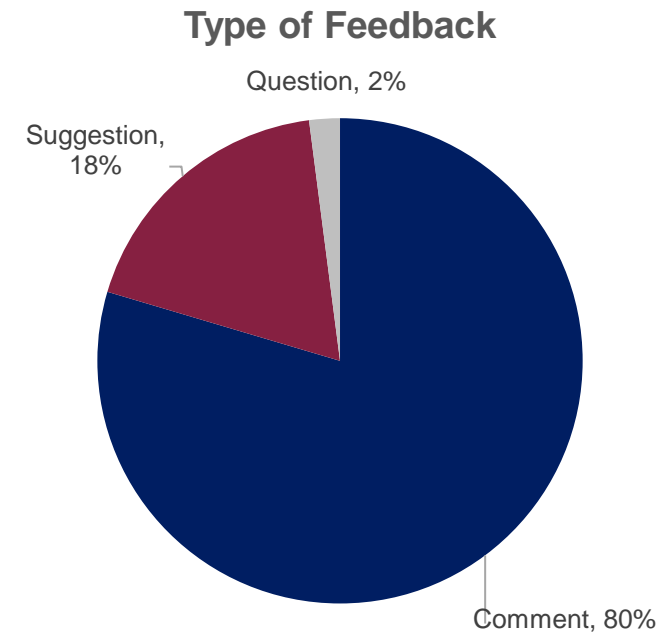
- » Most comments from Inside the Beltway
- » Zip code 22025 (Four Seasons): Van Buren Rd Extn
- » Zip code 22046 (Falls Church): Mixed comments
- » A few from DC, MD, other VA





Type and Themes of Comments Received

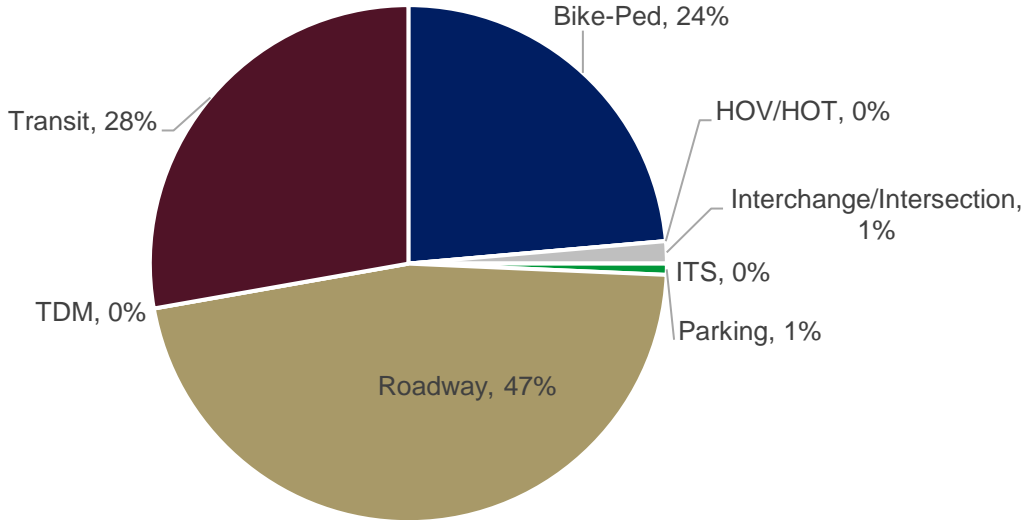
Common Theme	Example Comment
Against Roadway or Widening	“We must shift the scoring for NVTA projects to reward those that reduce Vehicle Miles Traveled if we are ever going to meet our climate goals.”
Environmental Concern	“Northern Virginia needs a plan that will keep its residents safe from disastrous climate change. We should be working towards resilience and emissions-curbing solutions, not business-as-usual and increased driving. From what I have read, the list of projects in 2045 far exceeds what Northern Virginia can afford, fails to address the land use policies and lack of affordable housing at the root of our transportation problems, and largely ignores urgent climate goals.”
Increase/Improve Transit	“As a resident, I would like to voice my support for this NVTA TransAction vision, and for the City projects contained within the draft project list. Investments in pedestrian, bicycle, transit projects help to relieve congestion and increase connectivity and accessibility.”
Improve Bike-Ped Routes	
Safety	“Driving is the most dangerous thing most of us do all day; this plan's continued focus on driving will harm safety, not improve it. Increased VMT will cause more crashes, injuring more drivers, more passengers, and more people walking & biking.”



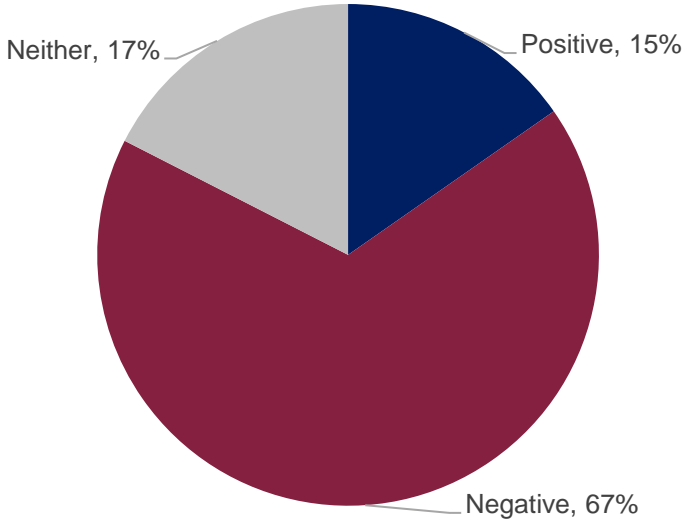


Public Comments Received

Amount Modes Mentioned



Direction of Feedback

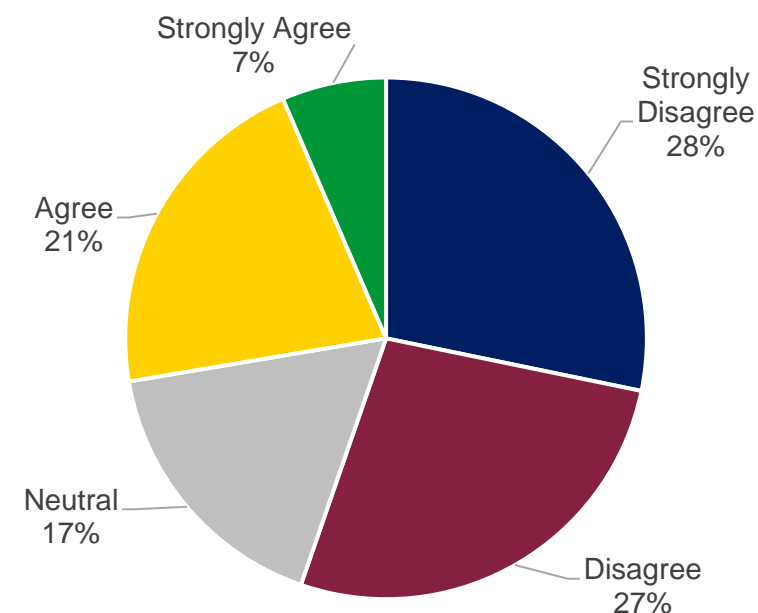


Does the Plan Achieve TransAction Goals - Mobility, Accessibility, and Resiliency?



» Example comments:

- “It is a start, but there is so much more to be done to actually achieve those goals.”
- “A plan that would do little to improve mobility without the massive financial outlay of a car cannot achieve true mobility in the region nor improve accessibility for those who need it most.”
- “The BRT plan definitely increases mobility, accessibility, and resiliency.”
- “A plan that fails to reduce vehicle miles traveled and greenhouse gas emissions cannot be a resilient plan; it dooms us to more and more of the disruptive severe weather we have been seeing over the last few years.”
- “I often use the Burke VRE trail to travel from the GMU area to West Springfield. I'm glad to see you are extending the trail out to Manassas. Please continue to expand these types of trails, keeping cyclists and pedestrians as far away from busy roads as possible.”

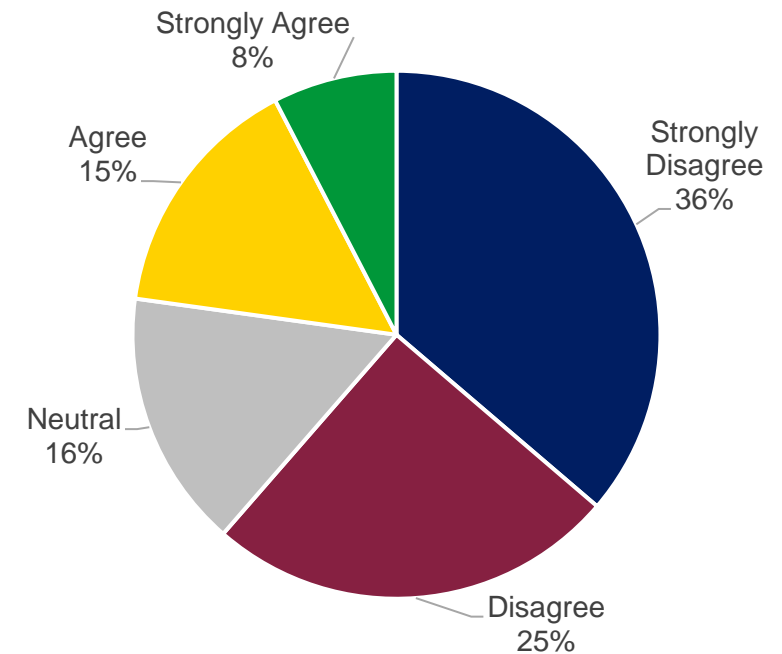


Does the Plan Reflect TransAction Core Values - Safety, Equity and Sustainability?



» Example comments:

- “A plan that anticipates such a large increase in VMT for a majority of the region cannot reasonably be called sustainable”
- “Expanding transit options can build up lower-income and minority communities by providing needed access to public goods, employment, and amenities.”
- “More bus services (including BRT) for underserved communities. People shouldn't have to take three buses to get to work.”
- “NVTA and TransAction continue to advocate for roadway widening. Nearly 1000 people die every year on Virginia roads, and a non-insignificant cause of some of these crashes are roadway design and roads meant to speed up cars.”
- The goals are reasonable to meet the core values of safety, equity, and sustainability.





Comments on Scenario Analysis

“Because there is uncertainty associated with predicting the future, TransAction considered multiple ways that the future of Northern Virginia could unfold. These scenarios were: Post-Pandemic ‘New Normal’, Technology, and Incentives/Pricing.”

Common Themes (79 completed responses)	Number of Responses	Positive	Negative	Neither
Specific strategies or types of projects	26	31%	35%	34%
Scenario definition	21	5%	14%	81%
Thoughts on future travel	20	5%	5%	90%

Example Comments:

- “It sounds as though the region is preparing for multiple scenarios, which is encouraging to see.”
- “Post-Pandemic 'New Normal' -> need to focus on transit and non-car travel across the region, not just connections to DC”
- “Technology - With automated vehicles, there should probably be fewer cars on the road: if people can rent cars out to ride-share services while they aren't using their own cars, then it will decrease the reliance on owning a car”
- “Incentives and pricing are one of the most effective ways to alter behavior, but NVTA needs to support such a policy with the appropriate infrastructure to give people a real choice. Without that infrastructure, it will be nothing more than a tax on the poor.”



Feedback on Specific Projects

Project ID	Project Name	Mentions	Positive	Negative	Neutral
273	Construct Van Buren North Road: Cardinal Drive to Dumfries Road	29	1	24	3
31	Route 7 Transit: Tysons to Mark Center	14	9	4	1
118	East Falls Church Bikeshare Connections	12	12	0	0
67	Route 29 Trail	11	7	2	2
356	City of Falls Church Greenway and Parkway Network	10	9	1	0
133	Falls Church Enhanced Bus Service	9	7	2	0
18	Seven Corners Ring Road Improvements	8	7	1	0
66	Falls Church Multimodal Improvements	8	8	0	0
72	Arlington Regional Trail Network	8	3	5	0
334	Falls Church Metro Station Access	8	7	1	0
406	W&OD Regional Trail Capacity and Connectivity Enhancements	8	2	6	0
21	Bike Lanes on Route 7: Alexandria to Seven Corners	7	6	1	0
62	East Falls Church Metrorail Station Second Entrance	7	7	0	0
71	Route 29 Bus Improvements	7	7	0	0
302	Fredericksburg Line Peak Period Service Expansion	7	6	1	0
303	Manassas Line Peak Period Service Expansion	7	6	1	0
333	Transit Boulevard along Sycamore Street and Roosevelt Street: East Falls Church Metrorail to Seven Corners	7	7	0	0
335	Falls Church Regional Bicycle Connections	7	7	0	0
357	Bicycle Facility Route 7 - City of Falls Church	7	6	1	0
360	City of Falls Church Safe Routes to School	7	7	0	0