

DUKE STREET *IN MOTION*

Advisory Group Meeting #11

May 25, 2023



alexandriava.gov/DukeInMotion

This project is funded with Northern Virginia Transportation Authority (NVTA) regional revenues.

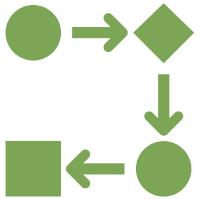


Welcome!



Introductions & Meeting Background

Overview of Public Feedback



Review Concept Comparison

Recommendation



Next Steps



Approval of Meeting Minutes #10

Meeting Goals



Understand public feedback



Discuss recommendation



Adopt recommendation

AG Roles and Responsibilities

- ✓ Relay information
- ✓ Participate
- ✓ Provide feedback
- ✓ Respect each other
- ✓ Represent groups
- ✓ Build on decisions



Project Guiding Principles



Convenient

Make bus travel more predictable, frequent, and comfortable



Efficient

Improve mobility for all Duke Street travelers



Equitable

Use enhanced bus transit to support equitable access for a diversity of people and places



Safe

Ensure safety and accessibility for those connecting to and riding the bus, as well as other travelers



Vibrant

Create and enhance thriving and future corridor destinations that improve resident quality of life and boost the local economy



Sustainable

Contribute positively to the environment, now and in the future



Community Feedback Overview

Engagement Period (Phase 3)



Starting early 2023, through April:

- Provided more information about
 - Two busway concepts (Concepts A and B)
 - Curb features (Concepts Y and Z)
 - Analysis results.

In April, collected feedback to inform:

- The Advisory Group's recommendation to Council.
- Areas to consider as the concept advances into further design.

This Phase Builds on Previous Input

The community input used through final design.

Summer 2021: Vision and Goals



88%

Wanted to see reduced traffic



47%

Would ride or would consider riding the bus more often with improvements



55%

Wanted to see improved safety

Fall 2022: Concept Options

A slight majority (53%) **did not think improved bus service warranted a few extra minutes of travel time,**

but 69% of pop-up poll respondents **said it's important to improve bus service** even if that means it takes slightly longer by car.

44% of respondents who use service roads said they were **willing or potentially willing to support changes to the service road to support a safer, greener, and more transit-friendly Duke Street,** as long as the redesign could provide access and parking.

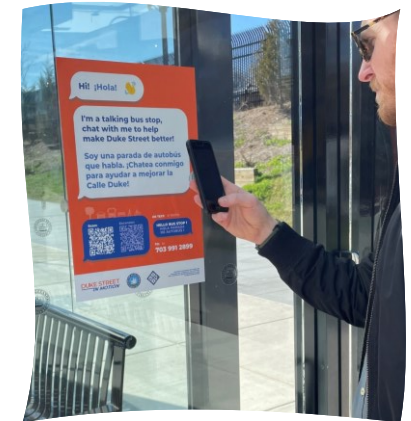


Outreach & Activities

Building Awareness for April Comment Period

Sharing information in many ways
Building on lessons learned

- Outreach through AG - Toolkit
- Advertisements - El Tiempo Latino, Alexandria Gazette Packet, and Alexandria Times
- **Multilingual Mailer** sent to multi-family residential units along the corridor
- Lawn signs throughout the corridor
- **Multilingual Hello Duke Street signage**
- Press release/email notifications via City listservs and the project email list (1,445 on project email list)
- Social media



Phase 3 Information-sharing and Input-Gathering Activities



- **Tally Polls from** (228 polls completed)
 - Pop-up events
 - Bus stop chats
 - Bus ride-alongs
- **Direct business outreach** via phone, email, door-to-door
- **Written feedback via**
 - Feedback form (432 responses)
 - Emails (19, including 1 petition)
 - Text messages (117 users)

- **Meetings & Presentations**
 - *Targeted group discussions* including discussions with Canterbury Square, ACPS, WEBA, Cameron Station, Clover College Park, Agenda Alexandria
 - *Boards and commissions:* Traffic & Parking Board, Transportation Commission, DASH Board,
 - *Advisory Group* meetings (Feb, Mar, Apr)
 - *Open Houses* - Duke Street and West Taylor Run Meetings
 - *Recorded webinar*



Who We Heard From

Feedback Form Demographic Overview



Over 75% of respondents live “close to” or “directly off” Duke Street.



82% use multiple modes
17% of respondents only drive
3% never drive



Compared to overall corridor demographics:

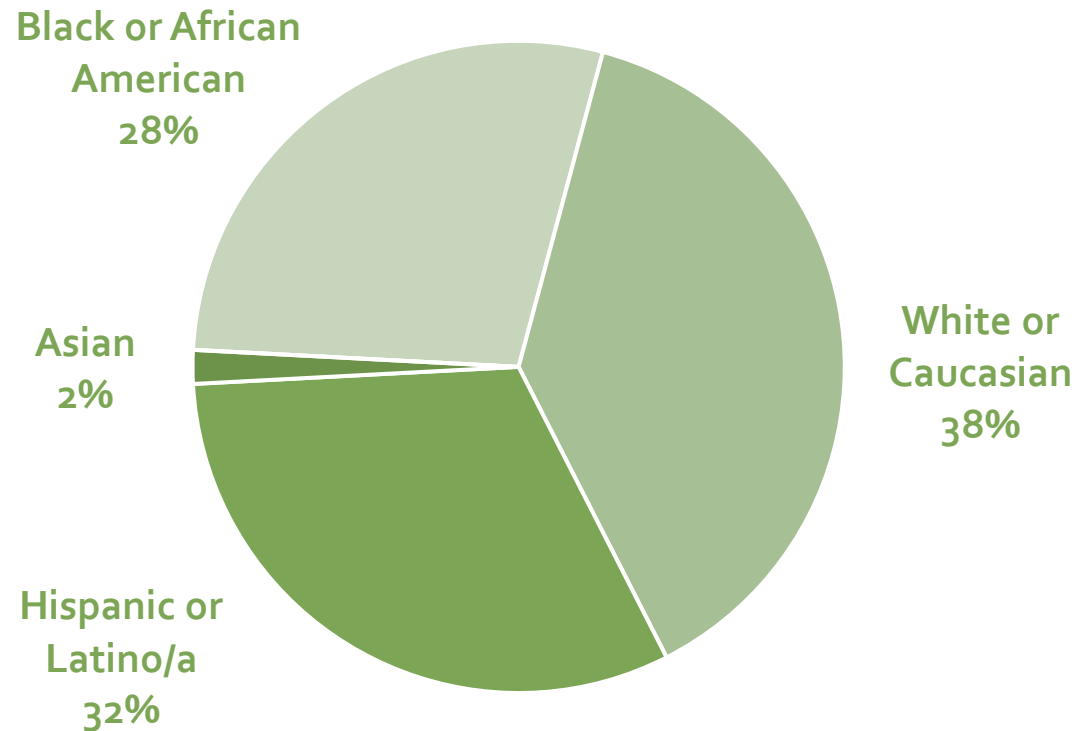
- Renters are underrepresented.
- People under the age of 35 are underrepresented.
- People who are non-white are underrepresented.
- Households with incomes below \$100,000 are underrepresented.
- The ratio of people who identified as female or male was similar.

You can view more demographic data in the Appendix.

Summary of Demographics (Bus Chats & Pop-ups)

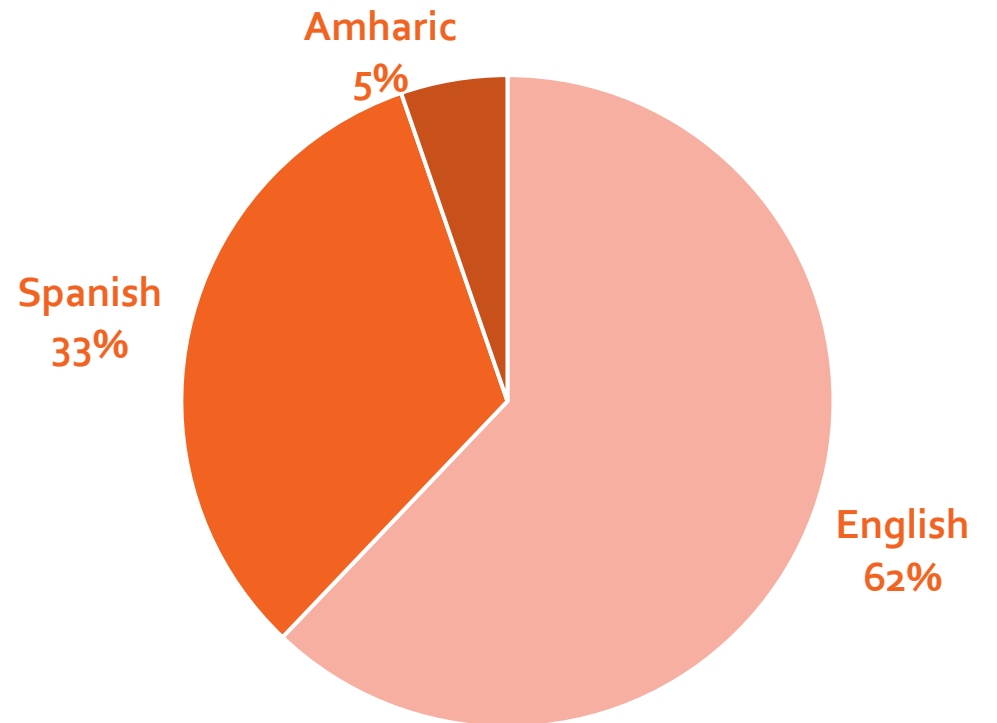
Race/Ethnicity for all Interactions

(600 interactions)



Language Spoken for Tally Poll

(228 responses)





What We Heard

Phase III General Takeaways



Concepts

- About 60% of feedback form responses favored Concept A, while 60% of “Hello Duke Street” responses and quick poll from pop-ups support curb bus lanes (Concept B).
- 25% of feedback form respondents did not favor either proposal.



Station Spacing

- About 3/4 of both feedback form and pop-up responses **supported the proposed stop spacing.**



Curb Features

- Strong majority of pop up responses favored **separated facilities** along with a slight majority of feedback form responses.









Feedback about Corridor Concepts A and B

Corridor Concept Feedback

How well do you think the concepts align with each of the Guiding Principles?

58% of all responses said Concept A is “much better” or “slightly better” for at least 4 of the 6 Guiding Principles. 12% said the same for Concept B.

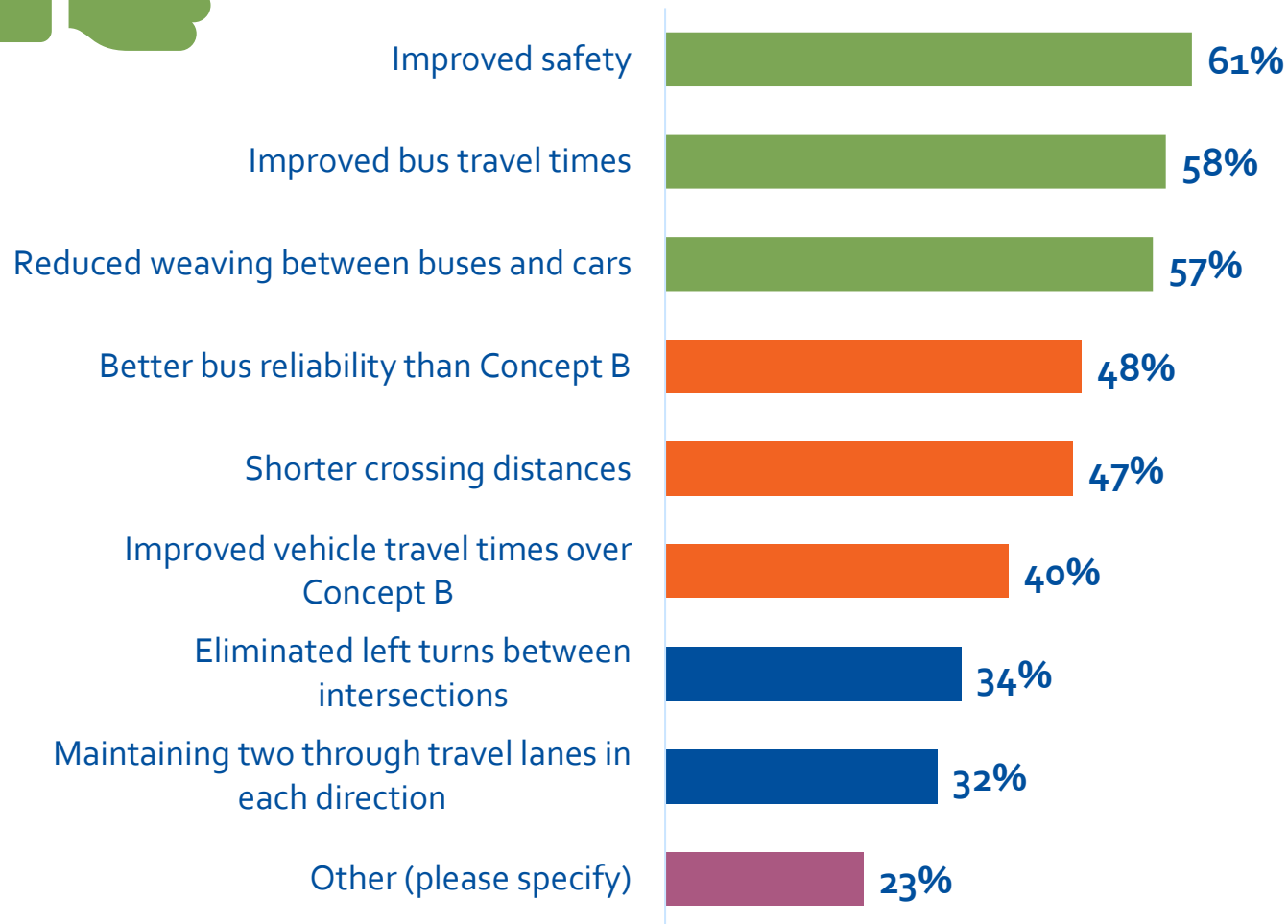
Guiding Principles	Concept A is <u>much</u> or <u>slightly</u> better	Concept B is <u>much</u> or <u>slightly</u> better	About the same or Unsure
 Convenient	64%	20%	17%
 Efficient	66%	19%	15%
 Equitable	60%	18%	23%
 Safe	67%	18%	16%
 Vibrant	61%	14%	25%
 Sustainable	61%	16%	23%

395-400 responses for each Guiding Principle

Corridor Concept A Feedback



What do you like?



More than half of respondents viewed Concept A favorably for improved safety, improved bus travel times, and reduced weaving between buses and cars.

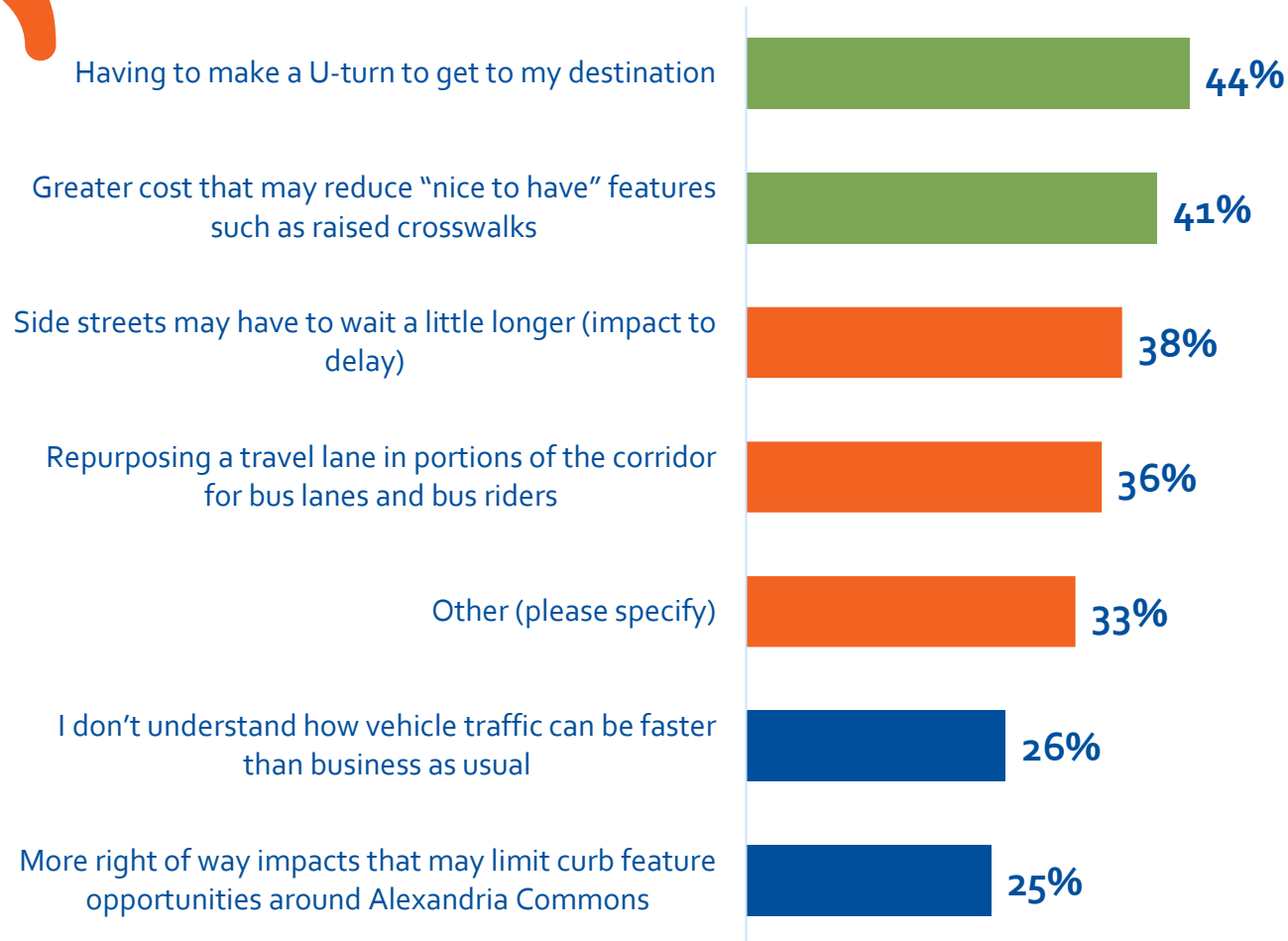
Other things people like about Concept A

- Nothing (14%)
- Neighborhood access/slip lane removal (3%)
- Better pedestrian safety (2%)
- Better for buses (1%)

Corridor Concept A Feedback



What do you dislike?



More than 40% of respondents don't like that more U-turns may be required with Concept A, and that there is a greater cost.

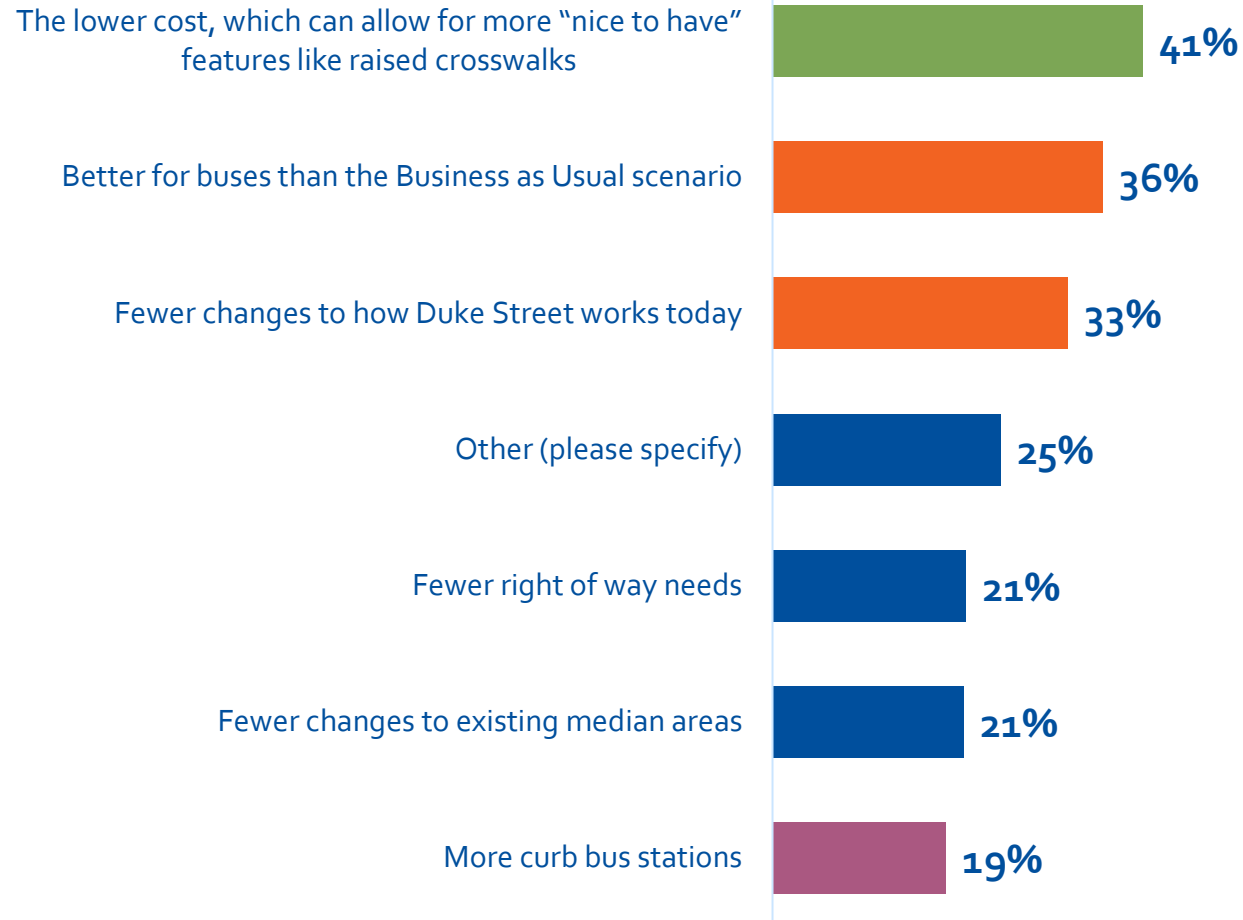
Other things people dislike about Concept A

- Nothing (5%)
- Greater expense; cost-benefit balance (4%)
- Everything (4%)
- Mixed traffic portions – want center running (3%)
- Safety (3%)



Corridor Concept B Feedback

What do you like?



Respondents viewed Concept B favorably for its lower cost, better bus alternatives (compared to Business as Usual scenario), and fewer changes to how Duke Street works today.

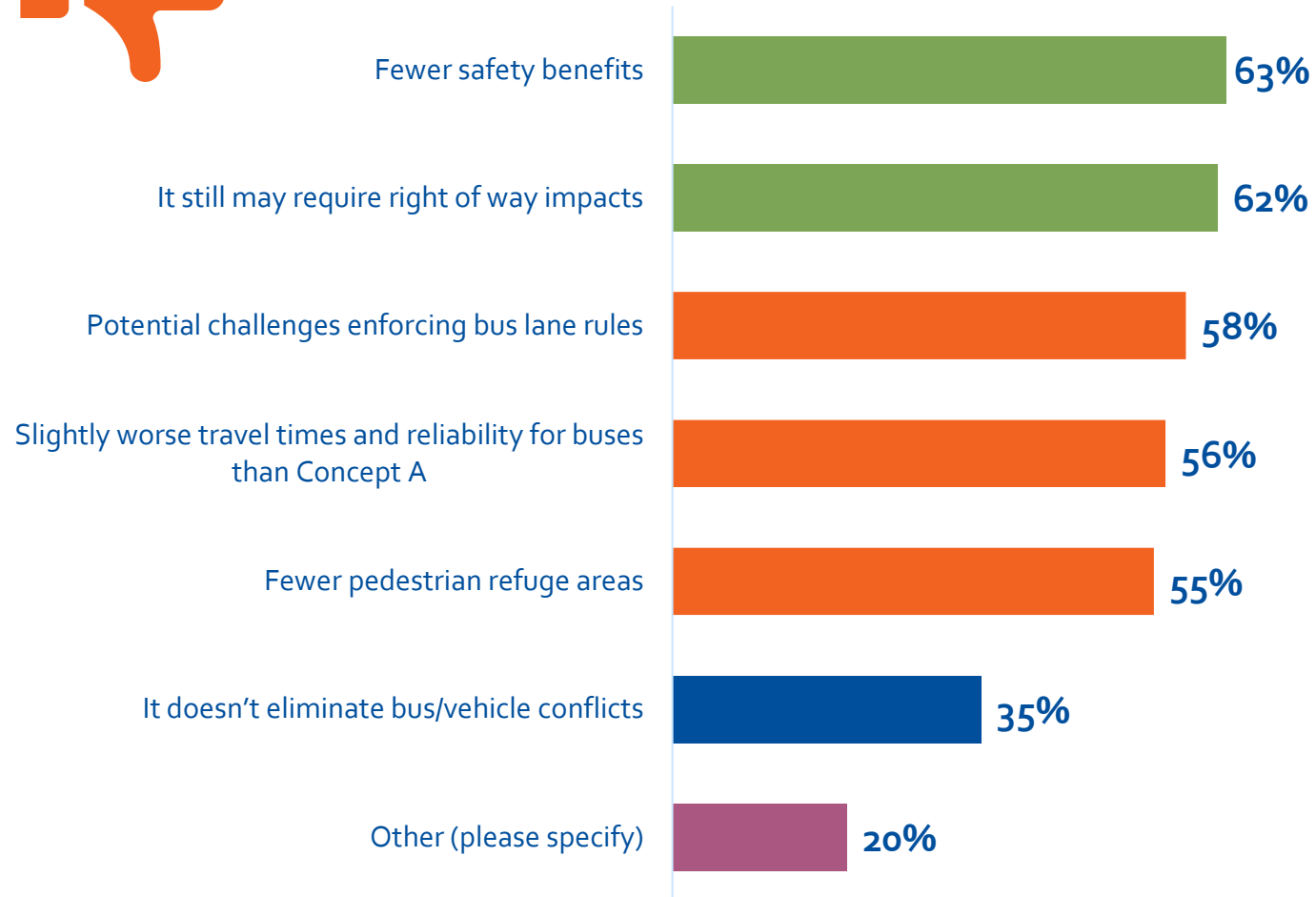
Other things people like about Concept B

- Nothing (13%)
- More convenient for drivers (1%)
- Easier to implement (1%)
- Safety benefits (1%)

Corridor Concept B Feedback



What do you dislike?



More than 60% did not like that Concept B has fewer safety benefits and may require right-of-way impacts.

Other things people dislike about Concept B

- Doesn't address underlying traffic issues (3%)
- Everything (3%)
- Neighborhood access issues (3%)
- Cost/benefit (2%)
- Safety concerns (2%)
- Nothing (1%)
- Does not achieve project goals (1%)
- Don't want any changes; don't want dedicated bus lanes (1%)
- More enforcement needed (1%)

Feedback Form Responses Differences by Demographic

58% of all responses said Concept A is “much better” or “slightly better” for at least 4 of the 6 Guiding Principles. 12% said the same for Concept B.

When looking at this same statistic for various demographics...



A larger majority (81%) of people who ride the bus at least once a week said they think Concept A is better.

44% of people who never ride the bus said A is better; 19% said B is better.

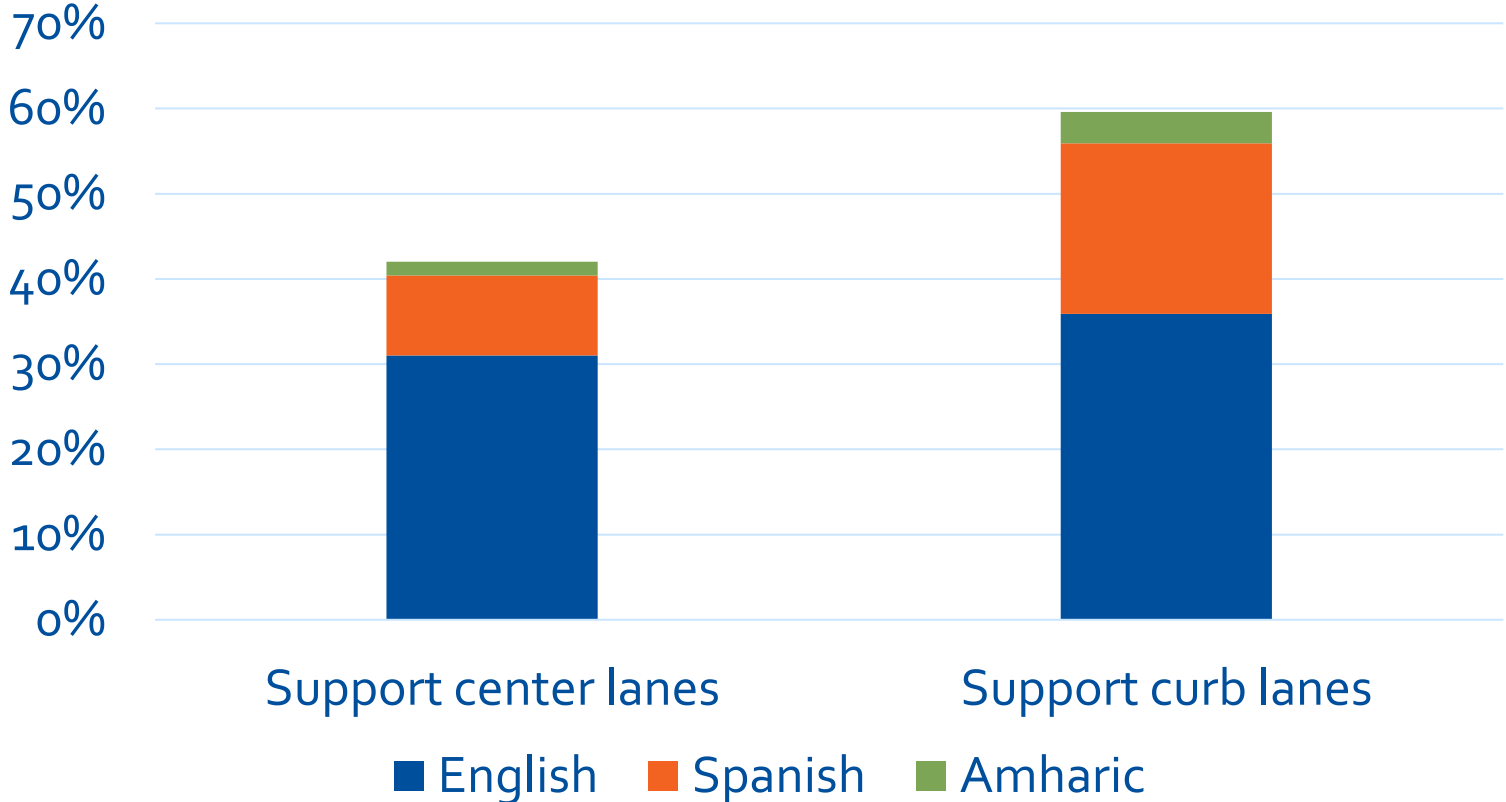


A larger majority of renters (80%) said they think Concept A is better.

58% of homeowners said Concept A is better, while 55% of those who chose not to provide information about their residence said Concept A is better.

Concept A/B Feedback from Other Activities*

Pop-ups, On-bus chats, "Hello Duke Street"



Bus stop chats & ride-alongs (30 bus):

- King St Metro
- Duke St & Jordan St
- Van Dorn St Metro

Tabling events:

- Speedy Laundromat
- Beatley Library
- Fun Run @ Patrick Henry Recreation Center

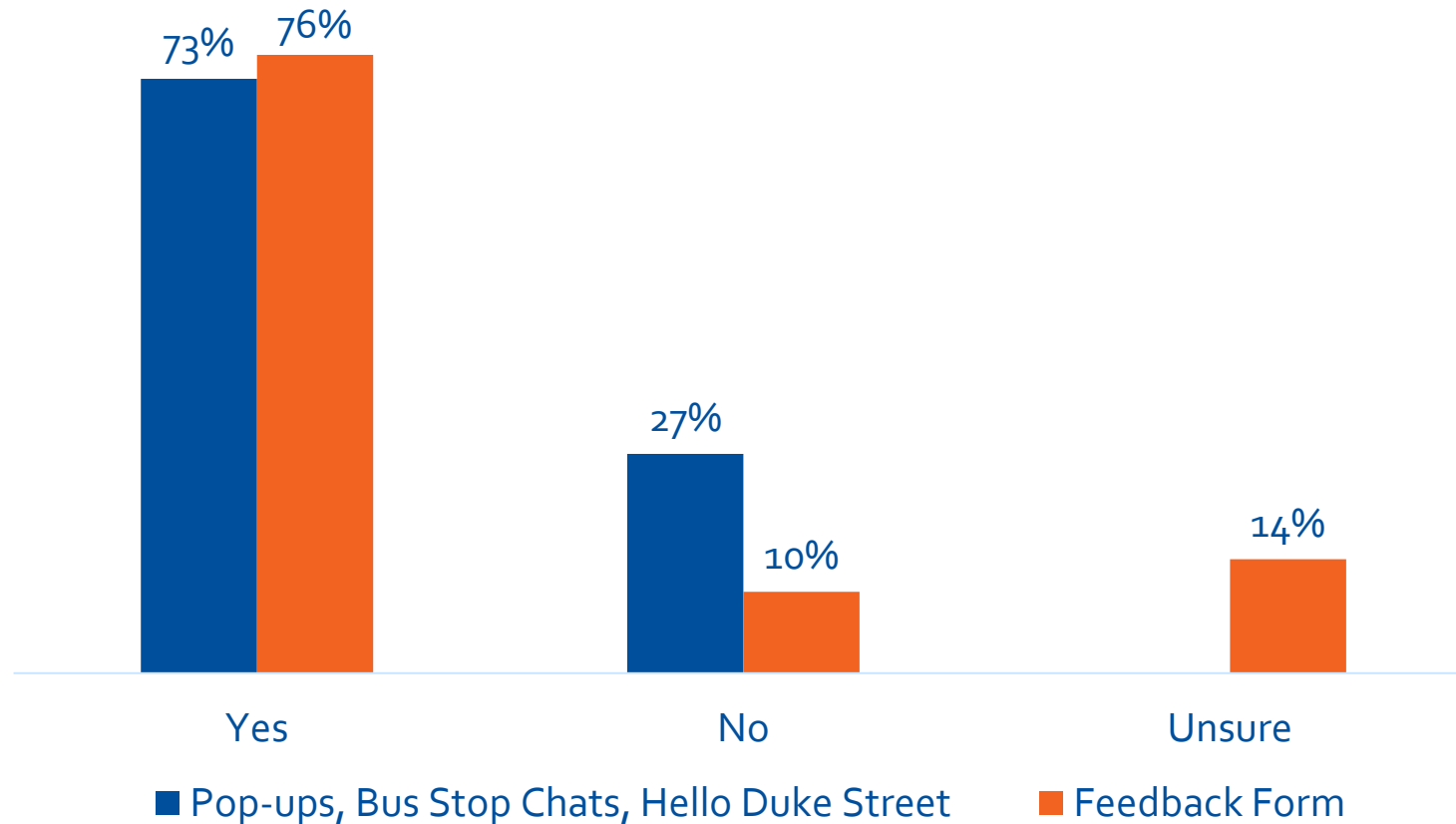
*Questions had varied levels of background information



Feedback about Station Spacing/Locations

Input about Station Spacing

There is support for the proposed bus station spacing





Feedback about Curb Concepts

Separated vs. Shared Facilities For Walking & Biking

Strong majority of pop-up responses favored separated facilities along with a slight majority of feedback form responses.

- **68%** of pop-ups and bus stop chats
- **55%** of feedback form responses
- **50%** of Hello Duke Street interactions

Comment Themes



- **Bike/ped improvements** (43)
 - 13 focused on continuity of facilities
- **Concept A** (36)
- **Dedicated EB lane in segment 2B** (21)
- **General support/appreciation** (14)
- **Improved safety** (12)
- **Concept Z – Shared bike/ped** (12)
- **Concept Y – Separate bike/ped** (11)



- **Specific design or operational suggestions** (27)
- **Want more center lanes or curb features in future phases** (21)
- **Process** (11)



- **Generally does not support project** (42)
- **E. Taylor Run slip lane** (26)
- **Traffic issues** (e.g., at Telegraph intersection) (23)
- **One-way service roads** (21)
 - *This includes a petition with support of 16 households requesting that the service road between Hilton Street and W. Taylor Run Parkway remain two-way.*
- **Cost/benefit** (16)
- **Impacts to driving** (16)
- **Bus in mixed traffic** (13)

Summary/Wrap-up

Safety and congestion have consistently been major areas of concern in all rounds of engagement

Strong feedback form support for Concept A; strong quick engagement support for Concept B

Many who oppose the project do not seem to be indicating a preference for A or B

Residents along service roads east of Cambridge are concerned about access impacts





Questions/Discussion

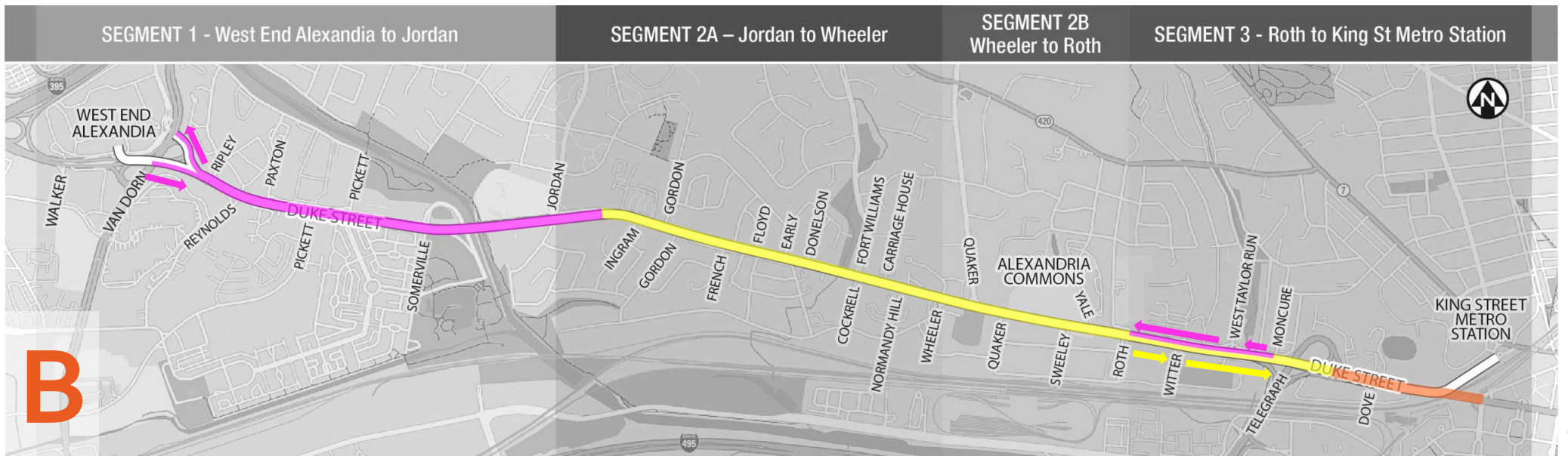


Recap of Concepts

Corridor Concepts

KEY

-  Center-Running
-  Curb-Running
-  Mixed Traffic



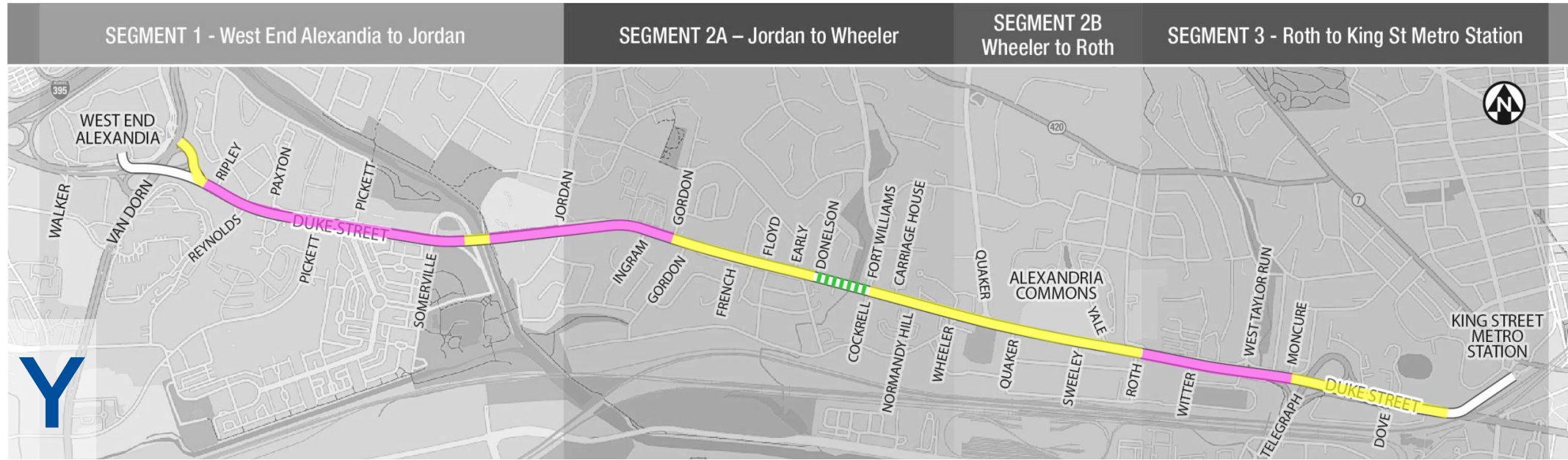
Proposed Curb *(North Side of Duke Street)*

KEY

 Shared Use Path

 Cycle Track + Sidewalk

 Potential Woonerf



Corridor Concept Comparison



Bus User Benefits

	A	B
Overall travel time savings	++	+
Overall improved bus reliability	++	+
Pedestrian refuges improve safety and comfort	+++	+
Improved shelters, waiting areas, and station amenities	++	++
Improved access to key destinations and jobs	+	+



Driver Benefits

Reduced left turn crashes	+++	+
Travel time savings in PM	++	+
Travel time savings in AM Eastbound	+	+
Reduced conflict and weaving with buses	++	+

Pedestrian/Biker Benefits

Curb Concept Y



Corridor-wide bicycle facility on north side

Separate space for peds, bikes and green space (mostly west end)

Curb Concept Z



Combined space for bikes and peds with more green space

Concept A



Safer crossings and refuge areas; Concept A has more due to center stations

Curb Concepts



Modify service roads to be more ped and bike friendly. More in Concept Y.

Corridor Concept Comparison



Considerations/Tradeoffs

	A / Y	B / Z
Current Cost Estimate	-	-
Right-of-way area	--	-
Changes to turns/access	--	-
Vehicle travel time increase westbound in AM	--	-
Side street delays	-	-
Commercial Parking Spaces Impacted	--	-
Conversion of service roads	--	-

Round Trip Travel Time Examples

If you travel during the AM peak and return during the PM peak, you save...

West End to Old Town



2 min (Concept A)
0 min (Concept B)



11 min (Concept A)
10 min (Concept B)

Old Town to West End



1.5 min (Concept A)
3.5 min (Concept B)



16 min (Concept A)
15 min (Concept B)

Jordan/Fox Chase to Old Town



2.5 min (Concept A)
0.5 min (Concept B)



9 min (Concept A)
6 min (Concept B)

Old Town to Jordan/Fox Chase



- 3.5 min (Concept A)
1.5 min (Concept B)

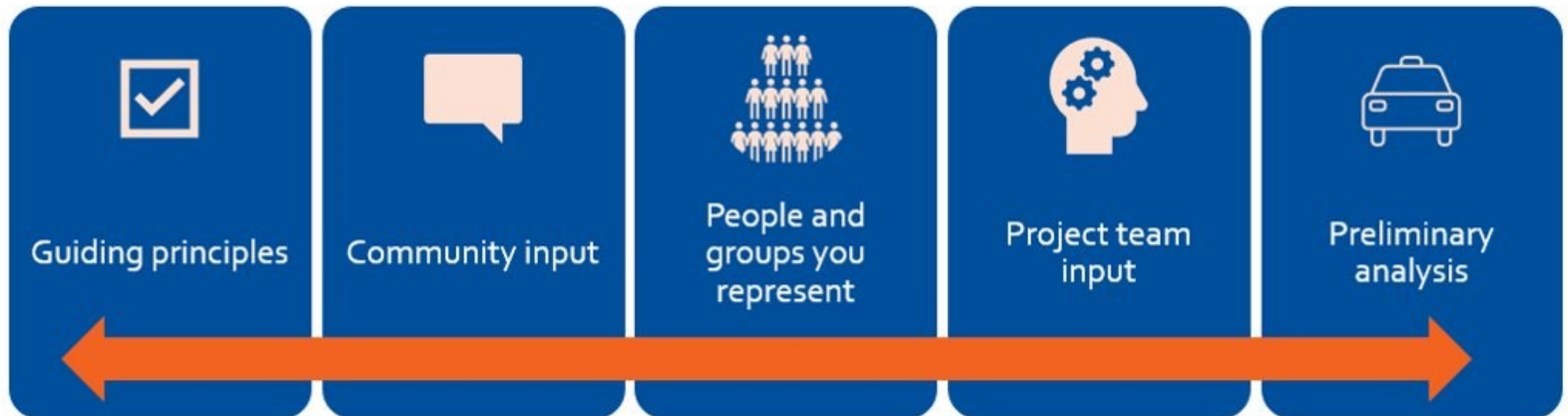


8 min (Concept A)
6.5 min (Concept B)

Discussion

- What outstanding questions do you have?
- Are you ready to discuss the elements of the recommendation?

CONSIDERATIONS



Near Term Busway Options

- Concept A
- Concept B
- Combination

Segment	Corridor Concept A	Corridor Concept B
1	Center-running	Curb-running
2A	Mostly mixed-traffic	
2B	EB center running	Mixed traffic
3	Center-running + mixed	Center running, curb-running, mixed traffic



Busway

- **Segment 1** from Ripley to Jordan should consist of <center running/curb running> bus lanes.
- **Segment 2A** from Jordan to Wheeler should consist of the <mixed traffic> option.
- **Segment 2B** from Wheeler to Roth should consist of a <single direction center running EB lane/mixed traffic.>
- **Segment 3** from Roth to Callahan should consist of <center running and mixed traffic/curb running and mixed traffic> to optimize busway operations while taking into account space constraints and ramp conflicts.

Curb Feature Options

- Affirm drafted language in support of Concept Y versus Z
 - Prioritize separated space for peds and bikes, where possible
 - Support pursuit of redesign of north side service roads to promote ped and bike safety, comfort, and connectivity
 - Encourage intersection treatments to promote enhanced pedestrian safety
- Propose edits

Note that design of service roads east of Cambridge will be further evaluated in conjunction with the changes related to the West Taylor Run project and intersection changes at Cambridge, with Council resolution as a guide.



Station Spacing

- **Station locations** should be approximately every $\langle .1/4-1/2 \text{ miles} \rangle$, taking into account current and potential ridership demand, accessibility, safety, topography, and right of way constraints. These stations should have comfortable waiting environments with shelters and seating, enable safe access, and include technology elements to make the bus easy to use for all users.

Long Term Recommendation

- **The long-term plan** for the corridor should include <center running/dedicated/other> bus lanes for the entirety of Duke Street with <separate spaces for people walking and separate spaces for people wheeling>.
- This long-term plan would be partially dependent on redevelopment and available funding and should be assessed further during the Duke Street Small Area Plan process.



Formal Motion

- To adopt the recommendation as discussed.



Next Steps

Upcoming Meetings

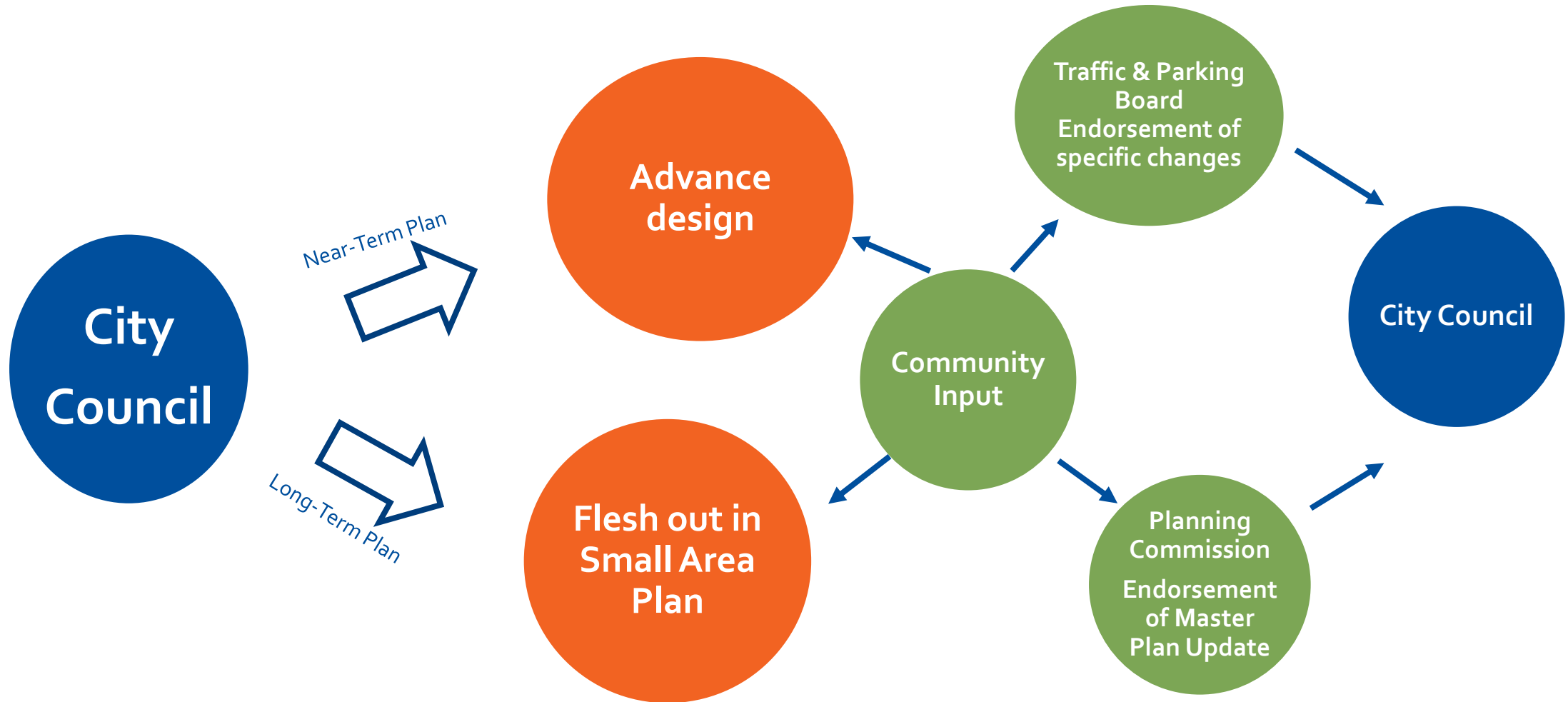
June 14:
DASH Board

June 21:
Transportation
Commission

June 20:
Planning
Commission

June 27:
Council

Next Steps





Approval of Meeting Minutes from March



Thank you!

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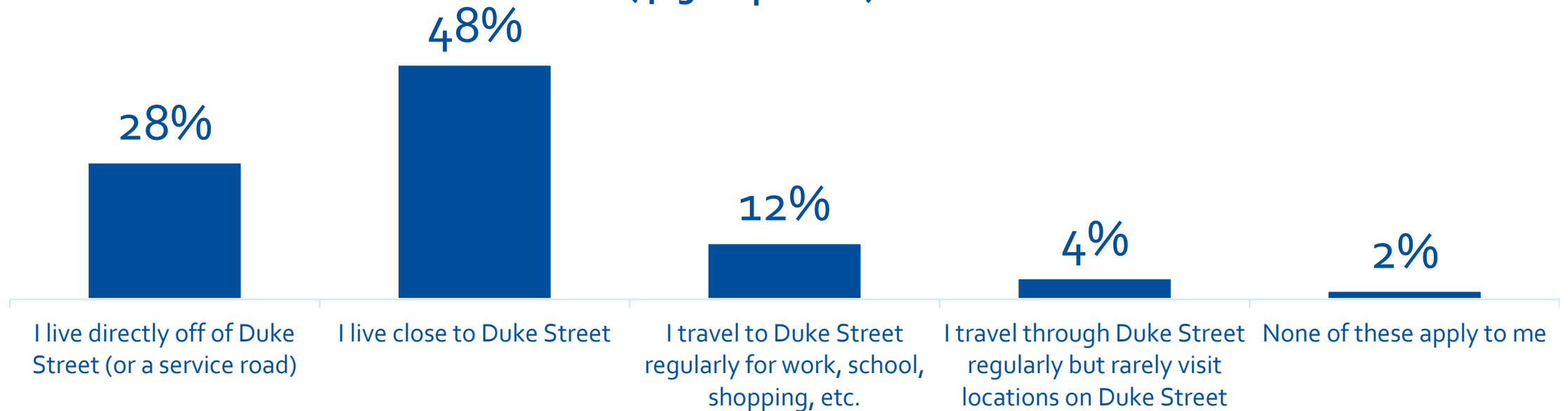
Demographic Appendix

Summary of Demographics (Feedback Form)

Over 75% of respondents live “close to” or “directly off of” Duke Street.

Which of the following best describes your interest(s) in this project?*

(405 responses)

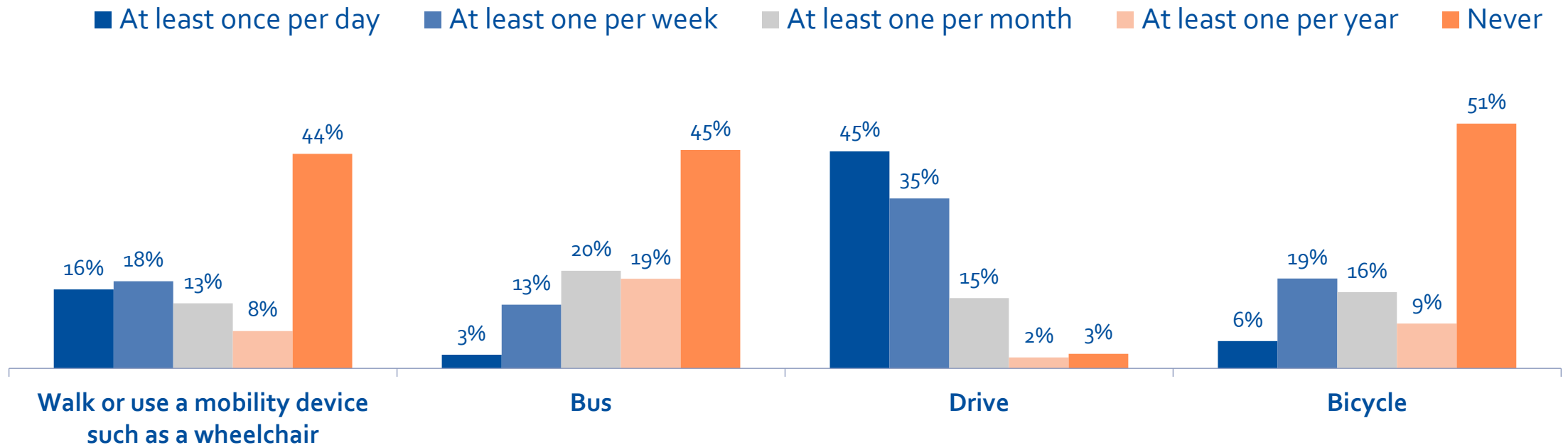


*Only primary identification is included on this slide

Summary of Demographics (Feedback Form)

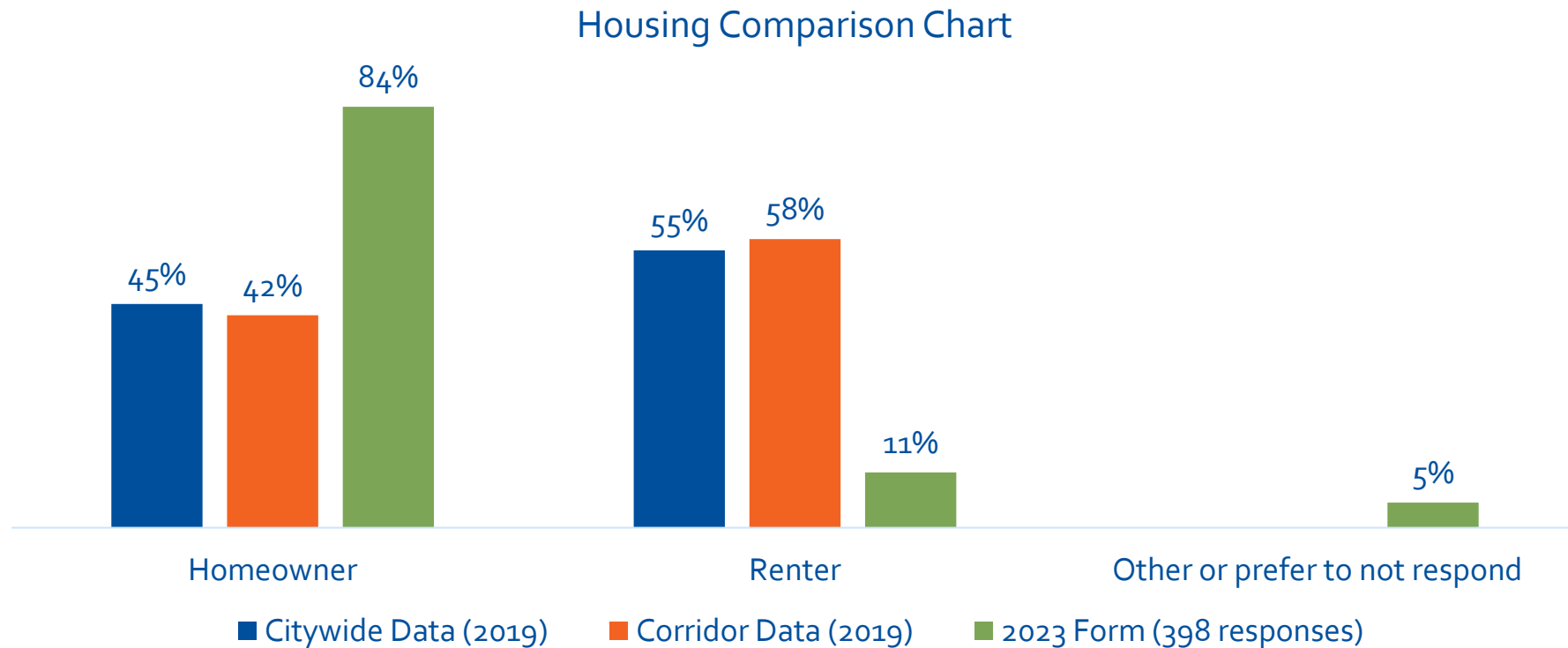
95% of respondents drive along or across Duke Street at least once per month
36% take the bus at least once per month

How often do you typically use the following modes along or across the Duke Street Corridor? (401 responses)



Summary of Demographics (Feedback Form)

Renters are underrepresented on the feedback form.

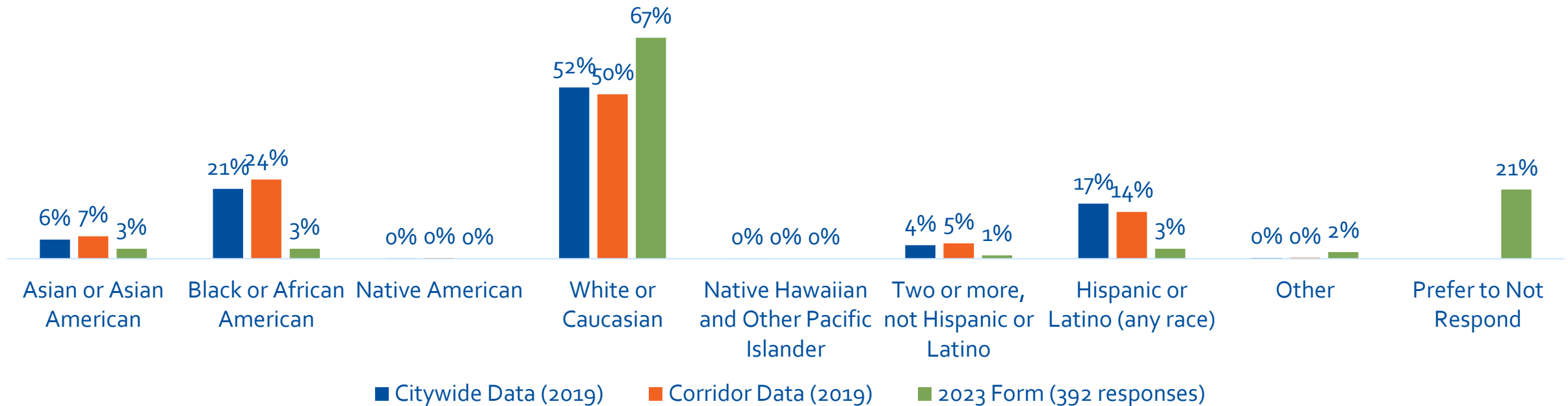


Note: Census results for housing tenure are completed by household while feedback form results were completed by individuals, who may be in the same household as other responders.

Summary of Demographics (Feedback Form)

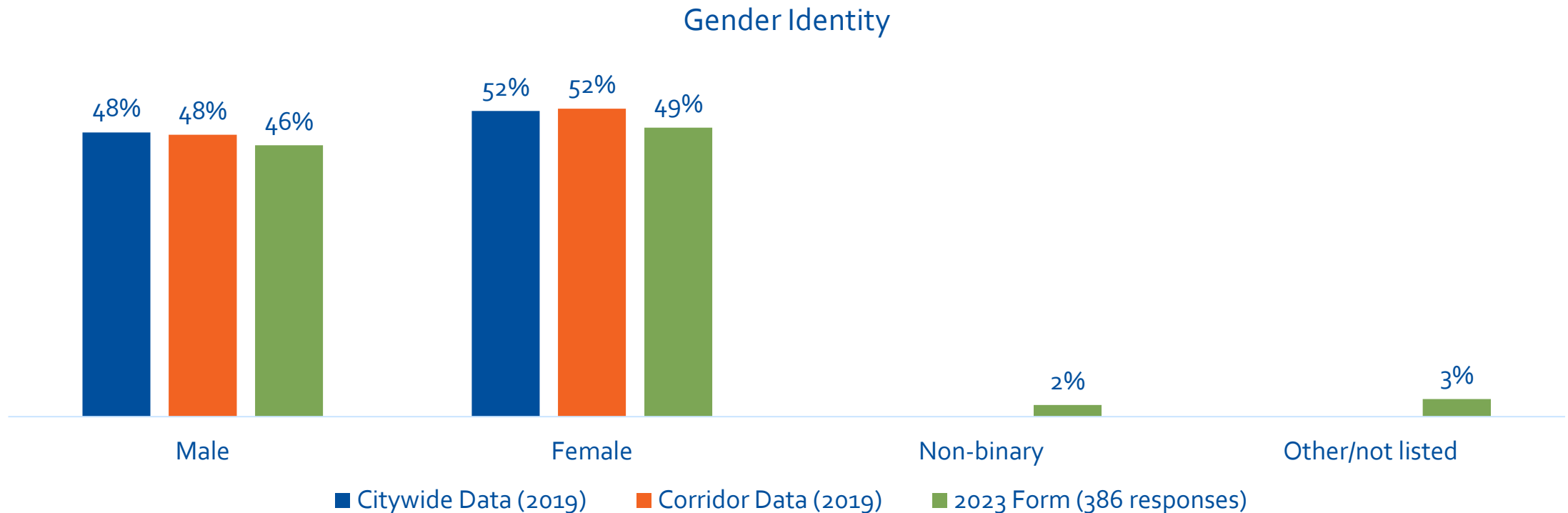
People who are non-white were underrepresented on the feedback form.

Race/Ethnicity Comparison Chart



Summary of Demographics (Feedback Form)

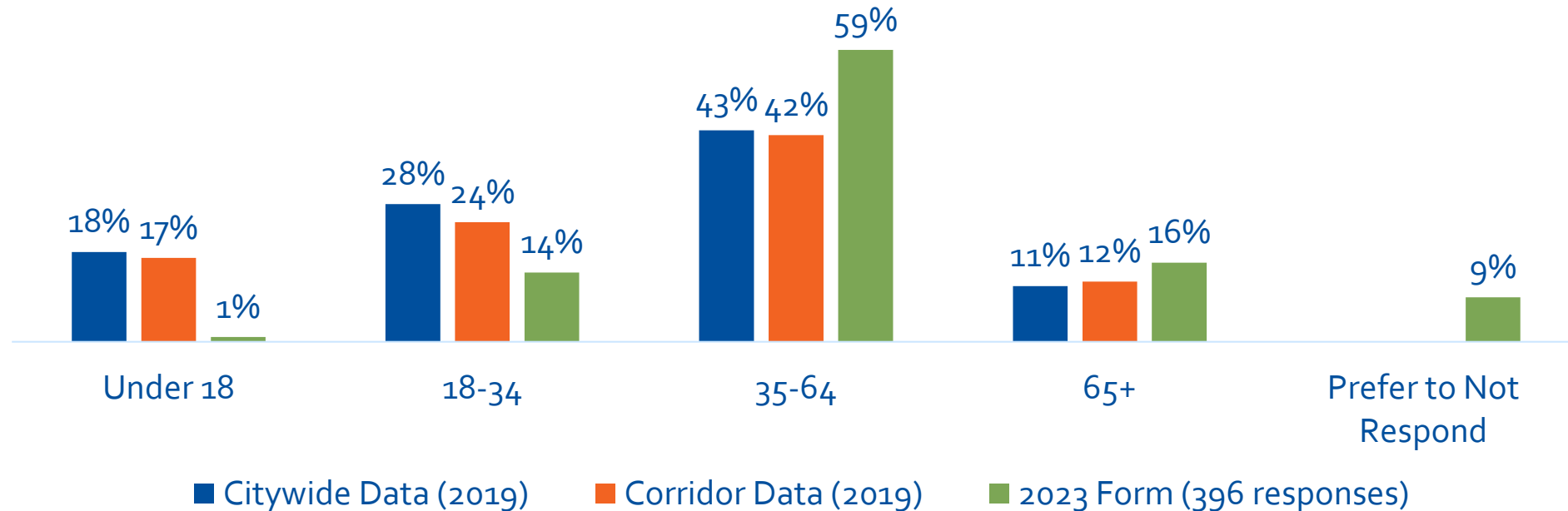
Slightly more respondents identified as Female rather than Male, mirroring general corridor and citywide demographics.



Summary of Demographics (Feedback Form)

People under the age of 35 were underrepresented in feedback form responses while people 35 to 64 were overrepresented.

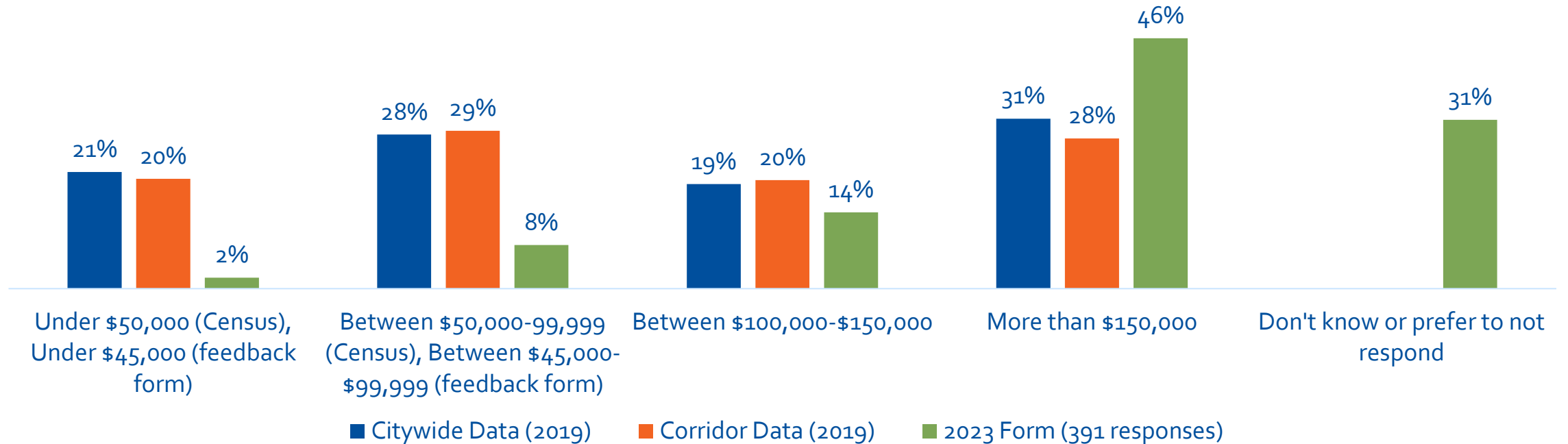
Age Comparison Chart



Summary of Demographics (Feedback Form)

Households with incomes below \$100,000 are underrepresented in the feedback form relative to the corridor population.

Income Comparison Chart



Note: Census results for income are completed by household while feedback form results were completed by individuals, who may be in the same household as other responders.

Summary of Demographics (Feedback Form)

More than 70% of respondents live in ZIP codes directly along the corridor

- 42% of respondents live in 22304
- 30% of respondents live in 22314

ZIP code (home) (398 responses)



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