Question of the week #1:
Would a protected intersection address some of the key issues experienced at the City Park and West Elizabeth intersection?

What is a protected intersection?

An intersection that provides enhanced separation and protection for pedestrians and cyclists from vehicular traffic.

Typical features include:

- ***Corner refuge Island*** – physical separation that provides a secure refuge for those waiting at a red signal and physically separates cyclists as they make right turns.
- ***Forward stop bar for bicyclists*** – drivers stop behind the crosswalk, while cyclists stop at a waiting area further ahead in the intersection. Advantages include: increased bicyclist visibility, a head start for bicyclists crossing the road, and reduced crossing distance for bicyclists.
- ***Setback pedestrian crossing*** – with the intersection geometry, drivers turn 90 degrees before they cross bicycle and pedestrian crossings, increasing visibility. The setback crossing further allows a vehicle space to stop before the crossing in case of potential conflicts.
- ***Bicycle-friendly signal phasing*** – protected signal phasing for bicyclists use red signals to prevent conflicting car turning movements (if applicable).

For more information on protected intersections:

https://vimeo.com/86721046 Source: Nick Falbo, Senior Planner Alta Planning + Design
https://www.youtube.com/watch?v=FlApbxLz6pA Source: Mark Wagenbuur

Why are we considering a protected intersection here?

- This intersection serves a lot of bicyclists (upwards of 2,000 per day!), and also has higher than expected bicycle-related crashes compared to other similar intersections.
- City staff has observed—and you have confirmed your experience of—unpredictable and unsafe bicyclist maneuvers at the intersection. Providing dedicated space and signal phasing can improve predictability for all users.
- The benefits of a protected intersection align with the city's goals to create a low-stress bicycle network—may significantly improve the safety and comfort of cycling for people of all ages and abilities.

Question of the week #1: Protected Intersection

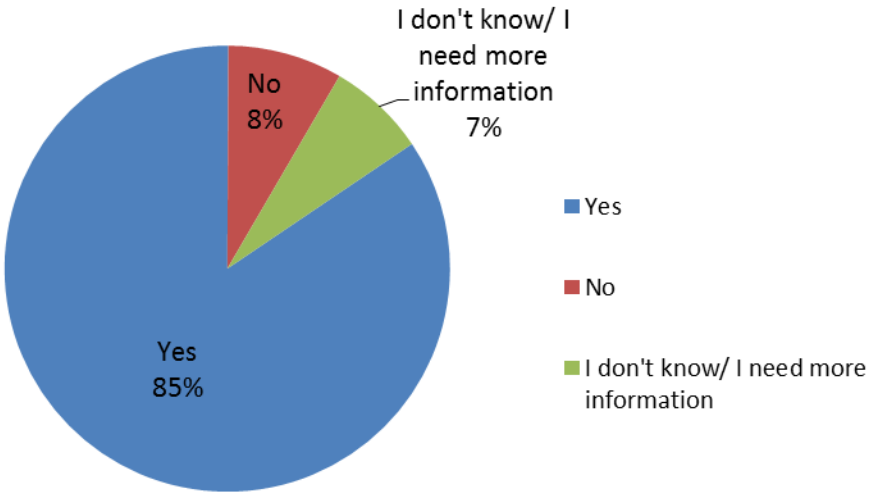
Participation Snapshot

Survey Instrument	Participants
SurveyGizmo (online)	84
Textizen (text message-based)	141
Total	*225*

What we heard from you…

SurveyGizmo Reponses:

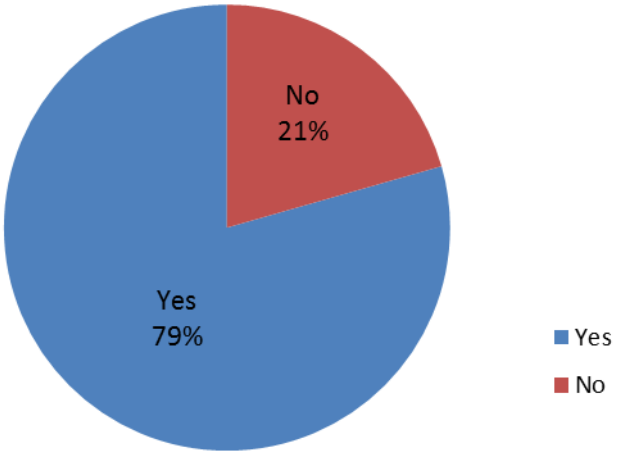
1. Would a protected intersection address some of the key issues experienced at the City Park & West Elizabeth intersection?



Value	Percent	Count
Yes	85%	71
No	8%	7
I don't know/ not enough information	7%	6
Total		*84*

Textizen Reponses:

1. Would the W Elizabeth and City Park intersection benefit from more separation of bikes & vehicles, e.g., refuge islands or special bike signals?



Value	Percent	Count
Yes	79%	112
No	21%	29
Total		*141*

…here is what some of your fellow citizens had to say

"What a wonderful idea! I think it's essential to have clearly marked lanes and obvious bike signaling to encourage safe/proper behavior."

"There are no guarantees, but the more protection that can be afforded to people on bikes and pedestrians, the safer it becomes to use those modes of transportation. Subsequently, more people ride and walk because they feel safer."

""I think it may help on the surface, but I am not sure it would improve the unsafe habits of the bicycle riders which seems to be more of the problem."

Question of the week #2:
Do you think providing a transit connection between the West Elizabeth Corridor and the MAX would be a worthwhile investment?

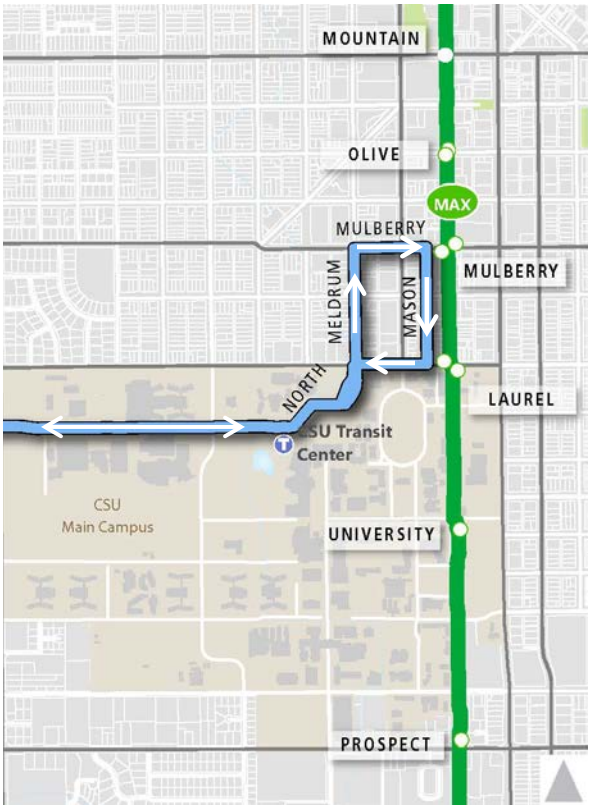
The current situation

Currently, the West Elizabeth Corridor lacks a direct transit connection to MAX and Downtown. To reach Downtown you must transfer buses at CSU's Transit Center (CTC) or walk from the CTC to the nearest MAX station.

One-seat ride to MAX

One of the goals of the West Elizabeth ETC Plan is to better connect the corridor to the rest of the city. During our outreach we heard a desire for a one-seat ride to Downtown and/or MAX, so the project team is exploring extending transit service from the West Elizabeth Corridor to the MAX Mulberry station. The alignment could start in the western part of the corridor, travel through CSU, and continue to the Mulberry Station as shown on the map below. Providing connections on the west side of the train tracks would improve reliability and minimize delays caused by train crossings.

Potential transit route to MAX



What's the trade-off?

Providing a direct connection to MAX could result in higher capital costs (e.g., purchasing additional vehicles) as well as higher annual operating costs for the City/Transfort.

Question of the week #2: One-Seat Ride to Downtown

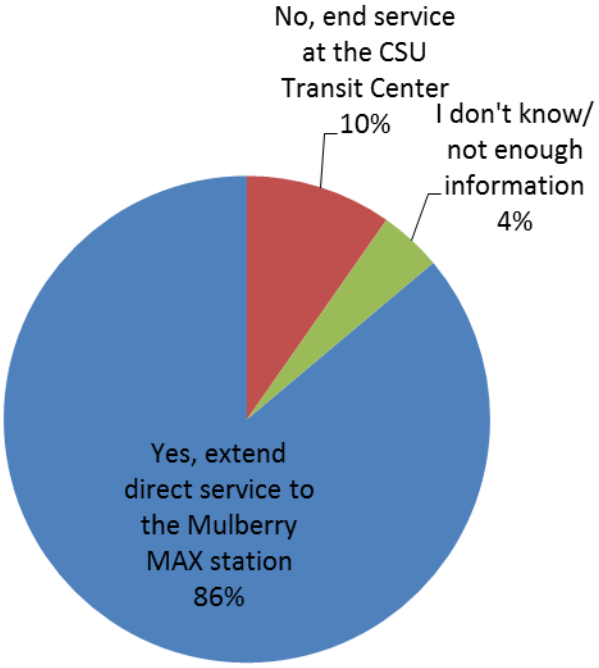
Participation Snapshot

Survey Instrument	Participants
SurveyGizmo (online)	72
Textizen (text message-based)	133
Total	*205*

What we heard from you…

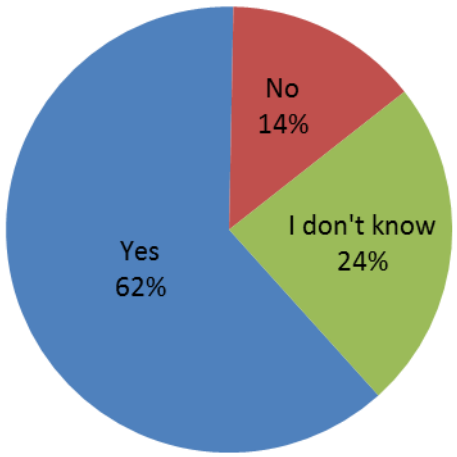
SurveyGizmo Reponses:

1. Do you think providing a transit connection between the West Elizabeth Corridor and the MAX (as shown above) would be a worthwhile investment?



Value	Percent	Count
Yes, extend direct service to the Mulberry MAX station	86%	62
No, end service at the CSU Transit Center	10%	7
I don't know/ not enough information	4%	3
Total		*72*

2. Would you use bus service that provided a direct connection between the West Elizabeth Corridor and the MAX?



Value	Percent	Count
Yes	62%	44
No	14%	10
I don't know/ not enough information	24%	17
Total		*71*

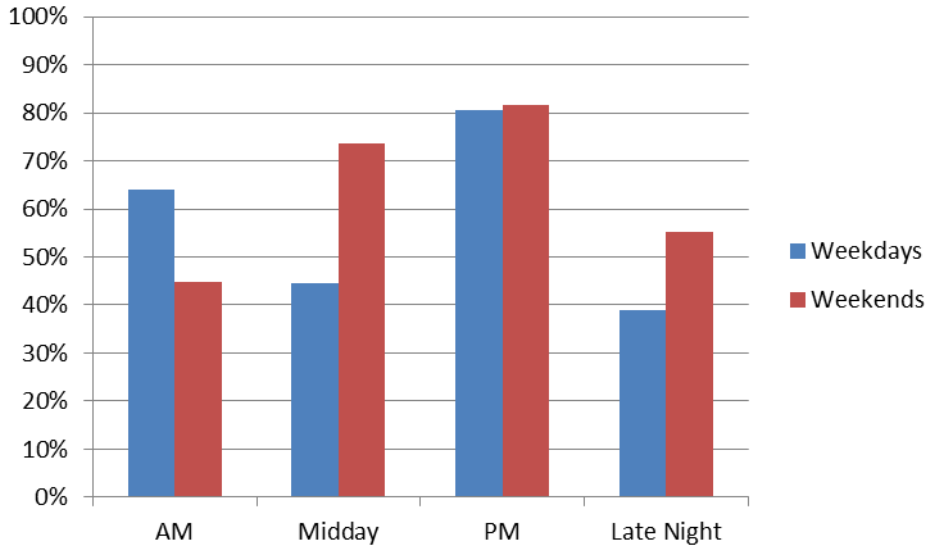
If answered no: why not?

"I use my own transportation on a daily basis. It's just more time efficient than waiting on the bus system."

"It's not connected closely enough with my neighborhood."

"Doesn't serve my travel needs.

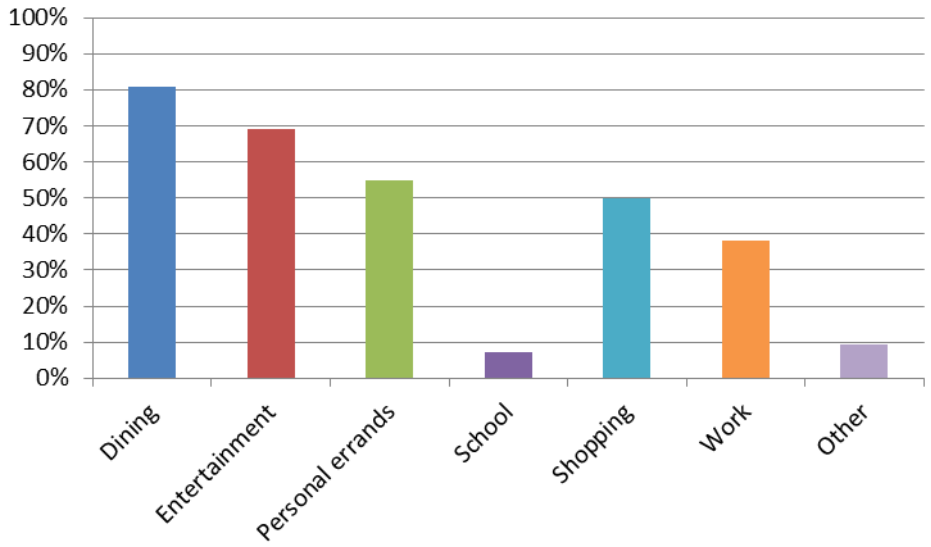
If answered yes: when? (select all that apply)



Value	Percent	Count
Weekdays		
AM	64%	23
Midday	44%	16
PM	81%	29
Late Night	39%	14
Weekends		
AM	45%	17
Midday	74%	28
PM	82%	31
Late Night	55%	21
Total*		74

*Respondents could select more than one answer, percentages may add up to more than 100%

If answered yes: for what purpose(s)? (select all that apply)

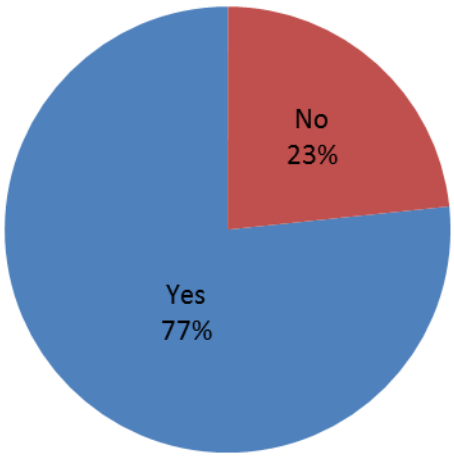


Value	Percent	Count
Dining	81%	34
Entertainment	69%	29
Personal errands	55%	23
School	7%	3
Shopping	50%	21
Work	38%	16
Other	10%	4
Total*		130

*Respondents could select more than one answer, percentages may add up to more than 100%

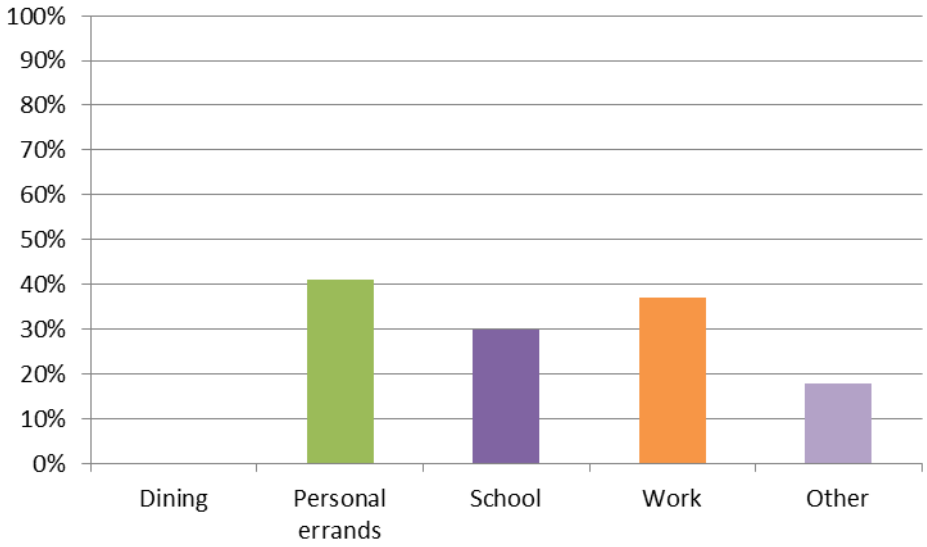
Textizen Reponses:

1. Would you use the bus service more often if a direct connection was provided to/from MAX?



Value	Percent	Count
Yes	62%	102
No	14%	31
Total		133

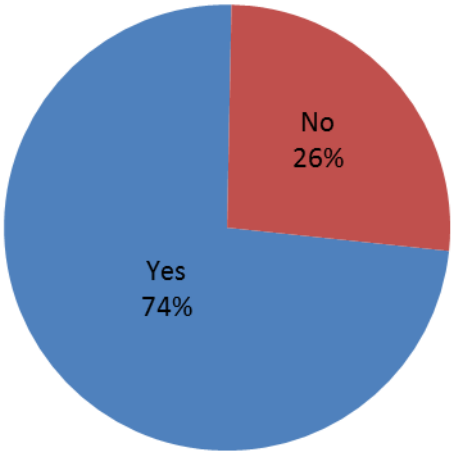
2. For what purpose(s) would you use a bus to MAX?



Value	Percent	Count
Dining	0%	0
Personal errands	40%	40
School	30%	30
Work	37%	37
Other	18%	18
Total*		126

*Respondents could select more than one answer, percentages may add up to more than 100%

3. A direct bus connection to MAX could result in additional operational costs for the City. Do you think that it is a worthwhile investment?



Value	Percent	Count
Yes	74%	95
No	26%	34
Total		133

...here is what some of your fellow citizens had to say

"I don't consider it a transit system if your focus routes don't connect. Go big or go home!"

"It would be a wonderful option to have. I am retired, but still want to remain active in my community."

"Not everyone on this side of town is involved in CSU--expand the connection."

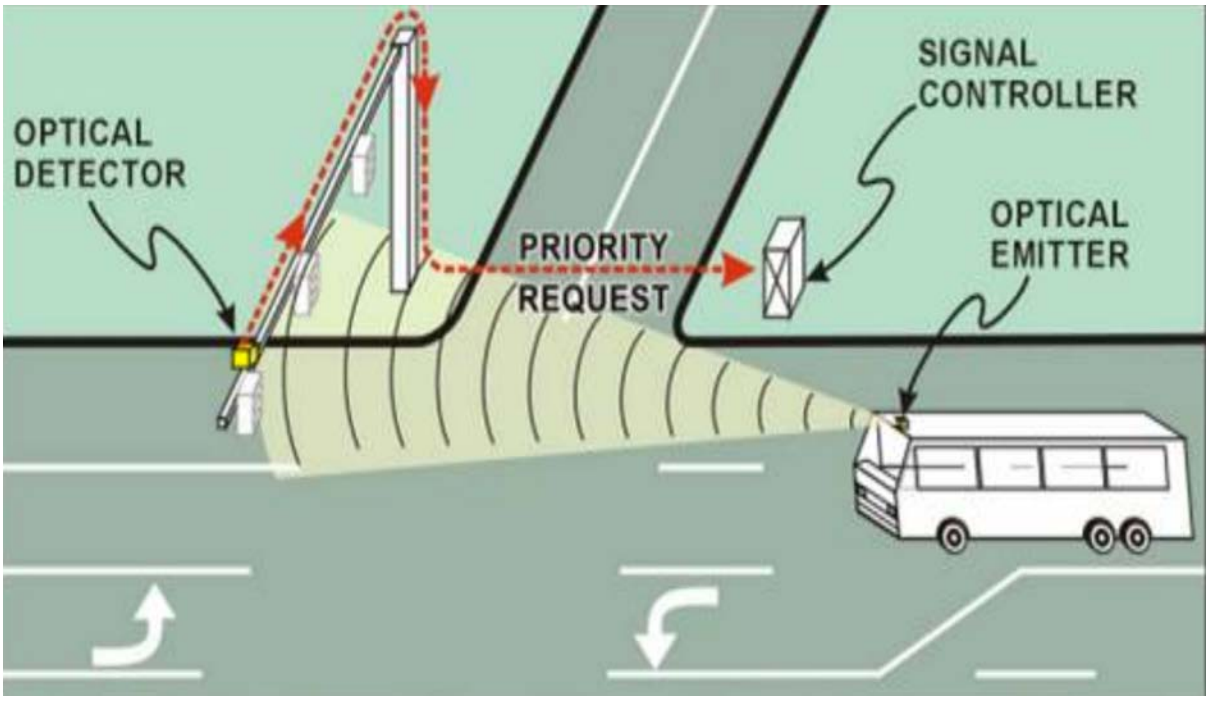
Question of the week #3:
Should Transit Signal Priority (TSP) be used at key intersections to make buses faster and more reliable in the corridor?

Make transit a top priority

We heard from you that transit should be a priority in this corridor due to the high usage along West Elizabeth Street. One way to decrease bus travel time and increase transit reliability is to provide Transit Signal Priority (TSP) at key intersections.

What is Transit Signal Priority (TSP)?

TSP are operational improvements to signals that help reduce how long a bus waits at intersections. A good portion of existing delay for buses occurs at intersections, so reducing this delay will ultimately make the buses go faster and improve transit reliability. This project is considering modifications to intersection signals that would sense when a bus is nearby and keep the light green so that the bus gets through the intersection.



What's the trade-off?

While TSP could improve transit reliability and travel time by approximately 30-45 seconds (5-8%) between Overland and Shields, it would increase delays for north/south traffic by 2-3 seconds at Taft Hill and West Elizabeth and 2-3 seconds at Shields and Plum.

Question of the week #3:
Should Transit Signal Priority (TSP) be used at key intersections to make buses faster and more reliable in the corridor?

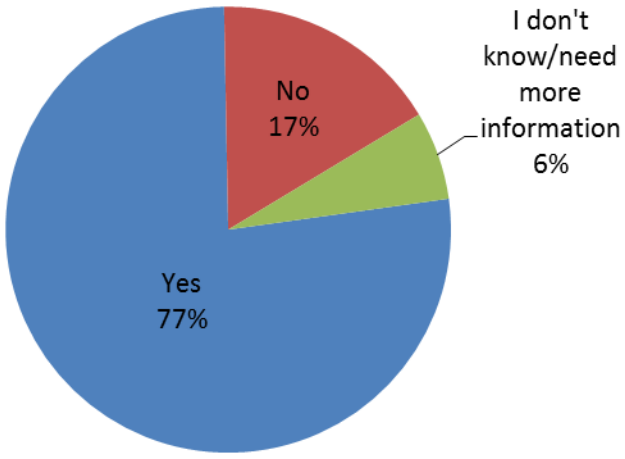
Participation Snapshot

Survey Instrument	Participants
SurveyGizmo (online)	78
Textizen (text message-based)	129
Total	*207*

What we heard from you…

SurveyGizmo Reponses:

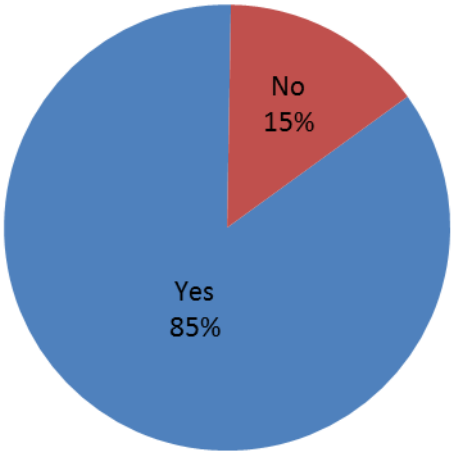
1. Should Transit Signal Priority (TSP) be used at key intersections to make buses faster and more reliable in the corridor?



Value	Percent	Count
Yes	77%	60
No	17%	13
I don't know/ not enough information	6%	5
Total		*78*

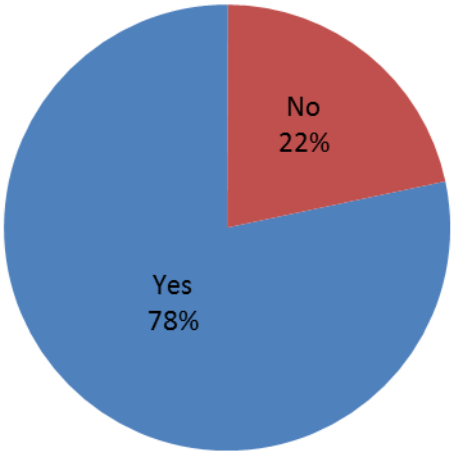
Textizen Reponses:

1. Signal improvements in the corridor could reduce bus travel time by 30-45 sec. Do you support this type of improvement to prioritize transit?



Value	Percent	Count
Yes	85%	110
No	15%	19
Total		*129*

2. These changes could delay N/S traffic 3-15 sec at Taft and at Shields if a bus is approaching. In this case do you support prioritizing transit?



Value	Percent	Count
Yes	78%	98
No	22%	27
Total		*125*

...here is what some of your fellow citizens had to say

"Reliable bus timing is a key to encouraging citizens to use the system."

"It is good, and sends a good message to all, that mass transit benefits all of us even if we do not use it that often-- it does benefit all of us."

"The bus as a means of transportation should always take priority over single occupant vehicles."

"No they should wait just like the other vehicles."

Question of the week #4:
What should protected bike lanes in the corridor look like?

What are protected bike lanes?

Protected bike lanes provide an additional element of vertical separation between vehicular travel lanes and bike lanes. The vertical separation can take the form of a curb, plastic posts, parked cars, planters, or a raised path. Two examples of protected bike lanes in Fort Collins include Shields Street between Richmond Drive and Swallow Road and the recently built protected bike lane on Laurel Street between College Avenue and Howes Street.

For more information on protected bike lanes:

https://www.youtube.com/watch?v=-6LZ0iRO-TM by PeopleForBikes

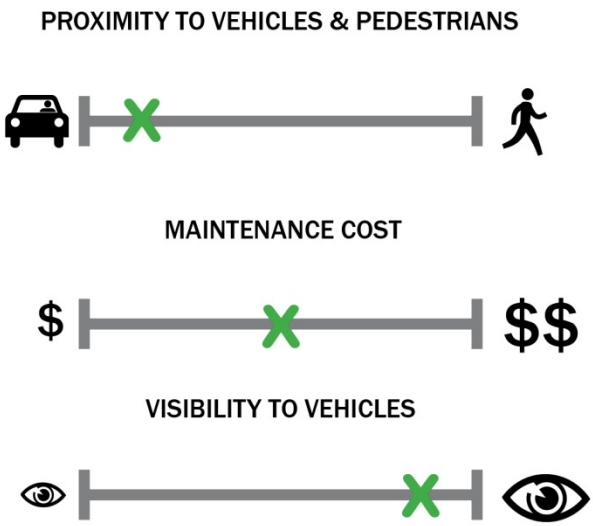
Why are we considering protected bike lanes here?

- The City's Bike Master Plan recommends protected bike lanes on West Elizabeth Street.
- The West Elizabeth Corridor has over 2,000 daily cyclists and is also one of the top locations for bicycle related crashes in the city; protected bike lanes could help reduce vehicle/bike conflicts.
- Bicyclists and motorists both comment on the unpredictability for cyclists in the corridor; a protected and dedicated facility would help clarify to all users where cyclists should be. Protected bike lanes are known to increase comfort and encourage use for a range of cyclists. This could result in more people biking and fewer people driving.
- This type of facility could create a sense of place and a neighborhood identity.

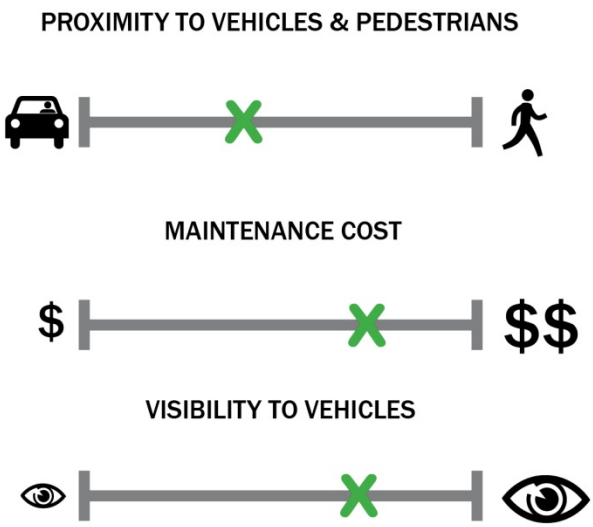
What are the options?

The West Elizabeth Corridor could include protected bicycle facilities on West Elizabeth while retaining the existing number of travel lanes and remaining within the public right-of-way. The project team is currently evaluating three different protected bike lane options for the western part of the corridor. Each of these options has tradeoffs. Some of these trade-offs relate to the proximity of cyclists to vehicles and pedestrians, snow maintenance costs, and visibility to vehicles.

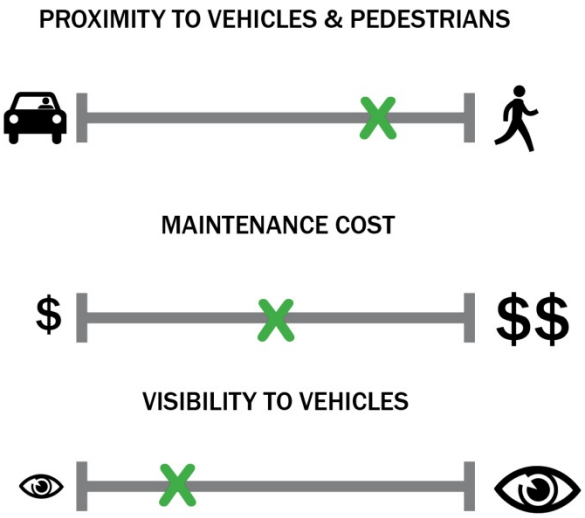
Option A: In-Street Protected Bike Lane



Option B: Raised Protected Bike (next to travel lane)



Option C: Raised Protected Bike Lane (next to sidewalk)



Question of the week #4:
***What should protected bike lanes in the corridor look like*?**

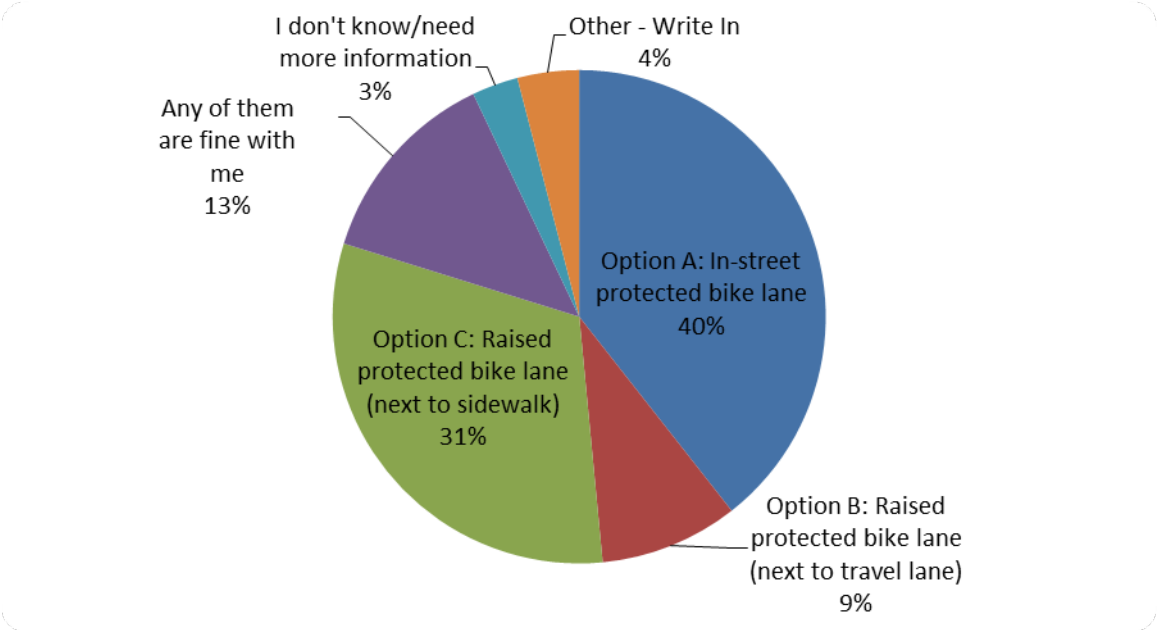
Participation Snapshot

Survey Instrument	Participants
SurveyGizmo (online)	157
Total	*157*

What we heard from you…

SurveyGizmo Reponses:

1. Which option would you prefer for the western part of the West Elizabeth Corridor?



Value	Percent	Count
Option A: In-street protected bike lane	40%	62
Option B: Raised protected bike lane (next to travel lane)	9%	14
Option C: Raised protected bike lane (next to sidewalk)	31%	49
Any of them are fine with me	13%	20
I don't know/need more information	3%	5
Other - Write In	5%	7
Total		*157*

...here is what some of your fellow citizens had to say

Option A: In-street protected bike lanes

"Visibility to vehicles is more important to me than either being physically raised or spatially separated from vehicles. It is also the most economical and easy to maintain in snow conditions."

"The balance of cost, visibility, and proximity to pedestrians seems to be best with option A. Being too close to the sidewalk comes with its own risks, and most motorists are used to seeing cyclists near traffic lanes."

"I really want cars to be able to see the bikers. I think that helps a lot with reduction of accidents."

Option B: Raised protected bike lane (next to travel lane)

"This will make it safer for pedestrians on the sidewalk, and help prevent vehicles from encroaching on the bike lanes."

"Currently the plows bury the bike lanes in snow during the winter time. A raised bike lane will not get buried during the winter season, and will still be separated from both bikes and pedestrians year round."

"The greater the buffer there is between autos and bicycles the fewer collisions there will be between them and the more comfortable the interested-but-hesitant cyclist will be riding on W. Elizabeth."

Option C: Raised protected bike lane (next to sidewalk)

"Keeping bikes away from the car lanes are the safest method of transportation for all parties involved."

"Maintaining a pedestrian sidewalk and dedicated bike lane side by each would be cost effective. Use on-pavement signage to indicate users and direction. Pedestrian and bike traffic is much slower than vehicular speeds."

"Cyclists will ride more comfortably next to pedestrians than cars. Cyclist will be less likely to cross the street at dangerous points if the bike path is separated from the road."

Any of them are fine with me

"I have difficulty envisioning how a single solution would be appropriate for the entire study area. Any of these options would be an improvement (particularly for areas between Taft & Overland where there is currently no bike lane at all!)"

"I assume there are lots of students on that stretch. I would want the most safety for them without disrupting an already congested traffic pattern."

Other Comments

"I'm very excited to see these changes being considered! I've had many close calls as a cyclist, particularly now that the bike lane at Shields and Elizabeth is nearly nonexistent paint-wise. As a driver, I can understand the frustration because the lane isn't visible, and many drivers don't realize that the right turn lane is in fact to the right of the bike lane at this intersection. I think a separated lane would improve clarity and safety for everyone."

"We need bike lanes that are completely protected from vehicles. Buffered bike lanes just don't do enough."

"I think it's a great idea, and will provide a greater incentive to bike around Fort Collins. I know many people who prefer to drive because they know it's a safer option, so protected bike lanes will allow for an increase in safety."