



RICHMOND CONNECTS

Steering Committee

February 22, 2024

Office of Equitable Transit and Mobility



DEPARTMENT OF
**PUBLIC
WORKS**



Agenda

Steering Committee

2/22/2024

1. Update on Near-Term Strategic Plan and Action Plan

2. Long-Term Scenario Planning

a. Refresh on Scenario Networks & Assumptions

b. Break-Out Groups

i. *What might these scenarios mean for displacement, climate resilience, and safety? Risks and benefits of each?*

c. Full Group Discussion

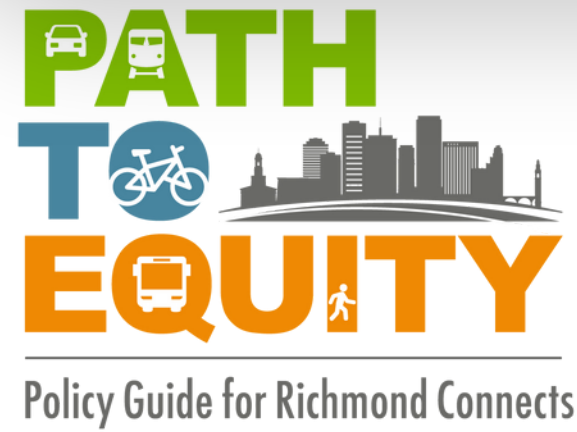
i. *What is 'adequate' accessibility?*

- **Introductions**
 - **Put name, role, and organization into the chat**
- **Intro Poll**

Recap...

1. Advisory Committee 10.27.23
 - a. Action Plan Projects - Process for prioritizing, 3 categories
 - b. Recap Survey Results
 - c. Non-Mappable Exercise - What are your priorities compared to the focus groups of communities of opportunity?
2. Steering Committee “Office Hours” Session 11/28
3. Public Review November and December 2023
4. CAO review and council one-on-ones
5. Moved to March Council Meeting

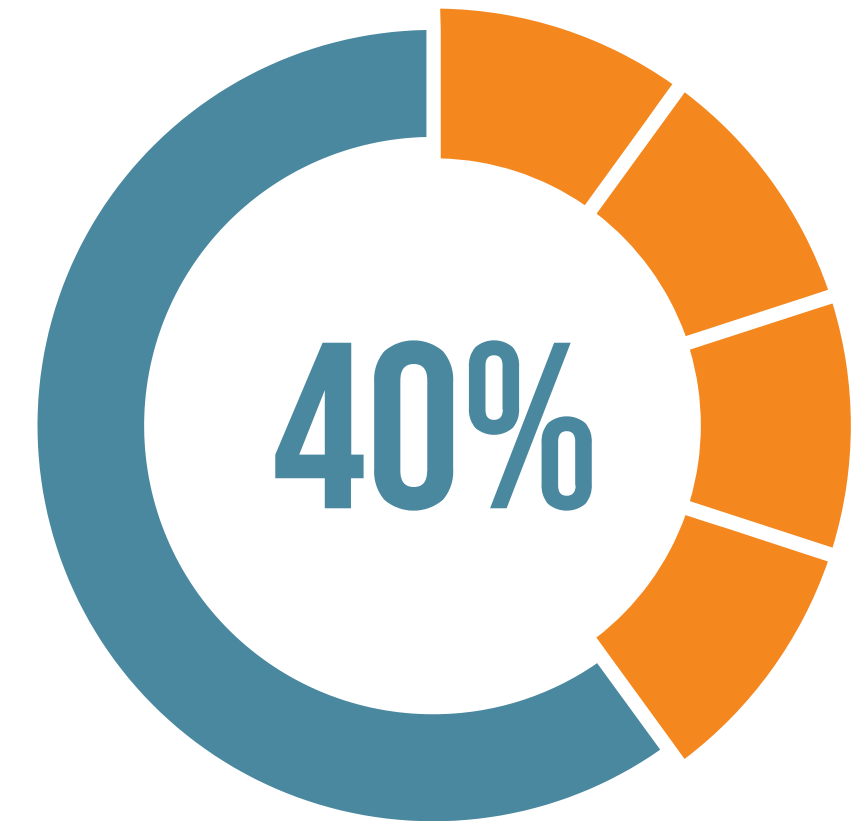
 **Complete**
Adopted by Council May 2022



Almost Done
March 2022 - February 2024



Underway
February 2023 - May 2024



Multimodal Transportation Plan



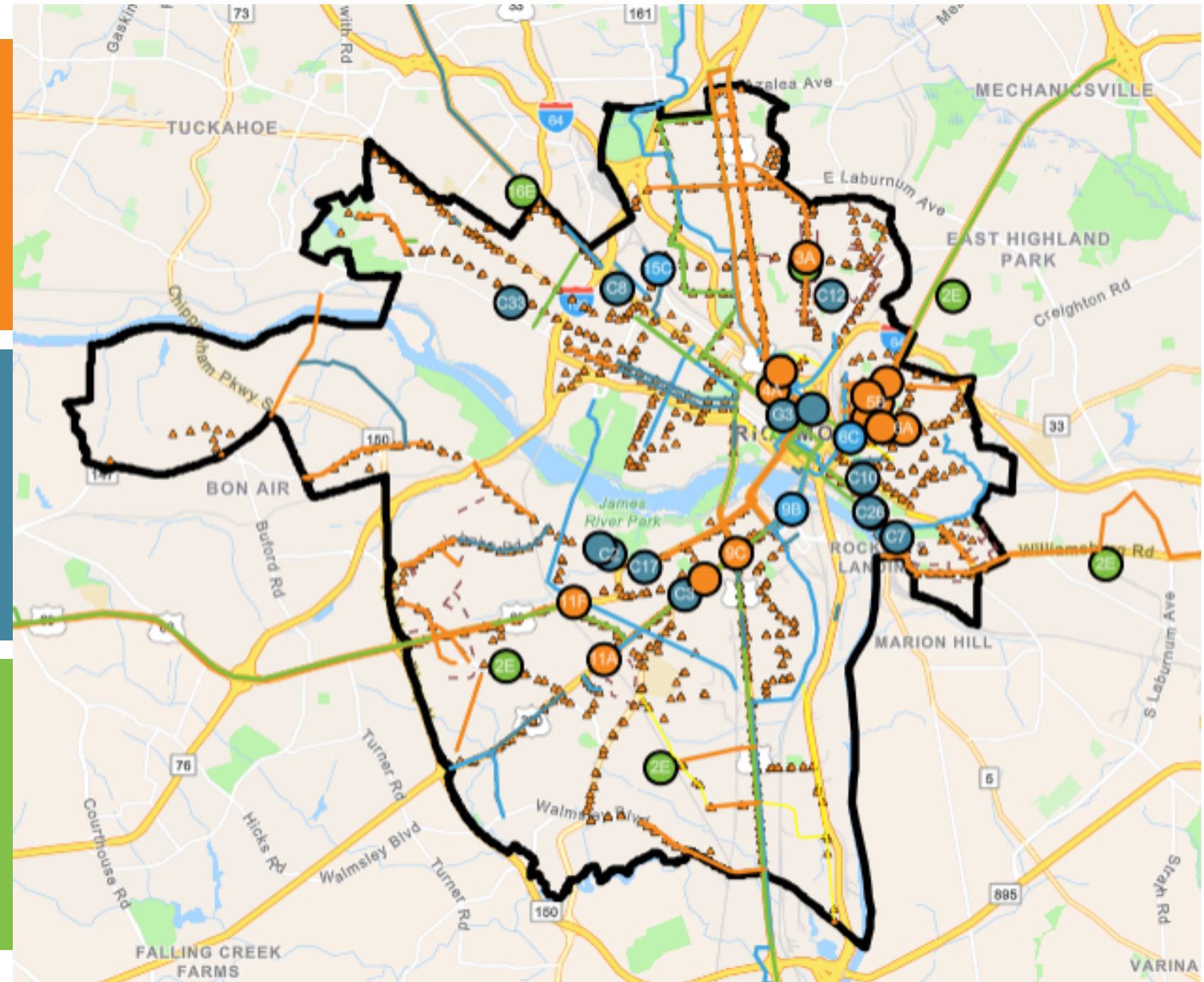
Recap: Action Plan Process: Picking the Priorities



A PRIORITIZE WHAT THE PEOPLE NEED

B FINISH WHAT WE STARTED

C MOVE FORWARD WITH WHAT WE CAN



Recap Action Plan: Whats in the Plan?



1

| Rank | Project ID | Project Name | Cost | Support Score | Page Reference |
|------|------------|--|----------------------|---------------|----------------|
| 1 | 4C | Richmond Connects Equity-Driven Sidewalks Projects | Very High (\$\$\$\$) | 5.0 | 62 |
| 2 | 5B | Mosby Street/ Mechanicsville Turnpike Pedestrian Safety Improvements | Moderate (\$\$) | 5.0 | 63 |
| 3 | 1C.3 | Laburnum Avenue Safety Improvements | High (\$\$\$) | 5.0 | 64 |
| 4 | 1C.1 | Chamberlayne Avenue Pedestrian Safety Improvements | High (\$\$\$) | 4.9 | 65 |
| 5 | 1C.2 | Brook Road Traffic Calming and Pedestrian Safety Improvements | High (\$\$\$) | 4.9 | 66 |
| 6 | 12C | Midlothian Turnpike Safety Improvements - German School Road to Carnation Street | Very High (\$\$\$\$) | 4.9 | 67 |
| 7 | 10A.1 | Bells Road Sidewalks | High (\$\$\$) | 4.9 | 68 |
| 8 | 10A.2 | Walmsley Boulevard Shared Use Path | Very High (\$\$\$\$) | 4.9 | 69 |
| 9 | 10A.3 | Terminal Boulevard Shared Use Path | High (\$\$\$) | 4.9 | 70 |
| 10 | 3A | North Avenue Pedestrian Safety Improvements | Moderate (\$\$) | 4.8 | 71 |

40 Public Priority Projects, ranked by public

2

| Rank | Project ID | Project Name | Cost | Support Score | Page Reference |
|------|------------|---|------|---------------|----------------|
| 10 | 15B | Clay Street Streetscape Improvements | n/a | 3.4 | 110 |
| 11 | 14H.1 | Franklin Street Cycle Track - Lombardy Street to Belvidere Street | n/a | 3.2 | 111 |
| 12 | 14G | Allen Avenue Bike-Walk Street | n/a | 3.0 | 113 |
| 13 | 14J | State Route 161 Bicycle Infrastructure | n/a | 2.9 | 114 |
| 14 | 1I | Fall Line Trail | n/a | 2.6 | 115 |
| 15 | 11H | Hull Street Shared Use Path - Arizona Drive to James River Branch Trail | n/a | 2.6 | 116 |
| 16 | 3L | Rowen Avenue/ N 5th Street/ N 3rd Street Bike Lanes | n/a | 2.5 | 117 |
| 17 | 11I | James River Branch Trail | n/a | 2.5 | 118 |

18 'Finish what you started' with public support score, Additional 35 added from CIP for reference & continuity

3

| Rank | Project ID | Project Name | Cost | Support Score | Page Reference |
|------|------------|-----------------------------------|-----------------|---------------|----------------|
| 8 | 16E | Willow Lawn Park-and-Ride | Moderate (\$\$) | 3.1 | 162 |
| 9 | 2E | Link: On-Demand Microtransit | Moderate (\$\$) | 3.1 | 163 |
| 10 | 5E | Mechanicsville Turnpike Bus Route | Moderate (\$\$) | 2.7 | 164 |
| 11 | 16B | York Road Sidewalks | Low (\$) | 2.7 | 112 |

11 Shorter Term 'easier' projects with medium or med-high public support

| ID | Category | Title | Relevance | Page |
|-----|-------------|--|-----------|------|
| 11D | Longer Term | Southside Plaza Street Grid | Secondary | 303 |
| 12D | Longer Term | Route 60/Route 150 Interchange Improvements | Secondary | 303 |
| 8C | Longer Term | East Main Street Streetscape Improvements | Secondary | 303 |
| 10B | Longer Term | Richmond Highway Great Street Transformation | Secondary | 303 |
| 10C | Longer Term | Richmond Highway Pedestrian Safety Improvements | Secondary | 303 |
| 9F | Longer Term | Riverside Shared-Use Path | Secondary | 304 |
| 14A | Longer Term | Stuart Circle Roundabout Improvement | Secondary | 305 |
| 14F | Longer Term | Randolph Connection Over I-195 | Secondary | 306 |
| 10H | Longer Term | Commerce Road Improvements at Walmsley Boulevard | Secondary | 306 |
| 4D | Longer Term | Baker Street Pedestrian/Bike Only Street | Secondary | 307 |
| 15E | Longer Term | Norfolk Street Bridge | Secondary | 307 |
| 15F | Longer Term | MacTavish Avenue Bridge | Secondary | 307 |

**65 Longer-term
Projects NOT in
the Action Plan,
but included in
the Strategic
Plan.**

Recap Action Plan: What's in the Plan?



Programmatic & Policy Recommendations

- 59 Strategies for addressing all 11 Investment Need Categories
- Provides flexibility in implementation
- Allows for multiple action items under each strategy
- City-wide strategies
- Highlights interdepartmental coordination to advance innovative programs

FOOD ACCESS AND URBAN FARMING (3.3)*

Provide funding to community organizations and collectives working on food insecurity and food access. Prioritize funding and land for local food production, and provide incentives to mobile farm pantries and farmers markets on wheels.

**This strategy is originally from Richmond 300, Objective 17.4, Strategy D, which reads "Attract healthy food retailers to low-income areas by increasing residential density and providing financial and technical support for retailer creation, expansion, remodeling, or equipment upgrades."*

Next Steps:

OOS

- Identify funding to support these programs, identify lead staff, and make COR procurement opportunities accessible.



LQC Implementation could involve: pop-up mobile community gardens, raised planters, and farm stands.



Partners in this strategy could include: OETM, DED, PCRF, OCWB, Chamber of Commerce, PDR

FREE GROCERY DELIVERY (3.4)

Provide money to cover grocery delivery service fees for low-income and elderly areas and neighborhoods in food deserts.

Next Steps:

OETM

- Develop program parameters and seek grant funding.



LQC Implementation could involve: pilot program.



Partners in this strategy could include: RRHA, OCWB, DSS, Office of Aging & Disability Services

FOOD RESILIENCY PLANNING & ZONING (3.5)

Complete a supply chain resiliency plan for low-income Richmond neighborhoods that describes how to get people food access when transportation, health, or climate emergencies happen. Ensure zoning updates allow for flexible use of space to meet food insecurity and resiliency issues identified through this planning. Further develop program parameters for food access in this plan.

Next Steps:

OOS

- Identify funding to support this planning effort and identify lead staff.



Partners in this strategy
OETM, PlanRVA



LIGHTER QUICKER CHEAPER PROGRAM

PEOPLE LED PROCESSES

SHIFT THE CAR NARRATIVE

MESSAGING TRANSPARENCY

EQUITABLE, HOLISTIC PROJECT

PRIORITIZATION & FUNDING

PROGRAMMATIC FUNDING

ACQUIRE FUNDING EQUITABLY

PROCURE EQUITABLY

HIRE EQUITABLY

9 ‘How we Do
Business’

Strategies to
implement the
Path to Equity

Guiding
Principles



RICHMOND CONNECTS

Both Going to City Council in March

Action Plan Includes:

- Current Priorities for projects
- Current Priorities for strategies, policies, and programs
- An Equitable Transportation Vision Story
- Envisioned to be updated as needed to reflect changing priorities every 3-5 years

Strategic Plan* Includes:

- ALL projects considered in the final survey
- One pagers on each project
- Full documentation of technical process and outreach

**Meets VDOT requirements for comprehensive plan transportation section per §15.2-2223*

Public Comments

- November 21st to December 13th
- 369 Public Comments
- Generally supportive, many project specific
- Several great suggestions that lead to changes in final document

“the action plan and the strategic plan are outstanding. congratulations on a terrific piece of work. sure, i could go through and make a few comments here and there, express some additional preference or priority...but honestly i only have one comment. do this.” - Andrew

*“We need to better our public transportation all over. it's not equitable if people cannot come to the park near my house because there is no transportation. We have very few bus stops, and no covered stops in our area. Equitable would improve the bus stops in most neighborhoods so that people can move freely.”
-Bill*

Next Steps for Action Plan and Strategic Plan

1. Recommend adoption by full council, March 25th
Public Hearing and (hopefully) Adoption
2. Key elements used to amend master plan
transportation section, future Planning
Commission
3. Lighter/Quicker/Cheaper program to commence
4. On-going project development and
implementation, associated public outreach
5. Action Plans and additional planning studies
noted as needs in Richmond Connects





Scenario Planning



Poll

How old will you be in 2045?

Complete

Adopted by Council May 2022



Policy Guide for Richmond Connects

- Reframes transportation as means for achieving Equity
- Builds on Richmond300 & RVAgreen2050
- Outcomes:
 - Policy Statements
 - Documents past land-use and transportation injustices

Almost Done

March 2022 - February 2024



ACTION PLAN

- Process measuring transportation needs with an equity lens
- Outcomes:
 - Recommends projects and programs
 - Contains action items for immediate implementation (0 - 12 months)
 - Contains recommendations for near term (1-5 year) and mid-term (5-10 years)

Underway

February 2023 - May 2024



SCENARIO PLAN

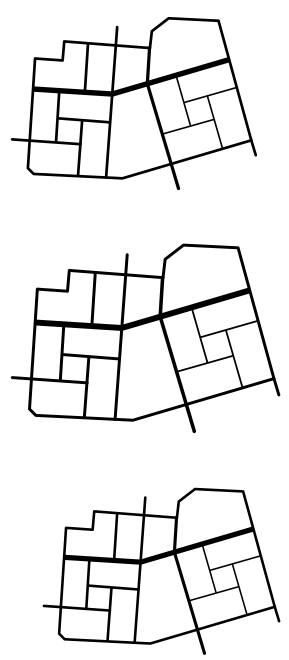
- 10 month process
- Asks 'What if we invested heavily in X, Y, or Z transportation, what does that do for equity?'
- 3 scenarios
- Holds land use steady (assumes growth occurs largely in nodes)
- Measures changes in access to jobs, healthcare, green space, retail by various modes, for Communities of Concern
- Outcomes:
 - Guidance for policy makers on trade-offs of different investment directions

Recap from prior meetings:

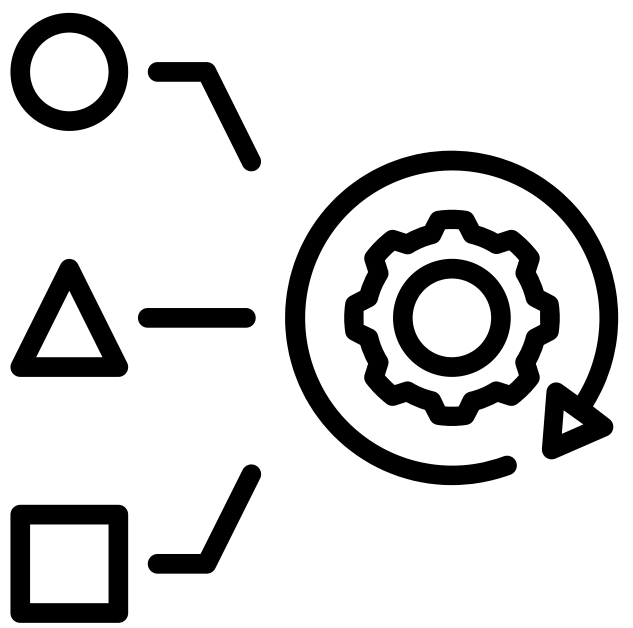


Scenario Planning Process

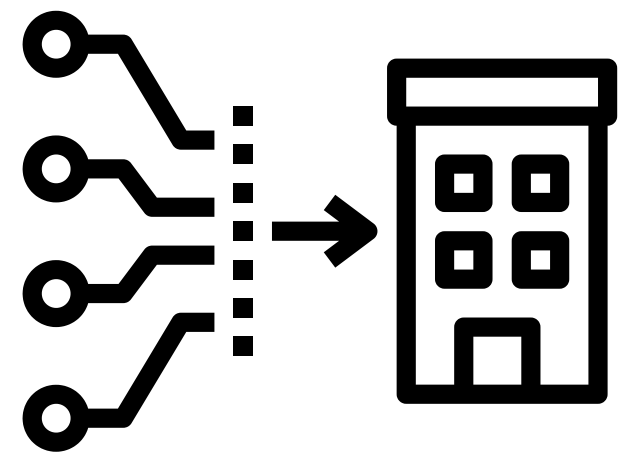
3 Scenario Networks



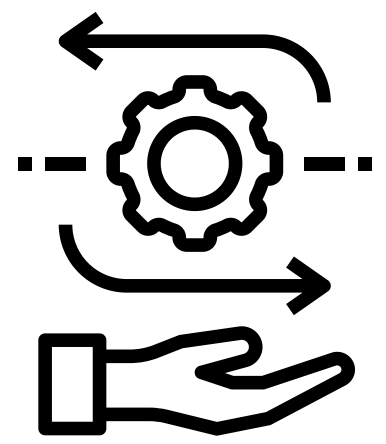
Run in Accessibility Model



Outputs: Accessibility Scores



Post Processing Qualitative Measures



See how different packages of investments improve access for Communities of Concern to jobs, green space, and food.

Assess the risks of the different scenarios on climate vulnerability, housing affordability, gentrification, safety, etc.



2045 Baseline

- “Completion Projects” from Richmond Connects Action Plan are implemented.
- All partially funded DPW Pipeline bicycle and pedestrian projects are constructed.
- Baseline Transit Improvements:
 - North-South BRT is up and running
 - Transit initiatives identified in FY24 Regional Public Transit Plan and within City are implemented.
- Essential Transit Infrastructure improvements reflect GRTC's Attainable Scenario.
 - 50% of GRTC stops have either a shelter or seating.
- Near-term bikeshare and scooter locations are implemented.
- EV adoption rates and charging infrastructure follow presumed rates.

Near-Term Bike-Share & Scooter Locations



Baseline 2045 Bicycle Facilities

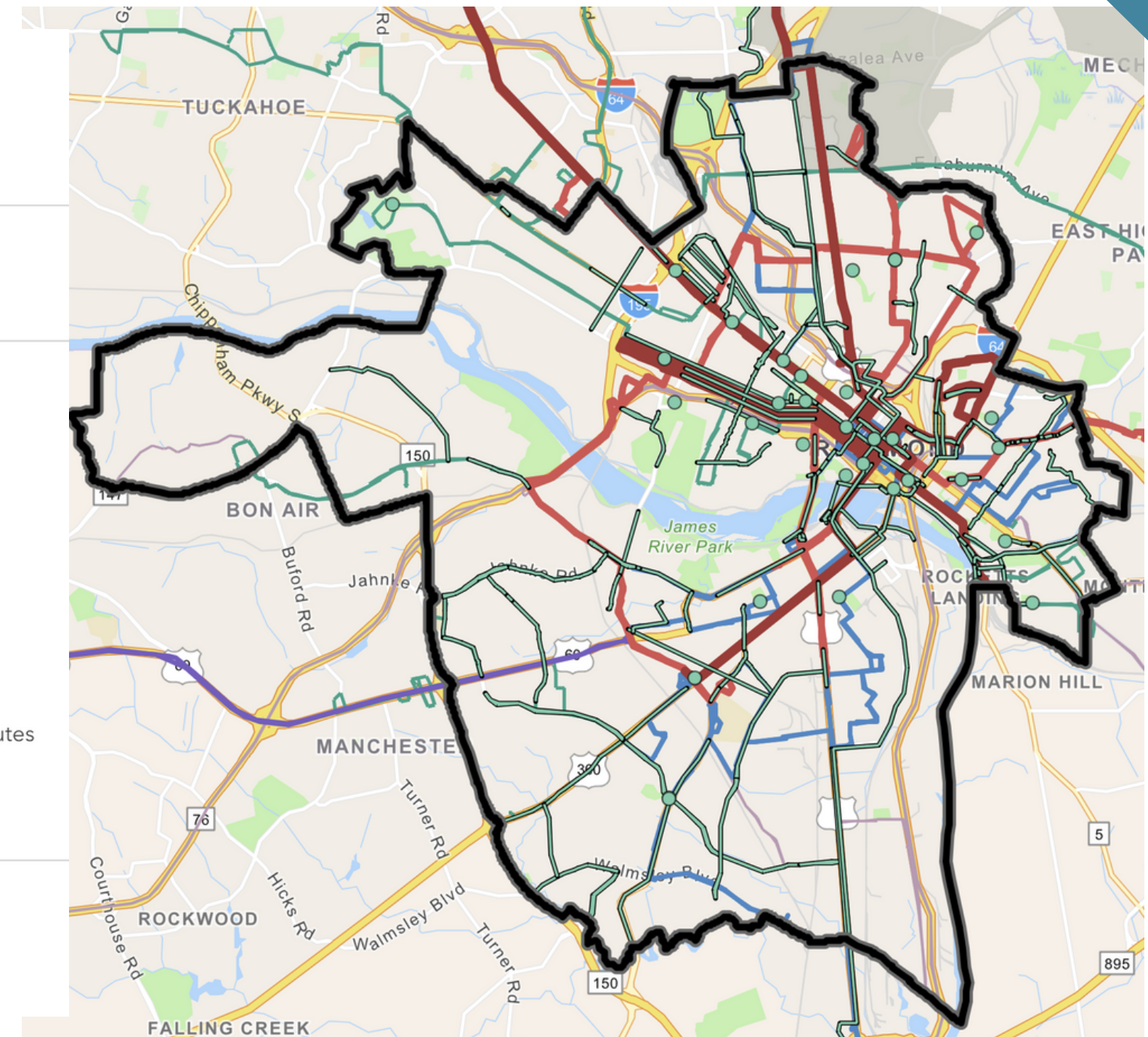


Baseline 2045 Transit Network

Weekday Midday Frequency

- 5 minutes or better
- 7-12 minutes
- 20 minutes
- 30 minutes
- 40-60 minutes
- Infrequent or express routes or no service at midday

Existing Microtransit



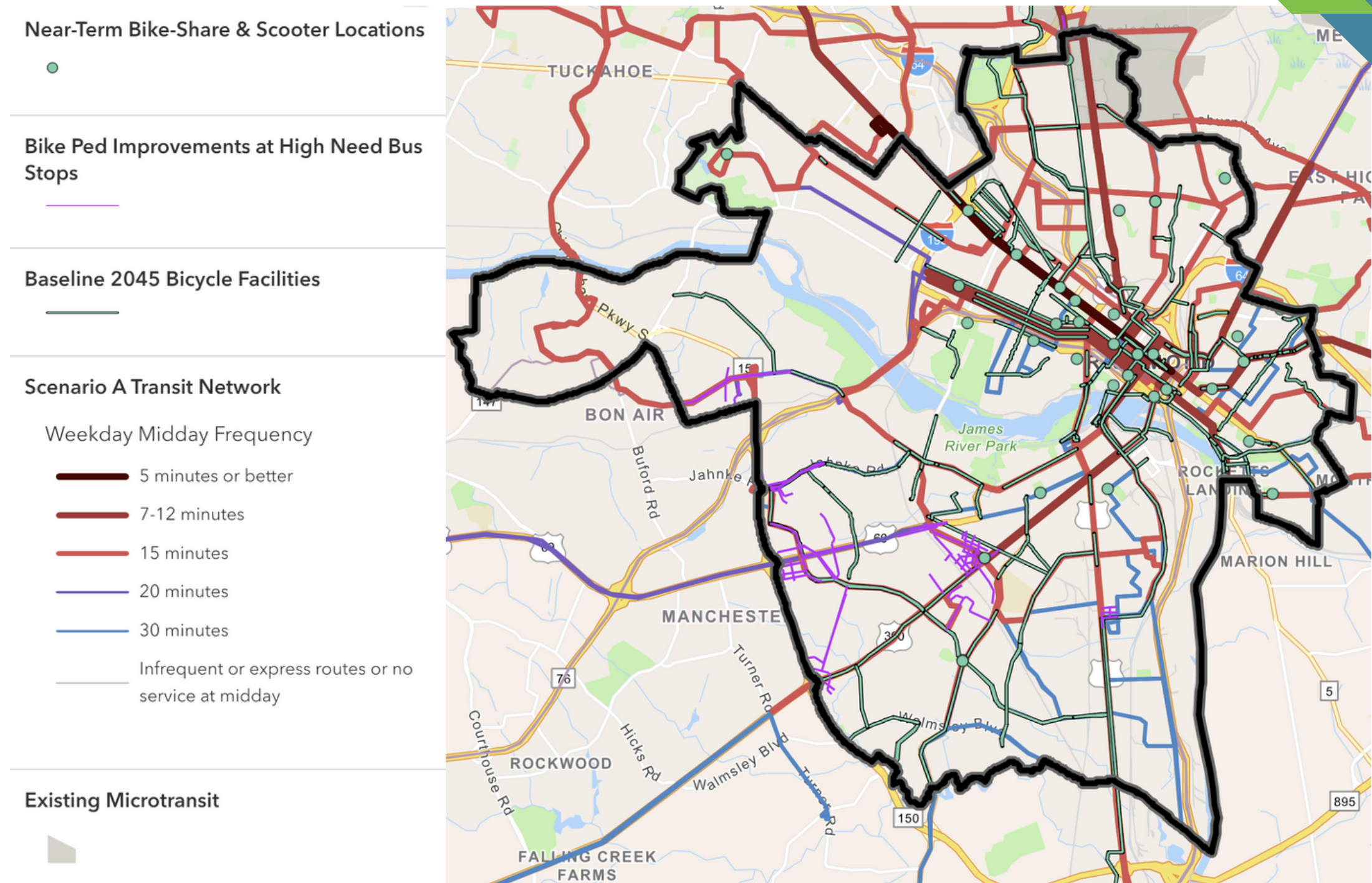
Explore the 2045 Baseline network:

bit.ly/RcScenBase

Scenario A

Equitable Transit

- Transit service is ~3x what it is today
 - Core routes have all-day frequency of every 15 mins or better. At least 30-min frequency on branches and outer/coverage routes.
 - All routes run from 5 am to 1 am, 7 days a week.
 - More frequent, direct connections from Communities of Concern to activity centers with employment opportunities.
- ALL GRTC bus stops have a bench and a shelter
- Bicycle and pedestrian improvements at highest-need transit stops



Explore the Scenario A network:
bit.ly/RcScenA

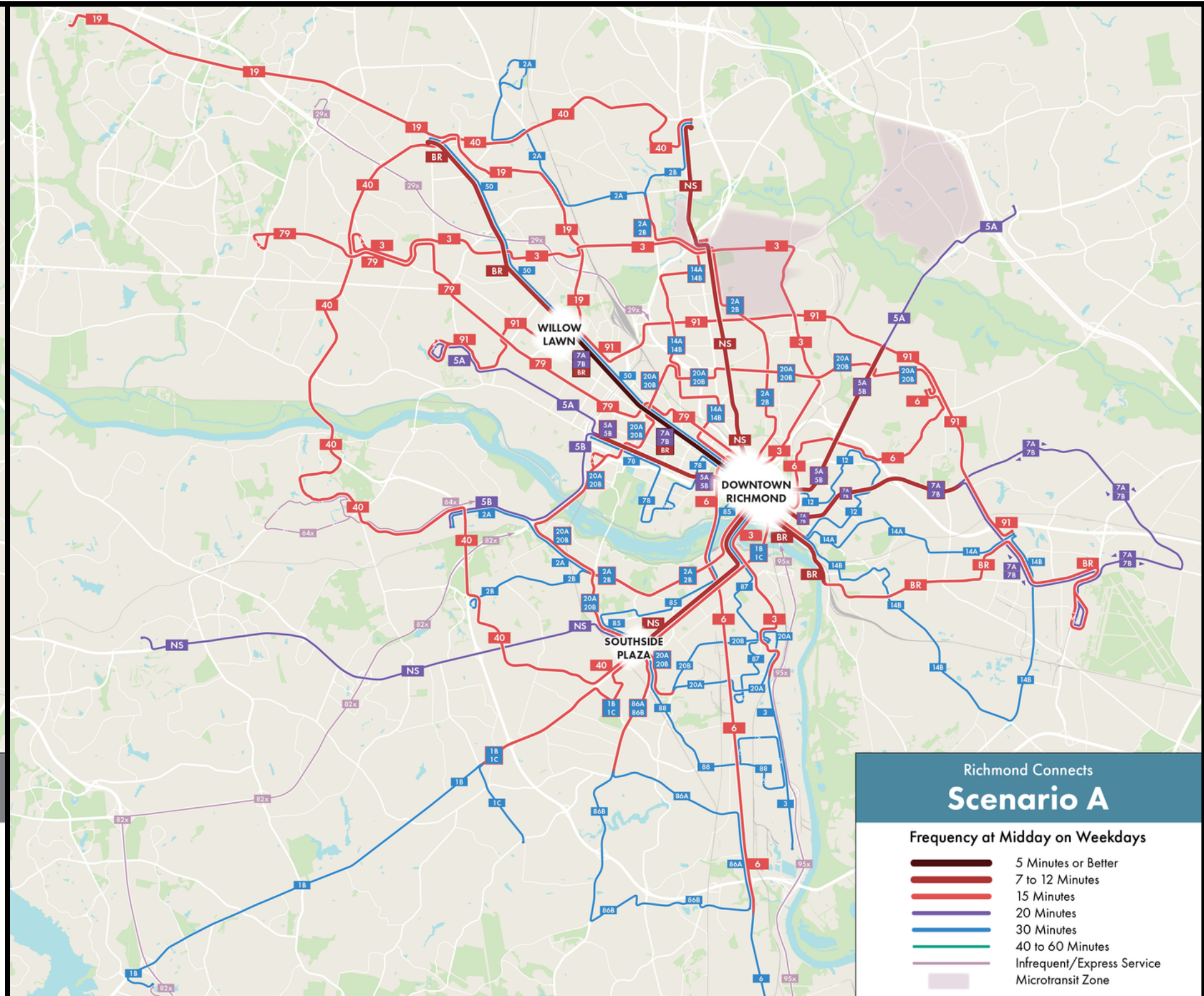
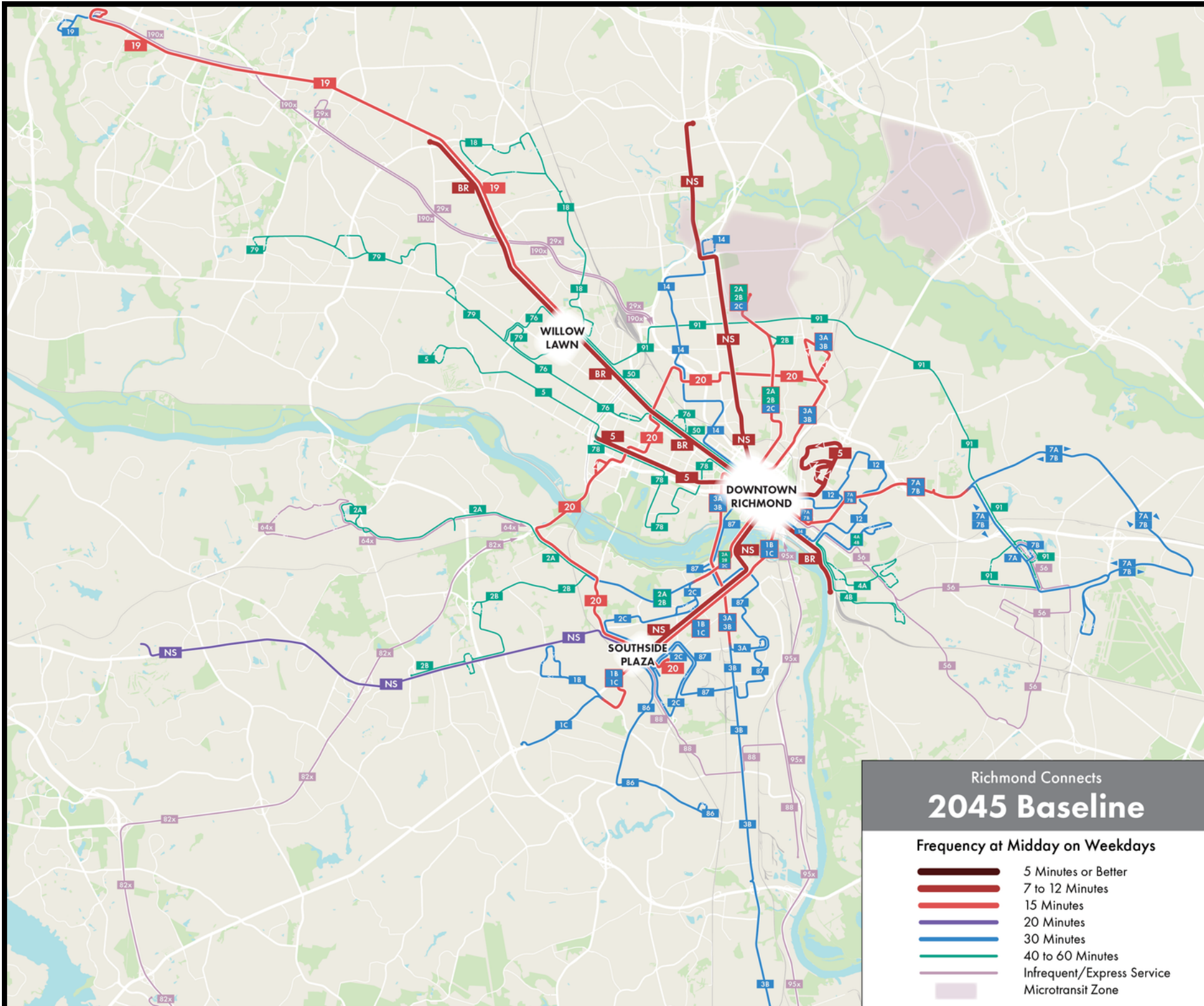


Transit Networks

2045 Baseline

Scenario A

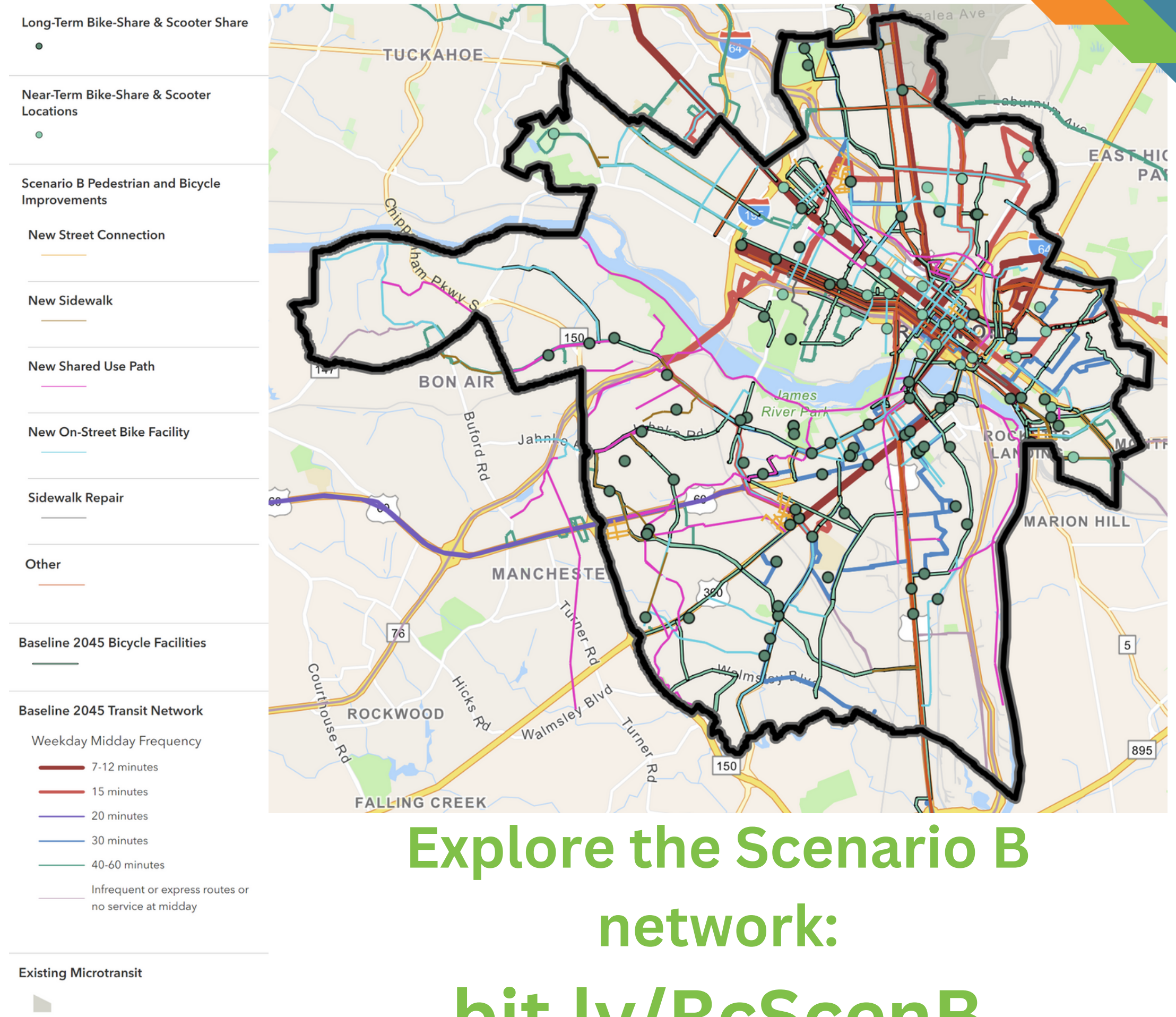
Frequency at Midday on Weekdays



Scenario B

Active Nodes

- Robust investment in pedestrian and bicycle facilities
 - All shared use path, sidewalk, streetscape, traffic calming, and bike lane projects identified in prior plans and studies that connect within or between Nodes are implemented.
 - New street grids proposed from Richmond 300 within Nodes are constructed.
 - All bicycle and pedestrian projects from Richmond Connects Strategic Plan are implemented.
- All near-term and long-term bikeshare and scooter locations are installed.
- All streets in Nodes have 100% sidewalk coverage.



Explore the Scenario B

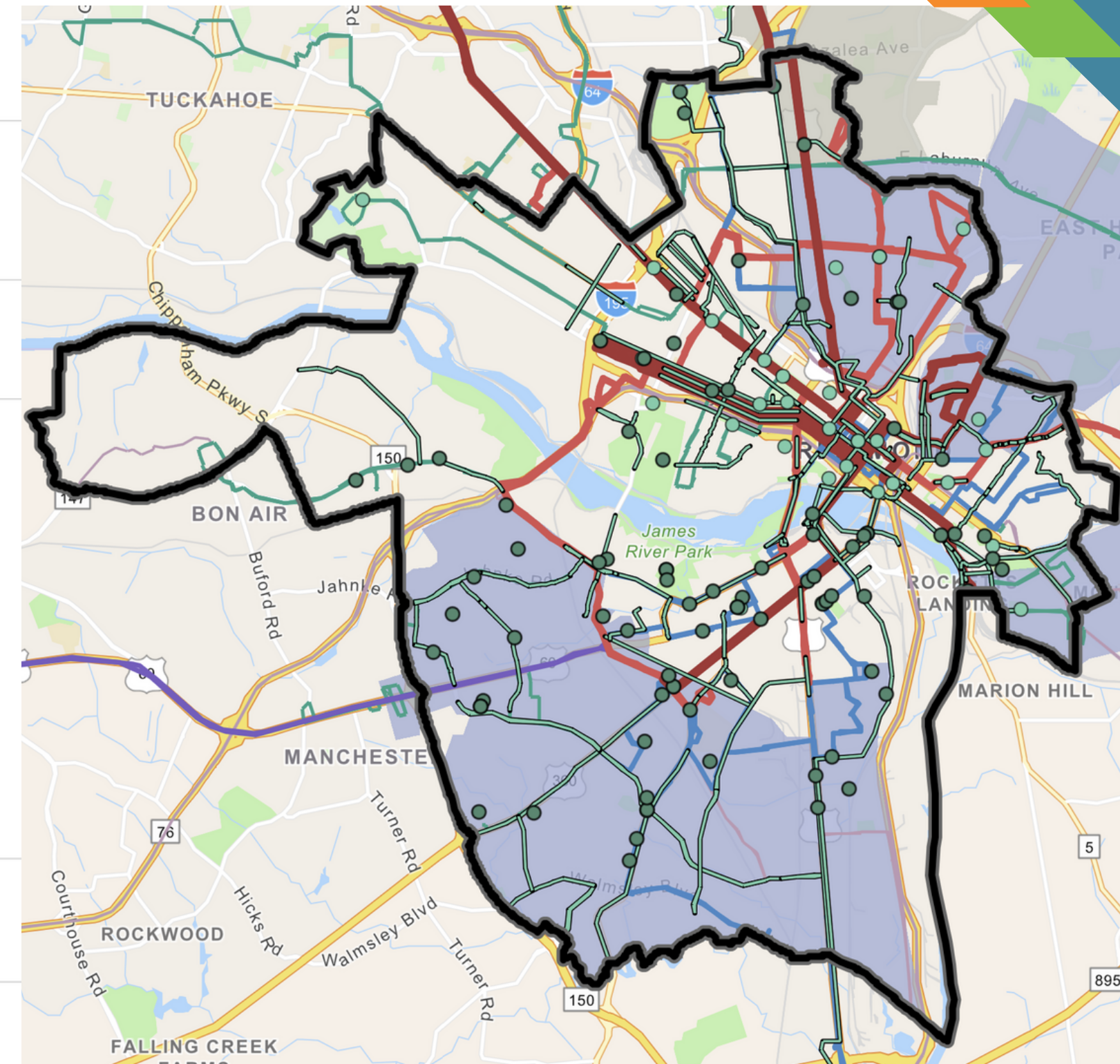
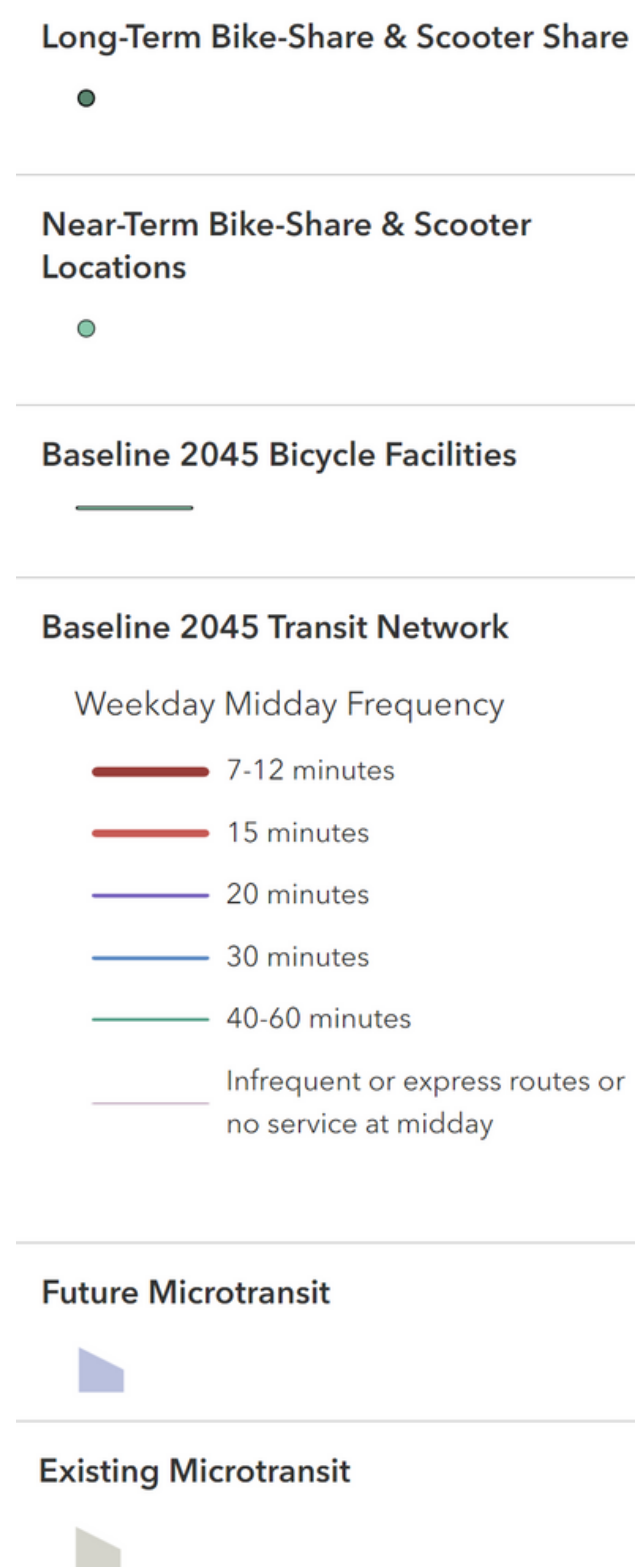
network:

bit.ly/RcScenB

Scenario C

Emerging Technology

- All micro-transit zones proposed in the City's micro-transit study are up and running
- Technology investments improve bus on-time performance to 80% systemwide
- All near-term and long-term bikeshare and scooter locations are installed
- Greater adoption of e-bikes
 - Bike speeds increase, bike access improves
- Publicly-available Electric Vehicle charging locations are 5X more than 2045 baseline.



Explore the Scenario C network:
bit.ly/RcScenC

Breakout Groups

**What are the potential
implications of the scenarios on:**

**Housing
Affordability,
Gentrification, and
Displacement?**



**Sustainability and
Climate
Resilience?**



**Safety and
Security?**



Breakout Groups

Group 1

Housing Affordability,
Gentrification, and
Displacement

Suggested
participants*

- Michelle Peters (HCD)
- Samantha Lewis (PDR)
- Ray Roakes (PDR)
- Marianne Pitts (PDR)
- Carla Childs (DPW, form. Econ Dev)
- Eva Colen (Human Services)

Group 2

Sustainability & Resilience

- Jasmin Johnson (OOS)
- Dawn Olesky (OOS)
- Laura Thomas (OOS)
- Wanda Marable (Parks & Rec)
- Christopher Frelke (Parks & Rec)

Group 3

Safety & Security

- Mike Sawyer (DPW)
- MS Khara (DPW)
- Andy Boenau (DPW)
- Lynne Lancaster (DPW)
- Lamont Benjamin (DPW)
- John Kim (DPW)
- Meloni Alexander (DPW)
- Torrence Robinson (DPW)
- Jake Helmboldt (DPW)

*You can choose a different group if you feel more knowledgeable about a different topic.

City Councilmembers, Liaisons, Equity Ambassadors, GRTC, and other participants -
Choose any group!

Group 1

What are the potential implications on **housing affordability, displacement, and gentrification?**

What are the risks and benefits of each scenario?



Group 1 - Scenario A

What are the potential implications of **Scenario A** on housing affordability, displacement, and gentrification?

1. What are the risks and benefits of **Scenario A** to housing affordability, displacement, and gentrification in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario A

- Transit service is ~3x what it is today
 - Core routes have all-day frequency of every 15 mins or better. At least 30-min frequency on branches and outer/coverage routes.
 - All routes run from 5 am to 1 am, 7 days a week.
 - More frequent, direct connections from Communities of Concern to activity centers with employment opportunities.
- ALL GRTC bus stops have a bench and a shelter
- Bicycle and pedestrian improvements at highest-need transit stops



Group 1 - Scenario A

Risks

- Could worsen displacement - potential double-edged sword

Richmond 300

Benefits

- Increased access to transit would reduce transit costs for families
- Might help with displacement
- Could help increase density of development --> greater housing affordability
- HCD affordable housing is very concerned with transit options in new developments

Richmond 300

Methods & Resources

- Research into gentrification and infrastructure investments coming out of Washington DC

Richmond 300

Other notes

- Make sure to target Communities of Concern first

Richmond 300

Jessica Dimmick



Group 1 - Scenario B

What are the potential implications of **Scenario B** on housing affordability, displacement, and gentrification?

1. What are the risks and benefits of **Scenario B** to housing affordability, displacement, and gentrification in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario B

- Robust investment in pedestrian and bicycle facilities
 - All shared use path, sidewalk, streetscape, traffic calming, and bike lane projects identified in prior plans and studies that connect within or between Nodes are implemented.
 - New street grids proposed from Richmond 300 within Nodes are constructed.
 - All bicycle and pedestrian projects from Richmond Connects Strategic Plan are implemented.
- All near-term and long-term bikeshare and scooter locations are installed.
- All streets in Nodes have 100% sidewalk coverage.



Group 1 - Scenario B

Risks

- Weather doesn't always cooperate
- Not everyone can use these (seniors, people with disabilities)
- Some important areas are not in Nodes, but may need these improvements too

Richmond 300

Benefits

- Would make Nodes more desirable, add housing in Nodes that aren't as residential, could expand affordable housing options
- Would create a synergistic effect with increasing transit ridership

Richmond 300

Methods & Resources

- Research into gentrification and infrastructure investments coming out of Washington DC

Richmond 300

Other notes

- Make sure to target Communities of Concern first

Richmond 300

Jessica Dimmick



Group 1 - Scenario C

What are the potential implications of **Scenario C** on housing affordability, displacement, and gentrification?

1. What are the risks and benefits of **Scenario C** to housing affordability, displacement, and gentrification in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario C

- All micro-transit zones proposed in the City's micro-transit study are up and running
- Technology investments improve bus on-time performance to 80% systemwide
- All near-term and long-term bikeshare and scooter locations are installed
- Greater adoption of e-bikes
 - Bike speeds increase, bike access improves
- Publicly-available Electric Vehicle charging locations are 5X more than 2045 baseline.



Group 1 - Scenario C

Risks

- Would attract younger populations, which could increase displacement
- Cost of EV is expensive for individuals
- Would have to increase education (costly and time-consuming)
- We don't know 100% if these tech options are definitely useful compared to tried-and-true methods (sidewalks, bikes), there may be other tech we don't know about

Richmond 300

Benefits

- Bus performance improvements would help reliability --> time is money, people may be more likely to use transit

Richmond 300

Methods & Resources

Jessica Dimmick

Other notes

- Make sure to target Communities of Concern first

Richmond 300

Jessica Dimmick

Group 1:

Housing affordability, displacement, and gentrification



What could we measure? What could we discuss? - Initial ideas from Richmond Connects team

- Percent of scenario network investments in gentrification-prone areas?
 - Look to prior OETM work on defining gentrification risk zones [here](#)
- Variation in value of improvements on land values via different modes
 - *e.g. Does sidewalk improvement have same impact as BRT stop?*
- Increase in development spurs increase in destinations so accessibility goes up, but how to measure or mitigate irrelevant destinations?

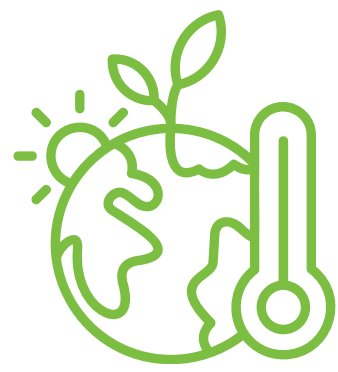
What else do we need to ask to be able to discuss and quantify or qualify the risks and benefits?



Group 2

What are the potential implications on **sustainability and climate resilience**?

What are the risks and benefits of each scenario?



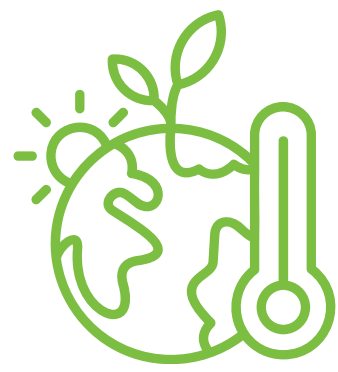
Group 2 - Scenario A

What are the potential implications of **Scenario A** on sustainability and climate resilience?

1. What are the risks and benefits of **Scenario A** to sustainability and climate resilience in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario A

- Transit service is ~3x what it is today
 - Core routes have all-day frequency of every 15 mins or better. At least 30-min frequency on branches and outer/coverage routes.
 - All routes run from 5 am to 1 am, 7 days a week.
 - More frequent, direct connections from Communities of Concern to activity centers with employment opportunities.
- ALL GRTC bus stops have a bench and a shelter
- Bicycle and pedestrian improvements at highest-need transit stops



Group 2 - Scenario A

Risks

If we don't have EV replacements for diesels/busses/CNG, we are risking air pollution.
Circular waste economy - recycling bus batteries,
Source of electricity need to be independent from fossil fuels.
East of City and route 5, lacking. Henrico 'loves library oriented development,' (look at the growth scenario, why don't we have more?),
Traditional transit - heavy!! Infrastructure load. redundancy? (lack of modal options, less ability to travel via other modes)

Kelli Kelli

Benefits

If all electric, huge win.
Community charging.
Stops are all covered, resiliency.
Infrastructure improvements for heavy vehicles are good for roads resiliency?

Kelli Kelli

Methods & Resources

<https://toolkit.climate.gov/tool/rvagreengreen-2050-climate-equity-index>

Dominion commitments to energy usage, VA clean economy act (sets goals/targets we can assume)

Green infrastructure mapping tool. What routes are more likely to flood out sooner.
Climate vulnerability and risk assessment.

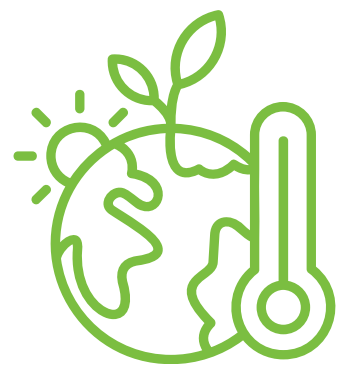
Lucy Bolin

Other notes

Will Nickel bridge have infrastructure to accommodate transit?

Lucy Bolin

Jessica Dimmick



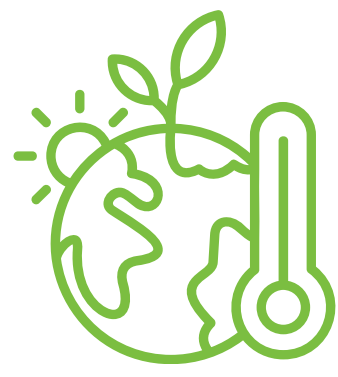
Group 2 - Scenario B

What are the potential implications of **Scenario B** on sustainability and climate resilience?

1. What are the risks and benefits of **Scenario B** to sustainability and climate resilience in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario B

- Robust investment in pedestrian and bicycle facilities
 - All shared use path, sidewalk, streetscape, traffic calming, and bike lane projects identified in prior plans and studies that connect within or between Nodes are implemented.
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 - All bicycle and pedestrian projects from Richmond Connects Strategic Plan are implemented.
- All near-term and long-term bikeshare and scooter locations are installed.
- All streets in Nodes have 100% sidewalk coverage.



Group 2 - Scenario B

Risks

Environmental impacts (heat, more frequent storms, etc.) can affect ability to bike/walk comfortably.
Maintenance cost of expanded urban canopy
Flooding risk of pedestrian infrastructure network

Lucy Bolin

Benefits

If this includes full landscaping - could help overall heat resiliency.

redundancy issues if using same infrastructure? Also risk

health and education, this has landscaping and localized green jobs that can't be automated, outsourced

Kelli Kelli

Methods & Resources

<https://analyzer.treeequityscore.org/richmond/map>

prioritization index- weighted the community priorities

Kelli Kelli

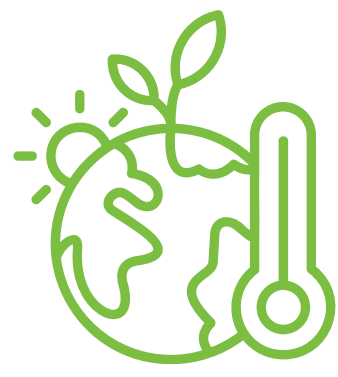
Other notes

Where/how much is the green infrastructure?
Where is redundancy?
Heat risk, flooding

Kelli Kelli

need to clarify assumptions about trees, landscaping, shade.

Kelli Kelli



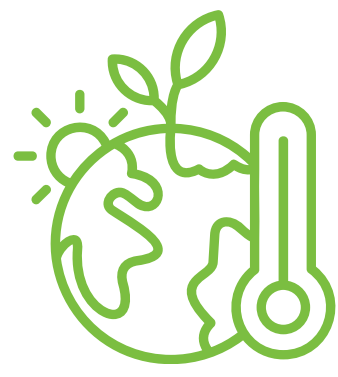
Group 2 - Scenario C

What are the potential implications of **Scenario C** on sustainability and climate resilience?

1. What are the risks and benefits of **Scenario C** to sustainability and climate resilience in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario C

- All micro-transit zones proposed in the City's micro-transit study are up and running
- Technology investments improve bus on-time performance to 80% systemwide
- All near-term and long-term bikeshare and scooter locations are installed
- Greater adoption of e-bikes
 - Bike speeds increase, bike access improves
- Publicly-available Electric Vehicle charging locations are 5X more than 2045 baseline.



Group 2 - Scenario C

Risks

Benefits

Methods & Resources

Jessica Dimmick

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Other notes

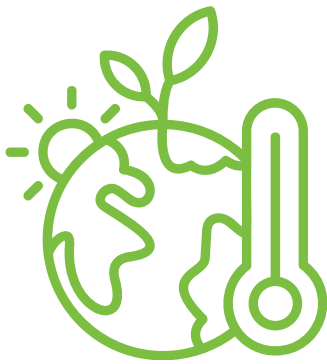
same questions apply to these.

Kelli Kelli

Jessica Dimmick

Group 2:

Sustainability and Climate Resilience



**What could we measure? What could we discuss? -
Initial ideas from Richmond Connects team**

- Network in flood zone
- Network in heat zones
- Investments' ability to mitigate heat risks
- Air quality impacts by mode
- Redundancy of modes and routes for resiliency

What else do we need to ask to be able to discuss and quantify or qualify the risks and benefits?

Where/how much is the green infrastructure? green jobs
Where is redundancy? - not just a road, but also community assets
Heat risk, flooding

Kelli Kelli

Group 3

What are the potential implications on **safety and security**?

What are the risks and benefits of each scenario?



Group 3 - Scenario A

What are the potential implications of **Scenario A** on safety and security?

1. What are the risks and benefits of **Scenario A** to safety and security in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario A

- Transit service is ~3x what it is today
 - Core routes have all-day frequency of every 15 mins or better. At least 30-min frequency on branches and outer/coverage routes.
 - All routes run from 5 am to 1 am, 7 days a week.
 - More frequent, direct connections from Communities of Concern to activity centers with employment opportunities.
- ALL GRTC bus stops have a bench and a shelter
- Bicycle and pedestrian improvements at highest-need transit stops



Group 3 - Scenario A

Risks

Robinson - Issues with crime increasing where bus shelters are located, using the shelter for non-civil purposes. (How to mitigate?) Increased lighting may be an option to address.

Sawyer - Late night concerns and how system is used at later hours/after dark. More safety concerns at later hours. Security concerns at the transit stops. Increased demand will bring conflict with mental/home less population utilizing free-fare bus service.

Bell - Later transit service means more bike/ped activity in dark and could increase safety concerns.

Benefits

Sawyer - Less drivers on the roadway, less cars for crashes. More automated bus drivers will have better safety operations. Reduced need for CDL/licensure if automated transit service.

Khara - Regional connectivity of increased transit service. In turn creates economic benefit.

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Other notes

Jessica Dimmick

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Group 3 - Scenario B

What are the potential implications of **Scenario B** on safety and security?

1. What are the risks and benefits of **Scenario B** to safety and security in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario B

- Robust investment in pedestrian and bicycle facilities
 - All shared use path, sidewalk, streetscape, traffic calming, and bike lane projects identified in prior plans and studies that connect within or between Nodes are implemented.
 - New street grids proposed from Richmond 300 within Nodes are constructed.
 - All bicycle and pedestrian projects from Richmond Connects Strategic Plan are implemented.
- All near-term and long-term bikeshare and scooter locations are installed.
- All streets in Nodes have 100% sidewalk coverage.



Group 3 - Scenario B

Risks

Boenau - Increased network may lead to more opportunities for bike/walk, which may lead to more interaction with vehicles.

Khara - For more sub-urban areas of the City, difficulty with ROW/space for introducing bike/ped spaces without higher cost or pushback.

King - Usage of bike lanes or sidewalks for parking by service/emergency vehicles because roadway has been narrowed to introduce those elements.

Robinson - Increased potential for bike/ped collisions with vehicles.

Cost of upgrading network to ADA standards and maintaining ADA standards is high.

Jessica Dimmick

Benefits

Sawyer/Boenau - leads to increased e-bike usage, which is a major positive.

Boenau - Increased network leads to more opportunities for benefits (net multiplier positive benefits). More usage by young/senior riders with an overall safer system.

Sawyer - Bike/pedestrian requires less overall ROW/space, which can lead to converting that space to more dense development/land use. More people using the system will create more safety from group/herd effect.

Vision Zero is easier to achieve with lower speeds therefore lower incidence and lower injury.

Cost to maintain bike/ped infrastructure is generally lower than vehicle infrastructure.

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Group 3 - Scenario C

What are the potential implications of **Scenario C** on safety and security?

1. What are the risks and benefits of **Scenario C** to safety and security in Richmond?
2. Are there ways to quantify/measure this? Resources or research we should consider?

Scenario C

- All micro-transit zones proposed in the City's micro-transit study are up and running
- Technology investments improve bus on-time performance to 80% systemwide
- All near-term and long-term bikeshare and scooter locations are installed
- Greater adoption of e-bikes
 - Bike speeds increase, bike access improves
- Publicly-available Electric Vehicle charging locations are 5X more than 2045 baseline.



Group 3 - Scenario C

Risks

Sawyer - Technology can only go so far to address built infrastructure.

Robinson - Security of IT/technology controlled by the City, will need more protection from outside action. Cybersecurity.

Benefits

Sawyer - Mode shift to e-bikes increases mobility.

Sawyer - City is already seeing benefits from ITS improvements for signals and could see more with improved AV. Emergency vehicle pre-emptions.

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Boenau - Review international usage for discussions related to storage/security.

Sawyer - Potential net-multiplier from e-bike usage. Longer trips, heavier trips, as well as ability to address more terrain/geography.

Other notes

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Group 3:

Safety and Security



What could we measure? What could we discuss? - Initial ideas from Richmond Connects team

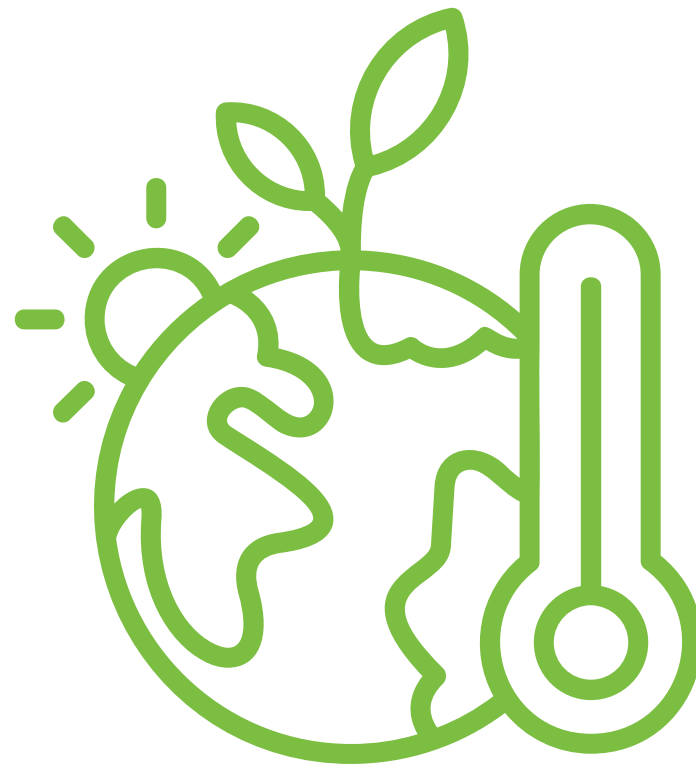
- Quantify: Percent of each scenario network on the High Injury Street Network (HISN)
- Discuss: Do scenarios with greater quantity of improvements on the HISN inherently have better safety outcomes?
- Qualify: Anticipated walk/bike and transit mode share impacts to safety.
 - e.g. What are the benefits of increased safety culture and awareness for walking and biking as more people walk and bike?
 - e.g. Do fewer cars actually result in fewer pedestrian deaths?

What else do we need to ask to be able to discuss and quantify or qualify the risks and benefits?

Report Out

Facilitators from each group share major insights from group discussion.

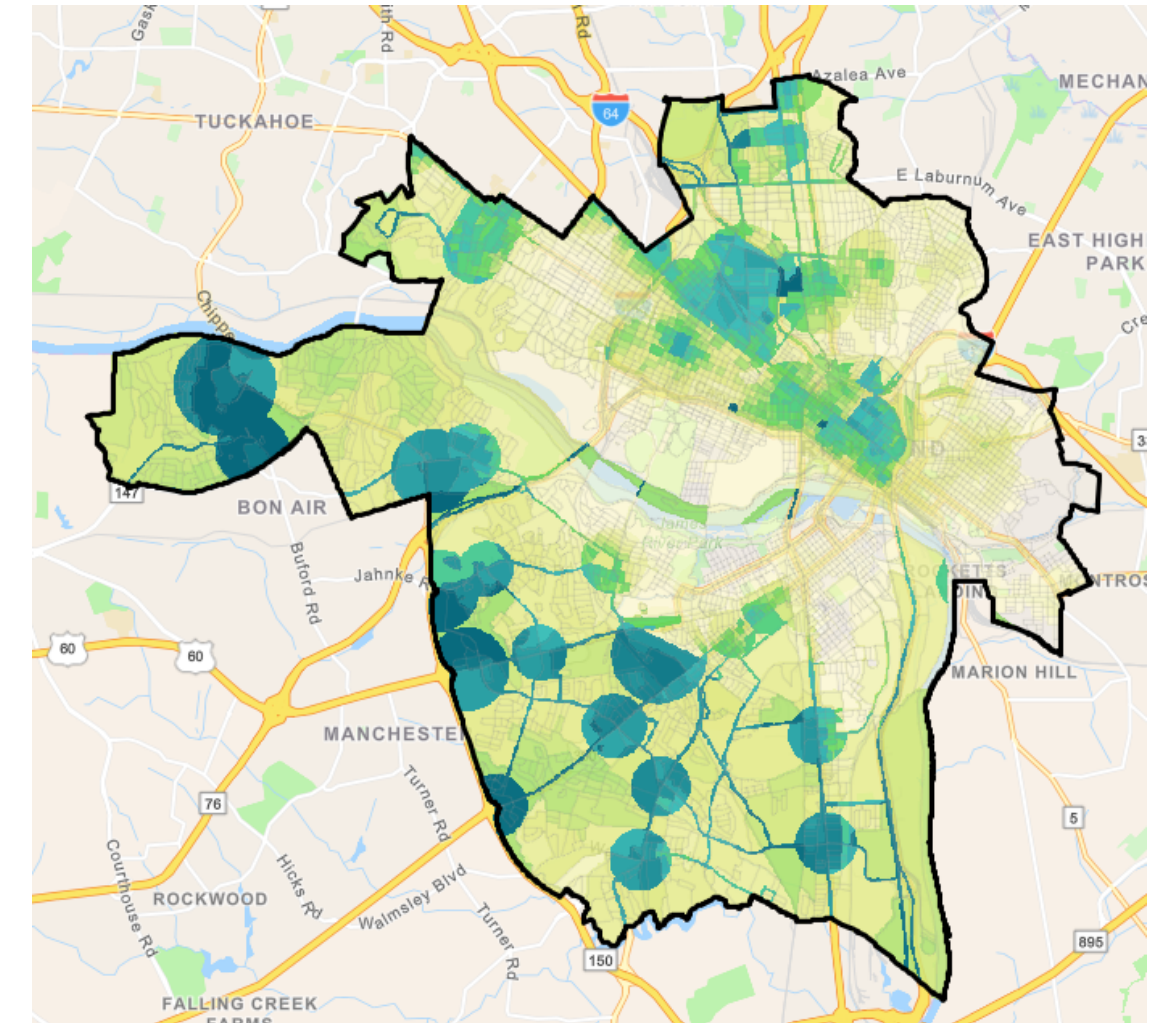
2-3 minutes per group



Accessibility Modeling

Long-Term Scenario Plan will tell the story of 3 scenarios with:

1. Maps of increases and decreases in access to jobs, food, and greenspace, by walking, biking, and transit
2. Data on how those changes compare for areas where Communities of Concern currently live vs. everyone.
3. Assessment of the “adequacy” of future accessibility in each scenario
 - i.e. Is it “good enough”?



← Discuss today

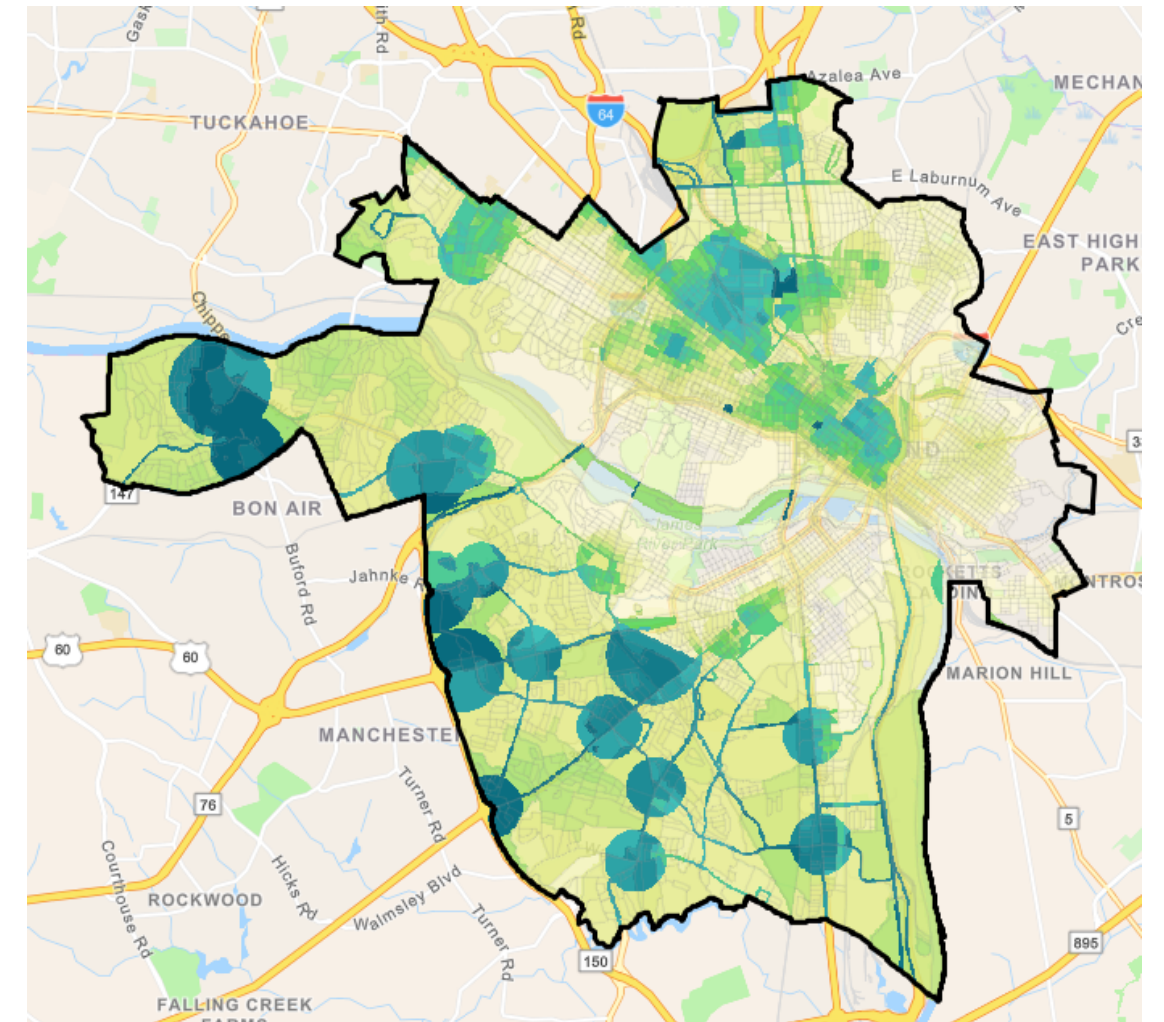
Where is access “good enough”?

Where is it not?

- Supplemental way to present the analysis results in a way that is easier to understand
- Defining what is “adequate” is thorny, but we can make some general assumptions

Consider the definitions on the next slide.

- **Thumbs up or thumbs down?**
- **How would you change them?**

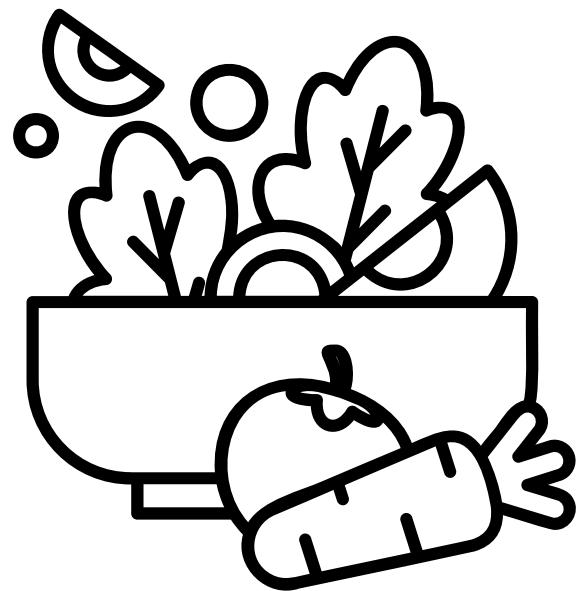


What is “adequate” access?

**Contingent upon analysis results*

Food:

- **2 grocery stores within 15 minutes by transit**
- **1 grocery store within 20 minutes by walking**



Greenspace:

- **1 park within 10 minutes by walking**
- **2 parks within 15 minutes by transit**



Jobs:

| Mode | General Adequacy Threshold | Access Score* |
|---------|--|------------------|
| Transit | 1 relevant job for every person within 45-minutes by transit | 1.0 for transit |
| Bike | 1 relevant job for every 2 people within 30 minutes by bike | 0.5 for bike |
| Walking | 1 relevant job for every 4 people within 20 minutes by walking | 0.25 for walking |

**Competitive relevant job accessibility by mode*



Discussion Notes - Defining “adequate” access

Food

Potential to lower grocery store walking distance to 15 minutes.

How are we looking at walking/transit scores for non-mobile populations?

Half mile is an option for upper limit.

Corner store vs Kroger is a major difference in access and equity. Make sure model incorporates access appropriately.

Greenspace

Considering cemetery space as greenspace.

Consider schools as parks?

Is there an option to add 5 minute walk to determine how many people are within that distance?

If using cemeteries as greenspace, make sure it does impact actual usage of cemetery as revered space.

Jobs

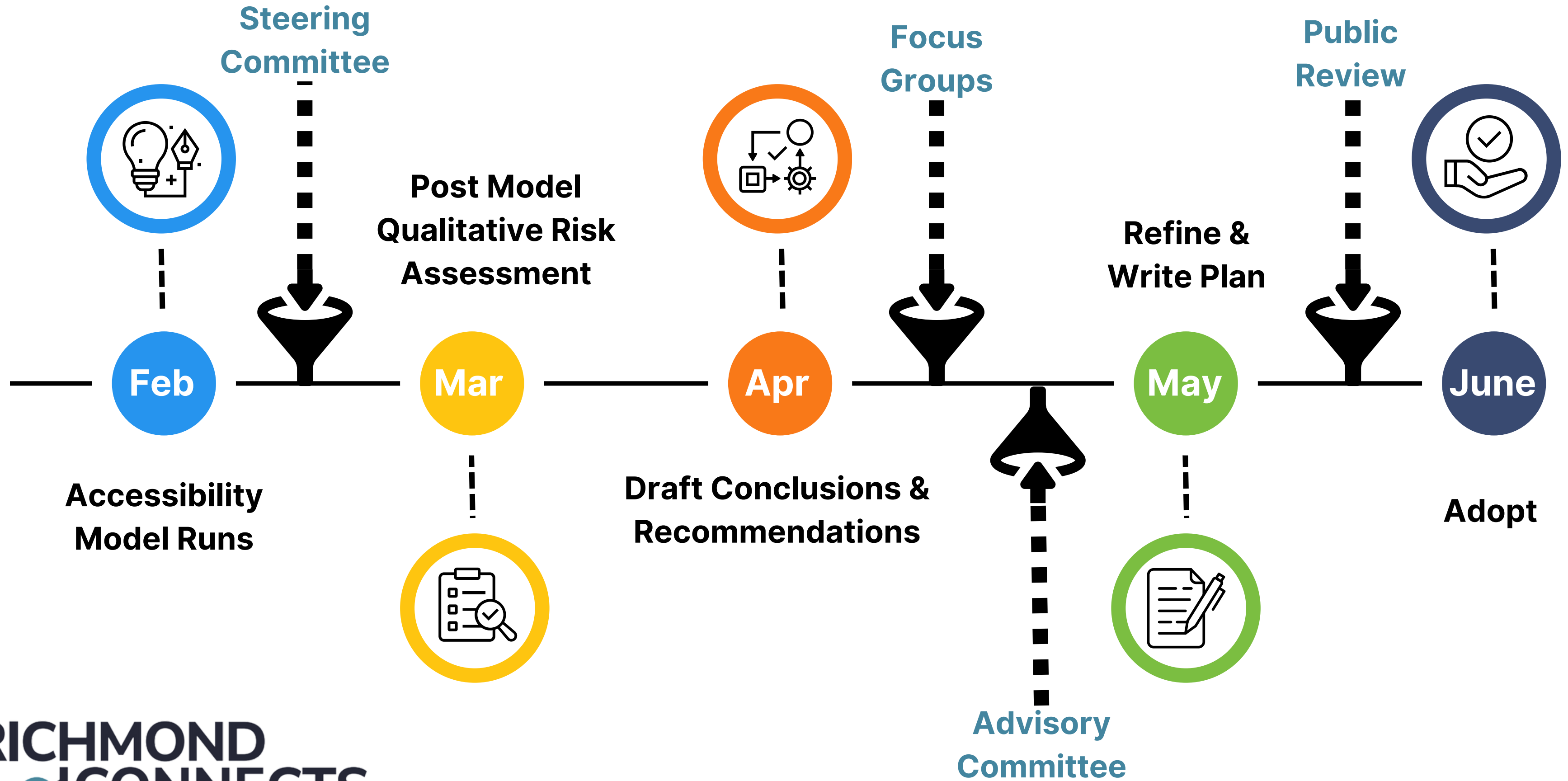
Is 45 minutes too long for 1 job? Should that be 30 minutes?

Other notes

Access for cargo e-bikes is different than walking or transit distances, could increase opportunities. Would that open up access due to faster ability.

Should we reconsider walking scoring for poor weather or disabilities?

Scenario Plan Next Steps





Thank You

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Information Slides

Changes made to document since public comment period:

1. Added a clear definition of “equity” and the Equity vs. Equality bicycle graphic from Path to Equity in the introduction section to address misunderstanding of equal geographic distribution as equity.
2. Removed the “Multimodal Bike Lanes” strategy to address comments that saw this strategy as condescending and correctly pointed out people who use wheelchairs are already allowed to ride in the bike lanes.
3. Removed car-free Carytown recommendation and put in a more general ‘car-free shopping areas’ in the strategies; added a Carytown safety project recommendation (14L)
4. Added Malvern Ave. sight distance project (16H)

Changes made to document since public comment period, con't...

5. Laburnum Median Improvements (Project C14) –

- a. The Richmond Connects team revised the Action Plan to note the public comments voicing opposition of the project, the reasons the public comments gave, and the survey of residents that found 75% of residents do not approve of this project.

6. Reformatting of strategies pages and clarification language added on other specific strategies

7. Added additional language to Project 4C Richmond Connects Equity-Driven Sidewalks Projects

- a. Added “Where new sidewalks may not be feasible on residential streets, try implementing bike-walk or slow streets
- b. Added “Sidewalk projects should preserve street trees, especially large mature trees, and create healthy foundations for the growth of large mature trees.”

8. Small wording or extent modifications to projects description