Options Development Workshop

17 Ave. S.E. Corridor Study – Stoney Trail to East City Limit

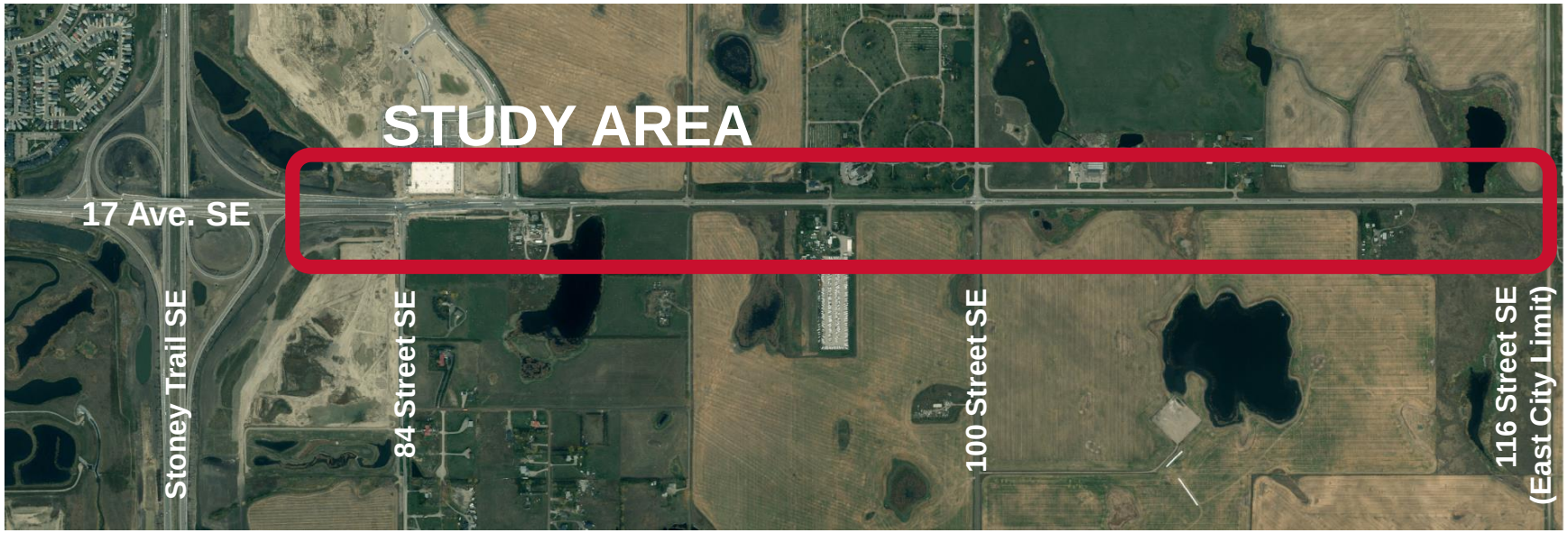
Workshop outline

1. Study overview and update
2. Guiding Principles
3. Facilities – what's up for discussion
4. Example cross section options
5. Workshop activity - develop options for the corridor
6. Evaluation framework
7. Staging plans – information on the near future
8. Next steps

Study Purpose

Develop a staged concept plan for 17 Ave. S.E. between Stoney Trail and the East City Limit including:

- Required land (right-of-way)
- Traffic lanes
- Connectivity for all road users
- Goods movement (truck traffic)
- Bus Rapid Transit (BRT) and future Light Rail Transit (LRT) accommodation
- Access to and from the corridor

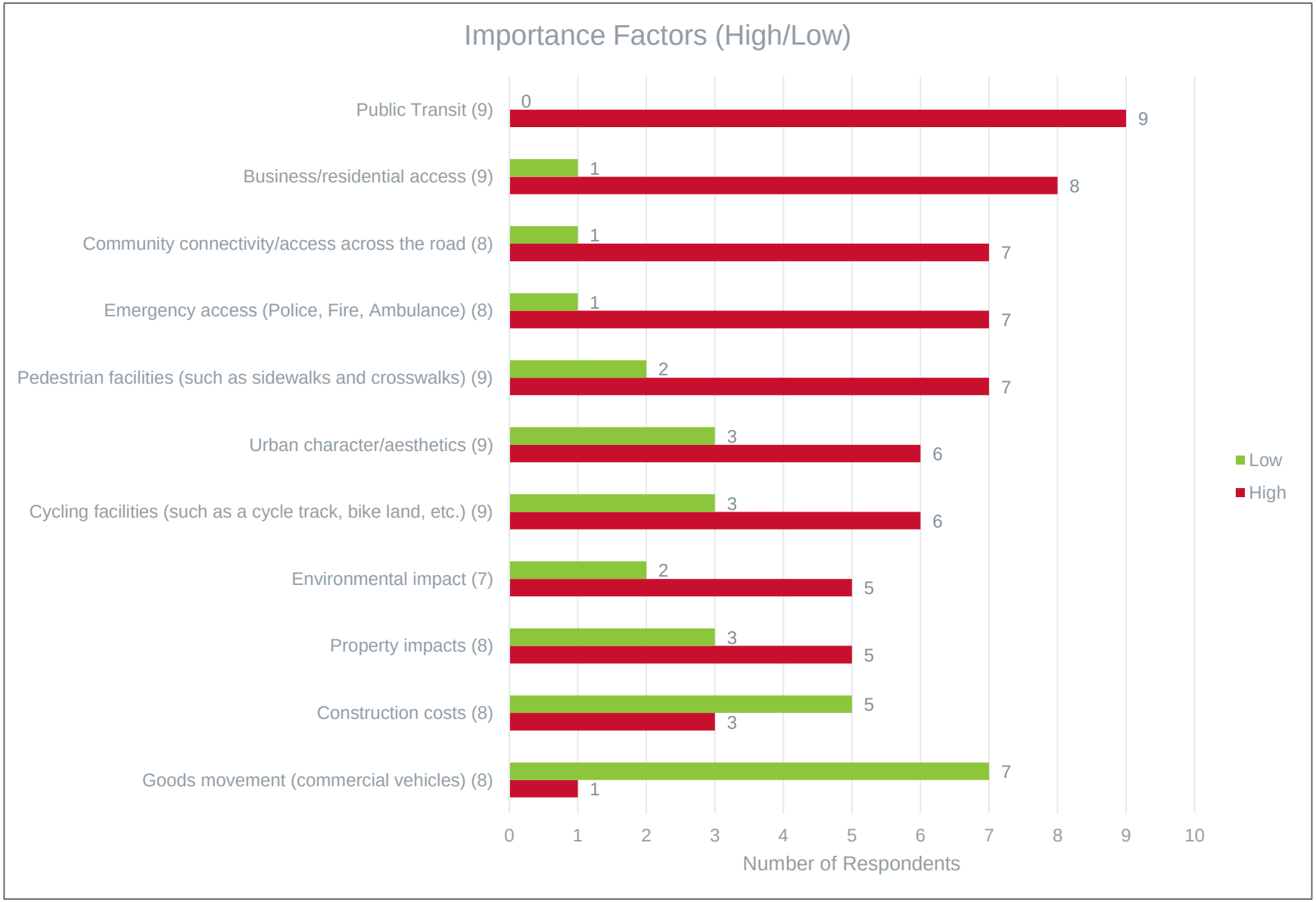


Study and Engagement Process

What we've heard

- Safety
  - Safe cycling and walking facilities are a priority
  - Reduce traffic speeds
- Pedestrian environment needs to be enjoyable
- Business / resident access is important
  - Crossing 17 Ave. S.E. and the median Bus Rapid Transit (BRT)
  - Number and spacing of intersections
- Vehicle capacity / congestion needs to be addressed
- Reducing through truck traffic (goods movement) is important

Feedback results from Phase 1: Vision and Context



Guiding Principles

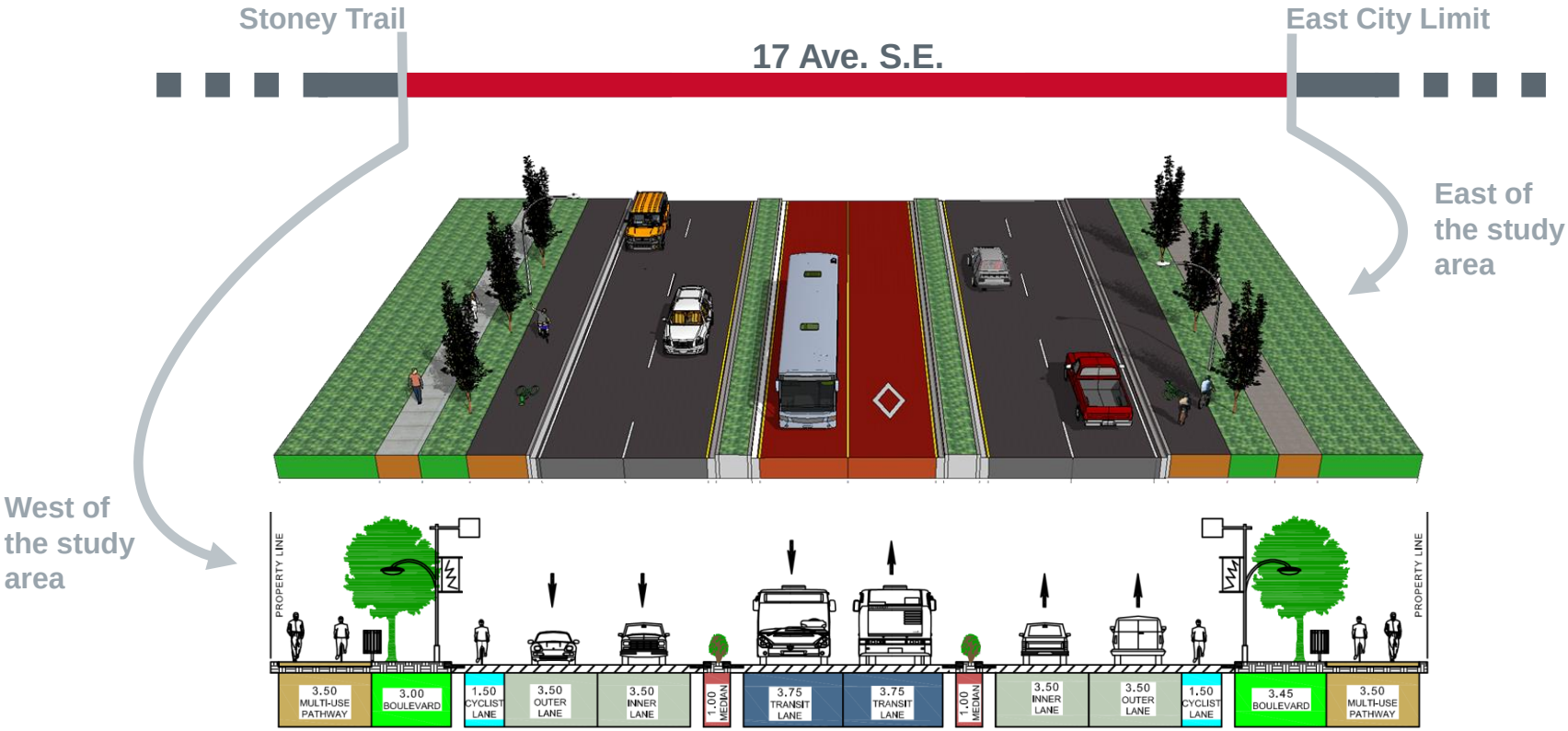
The 13 guiding principles will be used to develop the evaluation framework and make design decisions

They were developed based on:

- Stakeholder input from the first workshop and online feedback
- Background policies and documents
  - Belvedere Area Structure Plan
  - Role in the transportation network (Primary Transit Network, Primary Cycling Network)
  - Complete Streets Guidelines
- Best practices for planning Liveable Streets – bringing international learnings to Calgary

Guiding Principle #1 - Continuity

Provide continuity along the corridor by designing a cross-section that is compatible with the future plans east and west of the study area.



Guiding Principle #2 - Balance

Balance the needs of the local community while recognizing the corridor as a destination and an important connection between Calgary and Chestermere.

Guiding Principle #3 – Complete Street

Distribute the available space within the right-of-way according to the priorities for each transportation mode (walking, cycling, taking transit, and driving) in the Complete Street Guidelines. *(Urban Boulevards prioritize pedestrians, cyclists and transit vehicles above private vehicles. Parkways also focus on accommodating pedestrians and cyclists but also emphasize integration with adjacent natural areas.)*

Guiding Principle #4 - Context Sensitive

Provide transportation solutions that are responsive to the future land use and integrate with each of the five “character zones” identified in the Belvedere Area Structure Plan.

Character Zones:

Retail Transition

Office Employment

Regional Facility Central

Community Activity Centre

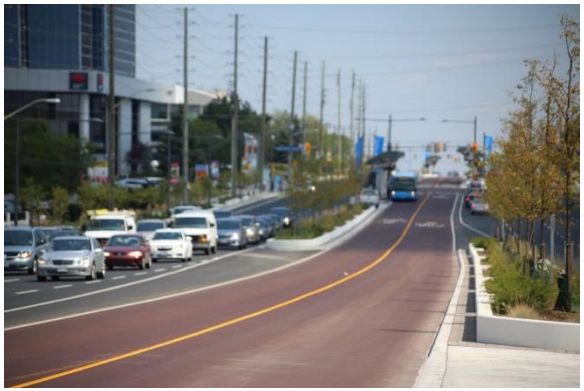
Eastern Gateway to Calgary

Guiding Principle #5 - Connectivity

Provide easy access between communities for all transportation modes (walking, cycling, taking transit and driving) and reduce crossing distances for people who walk, bike or take transit, when possible.

Guiding Principle #6 - Adaptable

Develop a plan that can be implemented as adjacent land is developed and can adapt when Bus Rapid Transit (BRT) changes to Light Rail Transit (LRT).



Guiding Principle #7 – Quality Pedestrian Environment

Provide a safe, comfortable, and accessible pedestrian environment for people of all ages and abilities.

Guiding Principle #8 – Quality Bike Facilities

Design facilities that encourage cycling by safely accommodating direct connections and recognizing the corridor's role in the Primary Cycling Network.

Guiding Principle #9 – Sidewalk/Public Realm & Green Space

Provide an environment that supports social interaction and accommodates street furniture, such as benches, trash containers and public art.

Guiding Principle #10 – Prioritize Transit

Prioritize the quality and accessibility of Bus Rapid Transit (BRT) over other vehicles and accommodate possible long-term conversion to Light Rail Transit (LRT).

Guiding Principle #11 - Vehicle Capacity

Recognize that people who walk, cycle or take transit are given higher priority than people who drive, while maintaining satisfactory traffic flow.

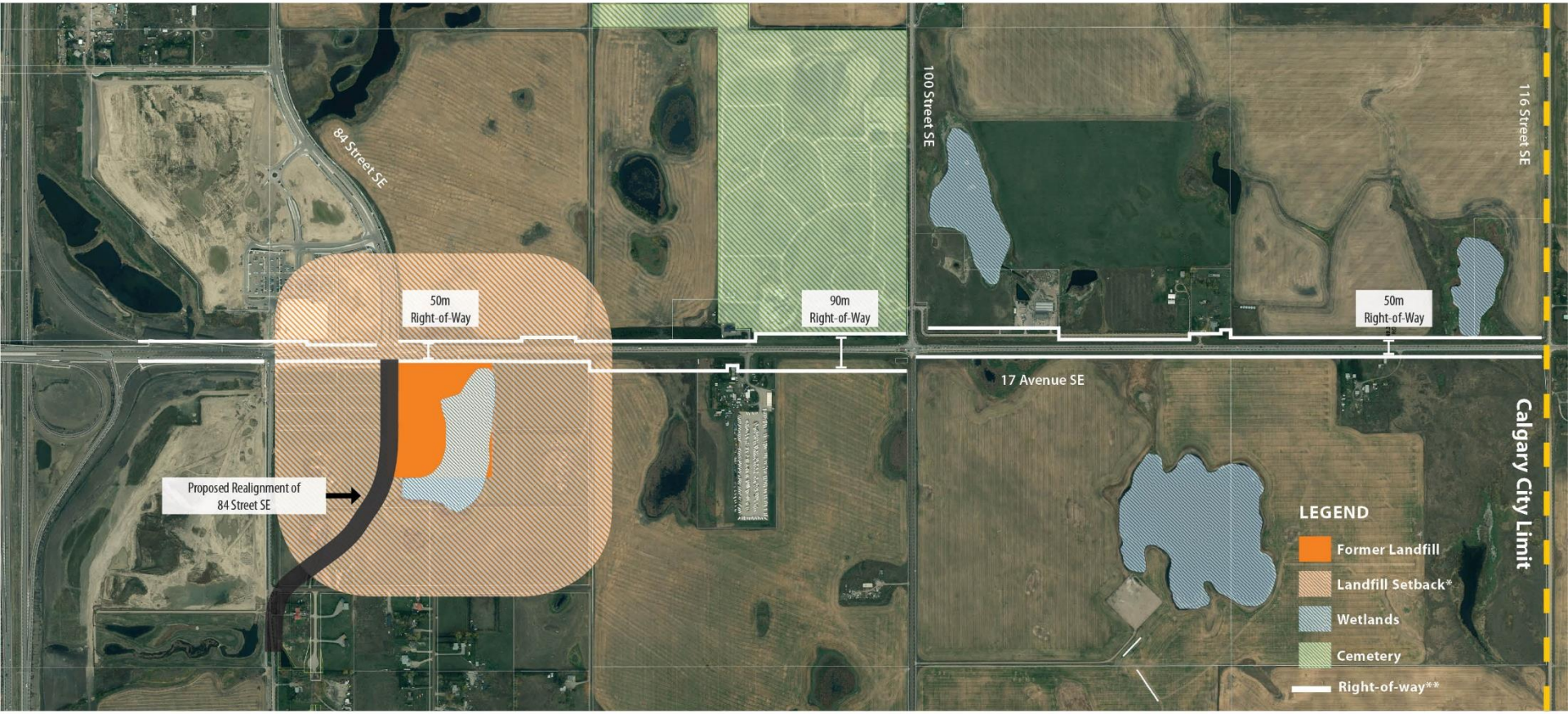
Guiding Principle #12 - Vehicle Parking

Provide a strategic supply of parking to support retail and commercial activity in the Urban Boulevard section of the corridor, recognizing some of the space next to the curb will be used to achieve other guiding principles, such as curb extensions at intersections, mid-block crossings or transit stations to reduce crossing distances for people who walk, bike or take transit.

Guiding Principle #13 - Goods Movement

Recognize that the corridor is not part of The City's Goods Movement Network and goods movement is a lower priority, while maintaining access for commercial vehicles to service local businesses.

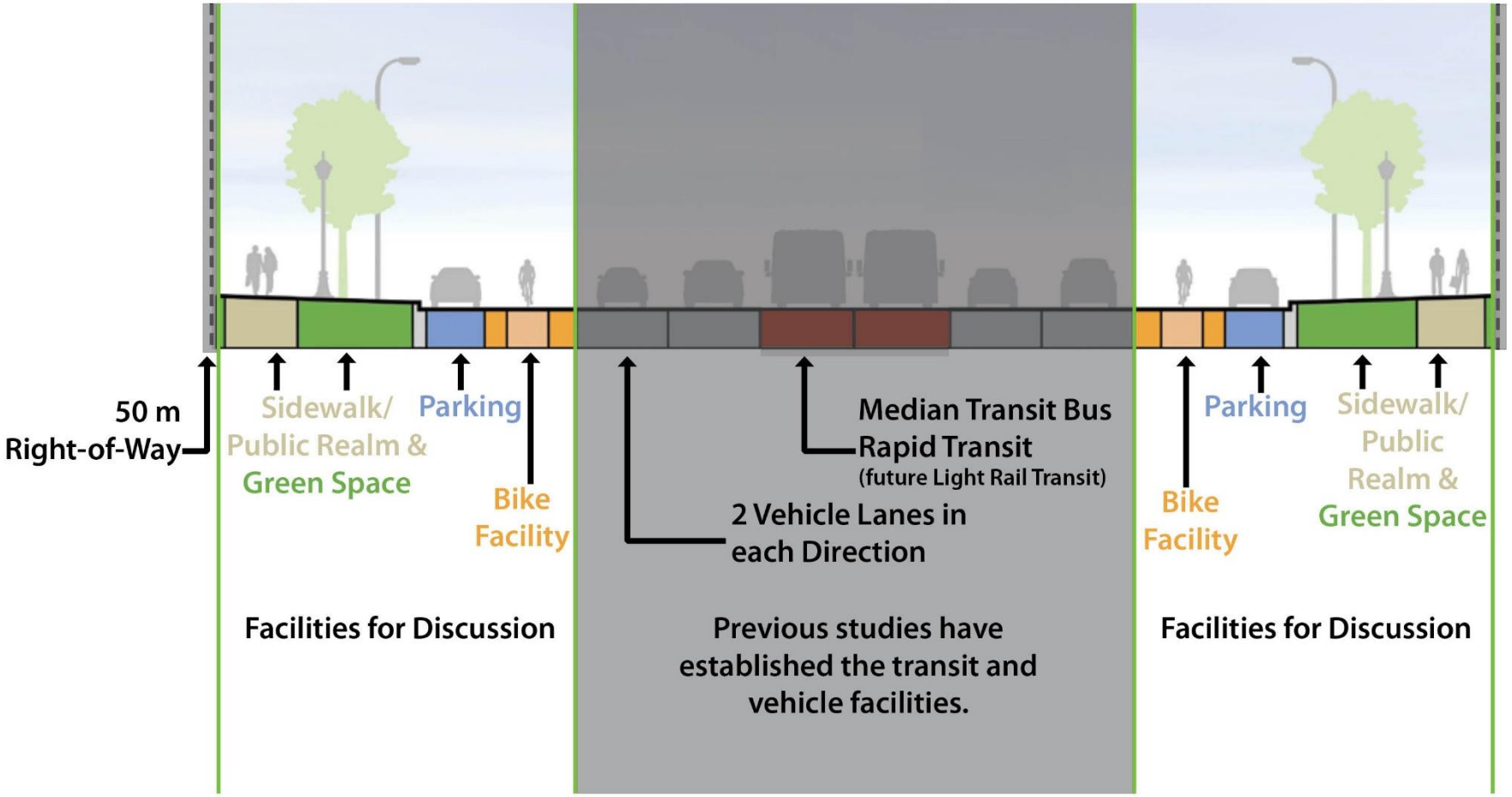
Physical Constraints in the Area



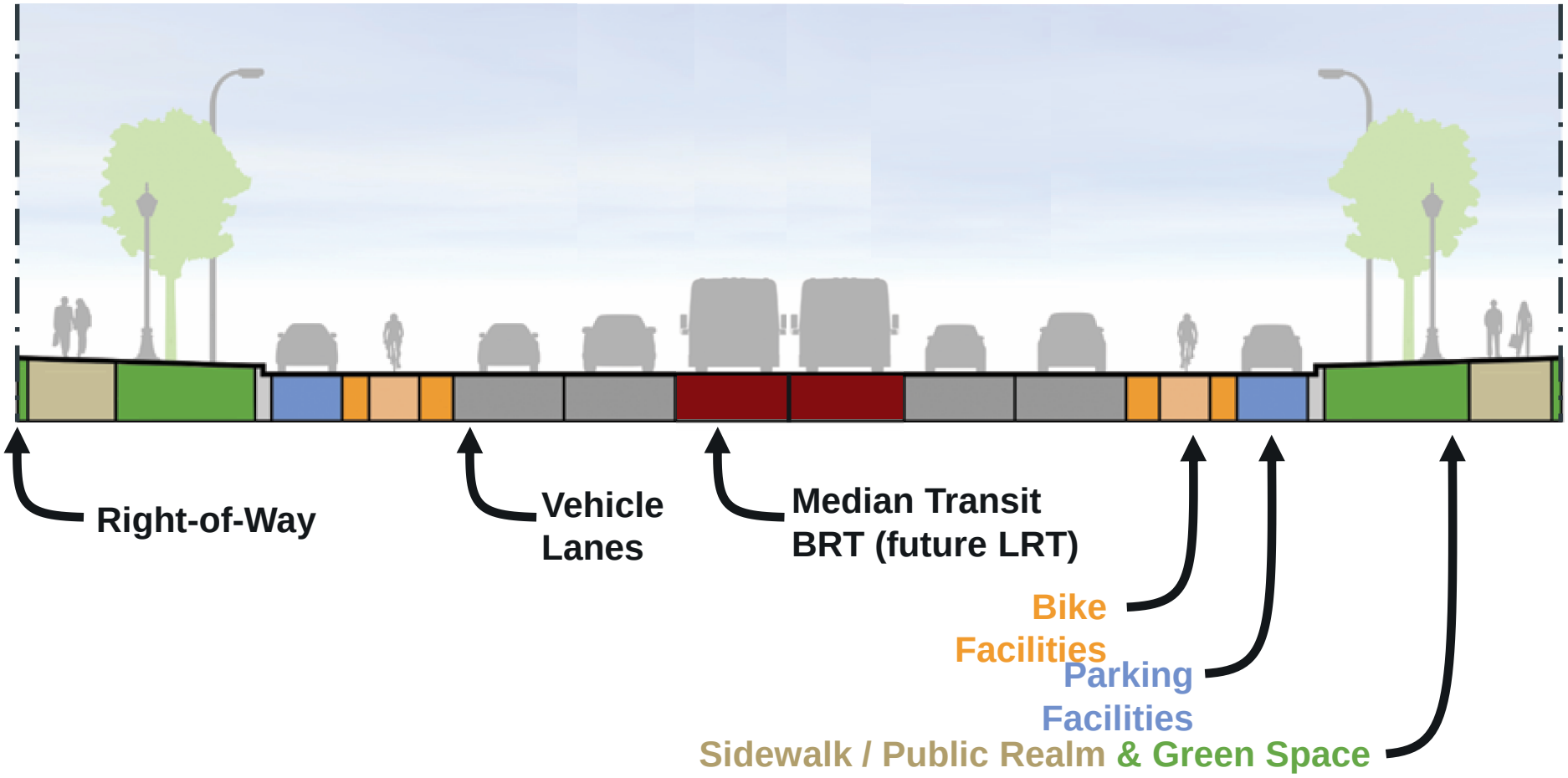
** Environmental regulatory requirements limit development near landfills*

*** Land currently owned by The City of Calgary*

Facilities – What is and isn't up for discussion



Example - facilities in a cross section



Bike facilities

Multi-Use Path

3-5 m

- ✓ Simple and low cost
- ✓ Buffer between people who bike and people who drive
- ✗ Shared between people who walk and people who bike
- ✗ Does not support land between buildings and road (retail areas)

Buffered Bike Lane

1.5 m lane

1.0 m buffer

- ✓ Designated bike lane
- ✓ Buffer between people who bike and people who drive
- ✓ Less width than other bike facilities
- ✓ Simple and low cost
- ✗ Vehicles can enter and block people who bike
- ✗ Potential conflicts with on-street parking
- ✗ Lack of physical barrier

Bike facilities cont'd

On-street Cycle Track

1.5-3 m track

1.0 m buffer

- ✓ Designated bike lane
- ✓ Physical barrier between people who bike and people who drive
- ✓ Attractive to cyclists of all experience levels, due to increased safety
- ✓ Vehicles cannot enter
- ✘ Requires more street width
- ✘ Difficult snow clearing due to barriers
- ✘ Higher cost

Raised Cycle Track

1-3 m

0.5-2 m buffer

- ✓ Designated bike lane
- ✓ Less width than other bike facilities
- ✓ Physical barrier between people who bike and people who drive
- ✓ Integrated with land use and sidewalk / public realm
- ✘ Higher cost
- ✘ Potential conflicts with pedestrians crossing the lane without separation

Sidewalk / Public Realm & Green Space

Narrower Space

Approx. 5 m

- ✓ More space for bike and vehicle facilities
- ✓ Good for areas with less pedestrian activity
- ✗ Less space for street furniture (benches, trash containers) and green space, buildings are closer to roads
- ✗ Less social interaction

Wider Space

Approx. 8 m

- ✓ More space for street furniture and usage (ex. sidewalk patio)
- ✓ More comfortable environment
- ✓ Good for areas with more pedestrian activity
- ✗ Less space for bike and vehicle facilities

Parking Facilities

No On-Street Parking

- ✓ Provides more space for bike and vehicle facilities
- ✓ Good for areas with no land between road and buildings (constrained areas)
- ✗ Less direct parking access to businesses

Parallel On-Street Parking (1 or 2 sides)

2.1 m

0.8 m buffer for bike lanes

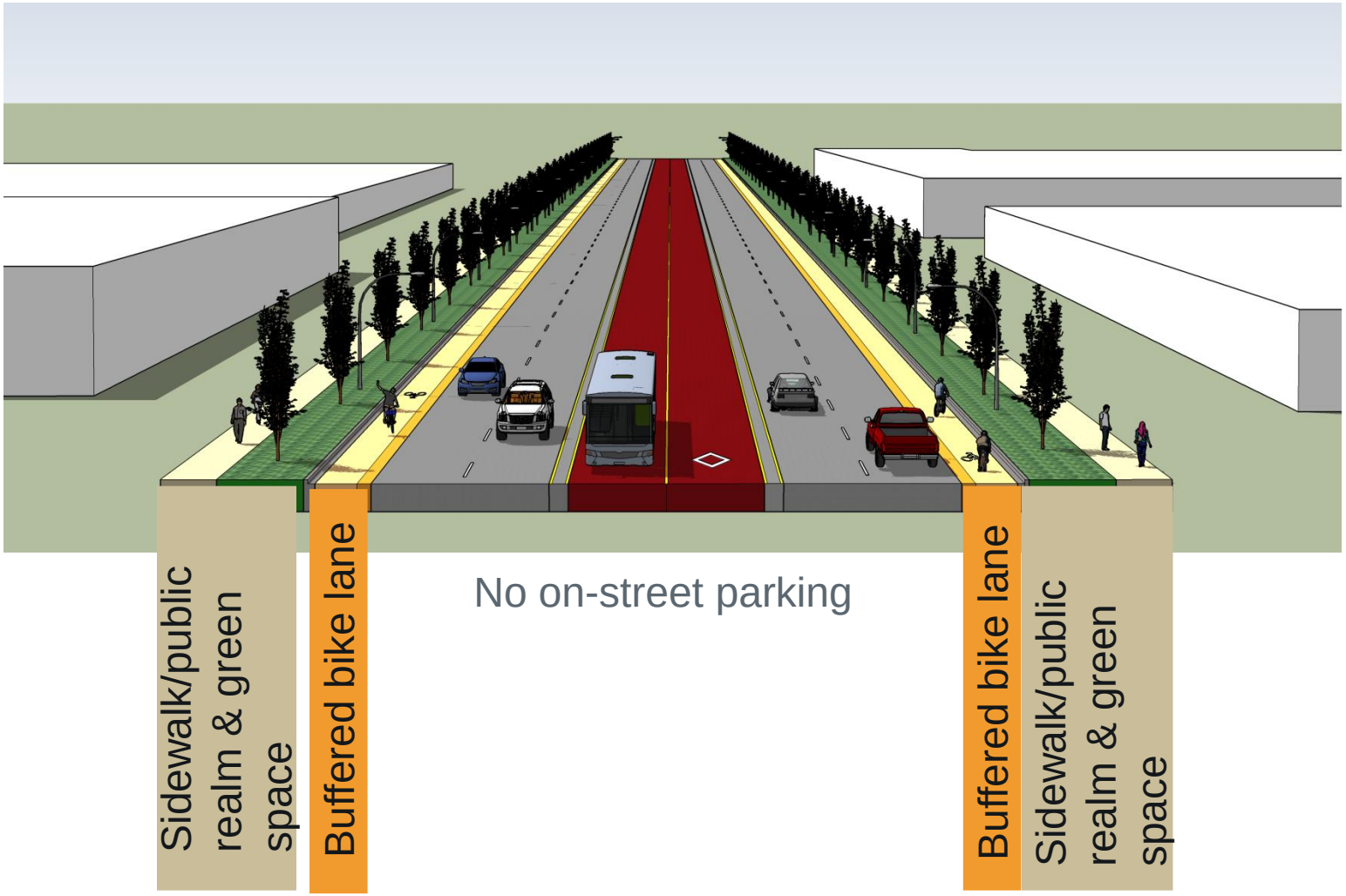
- ✓ Direct parking access to businesses
- ✓ Reduces vehicle speeds
- ✓ Provides a buffer for people who walk
- ✗ Space is used for vehicle storage rather than moving people
- ✗ Potential conflicts with people who bike and traffic flow/people parking cars

Questions

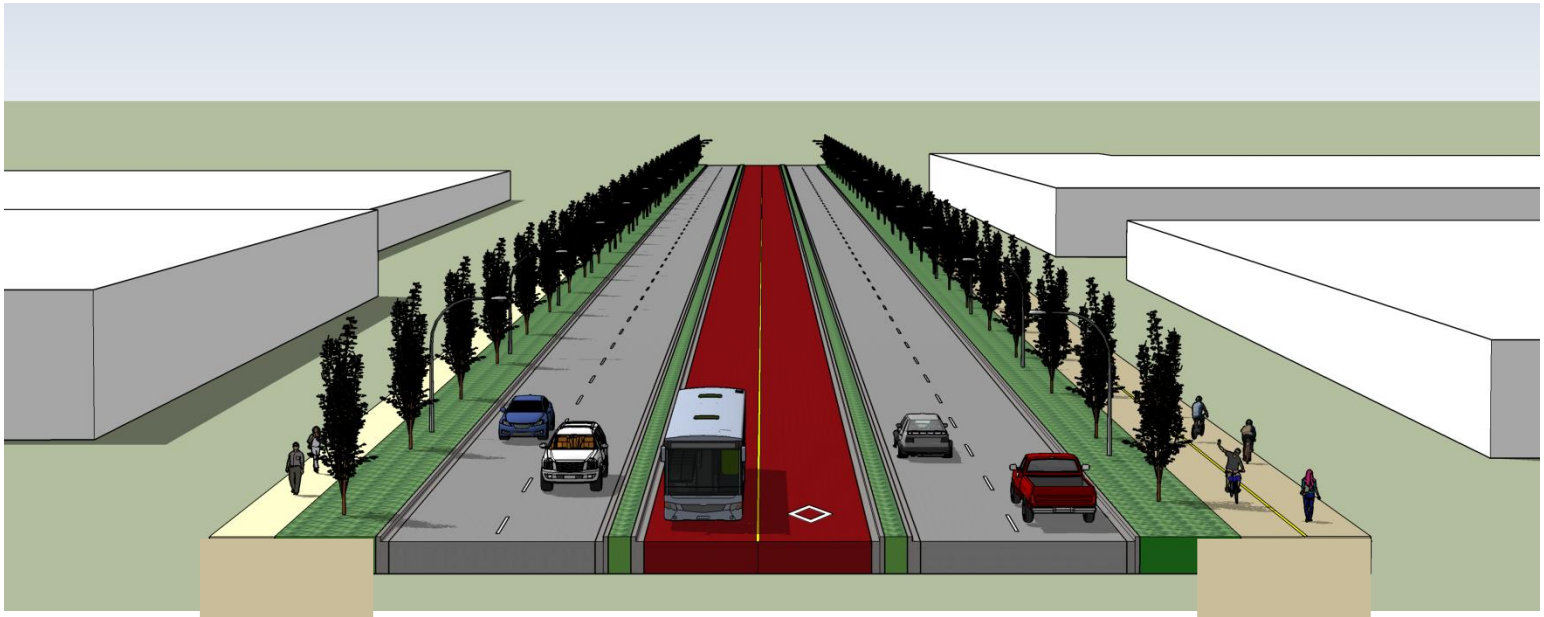
- Do you have questions about the different facilities?

Cross Section Examples

Example – Option #1



Example – Option #2

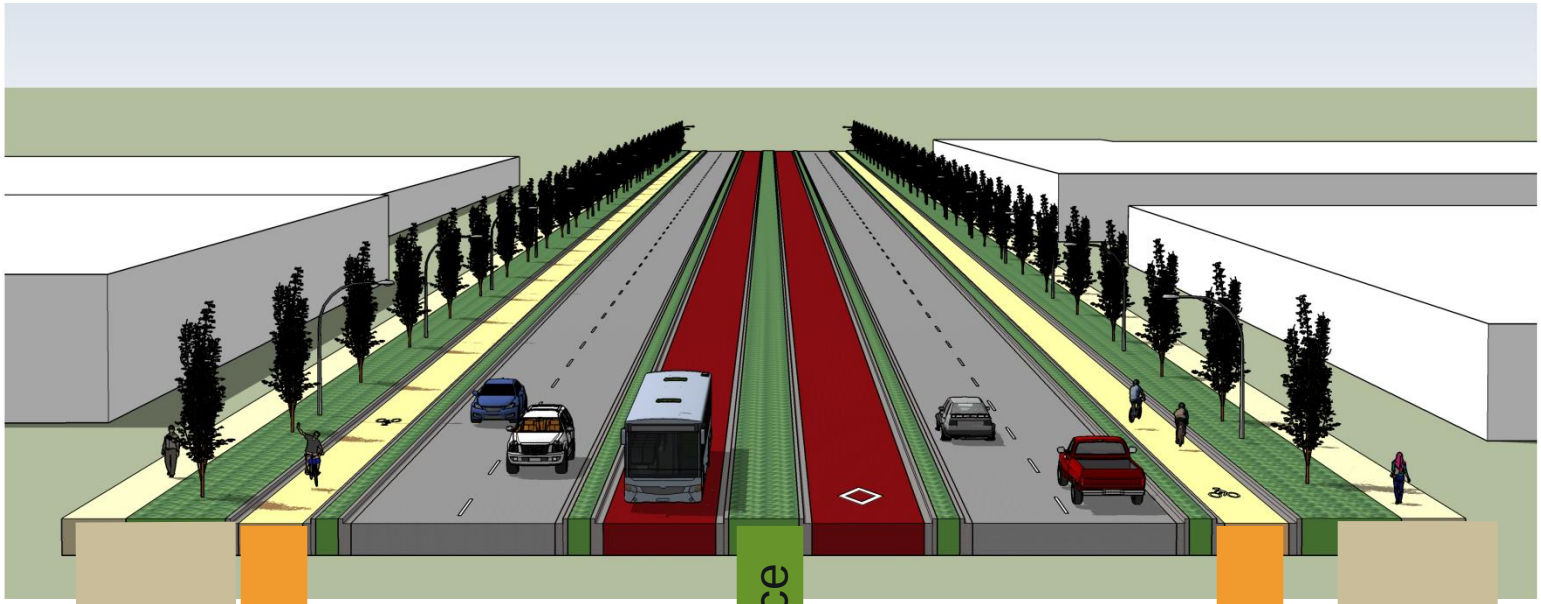


Sidewalk/public realm & green space

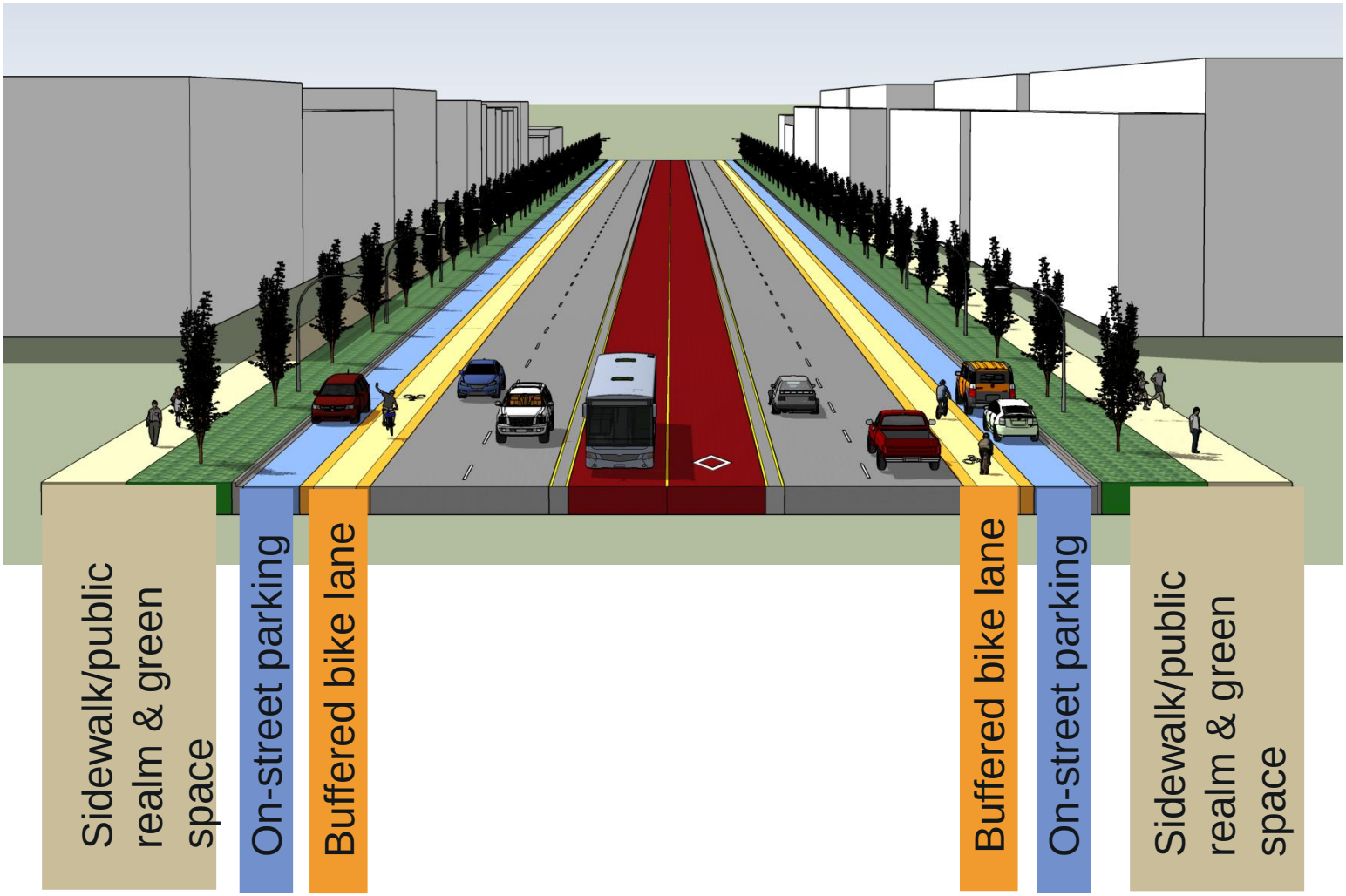
No on-street parking

Multi-use path & green space

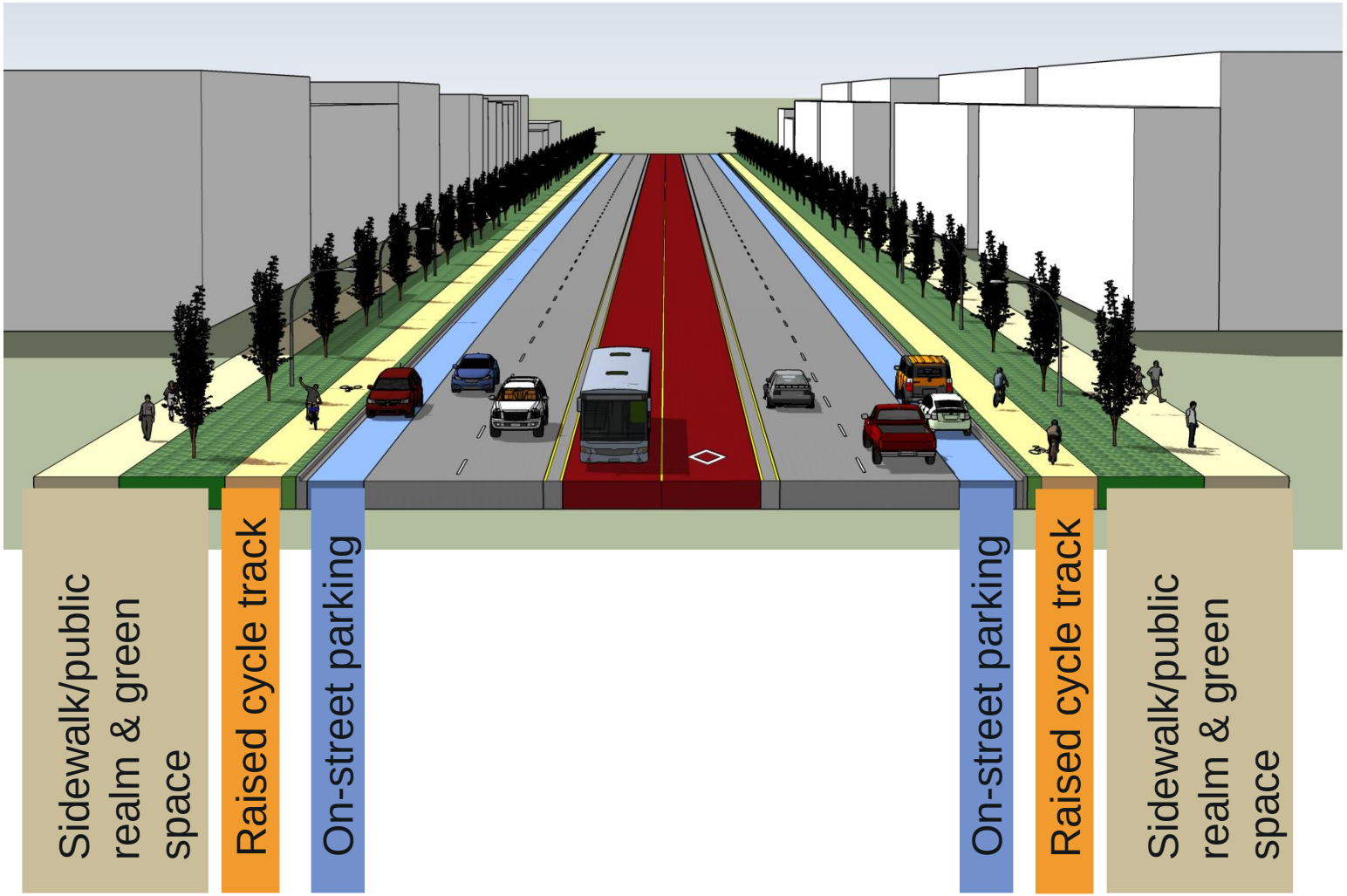
Example – Option #3



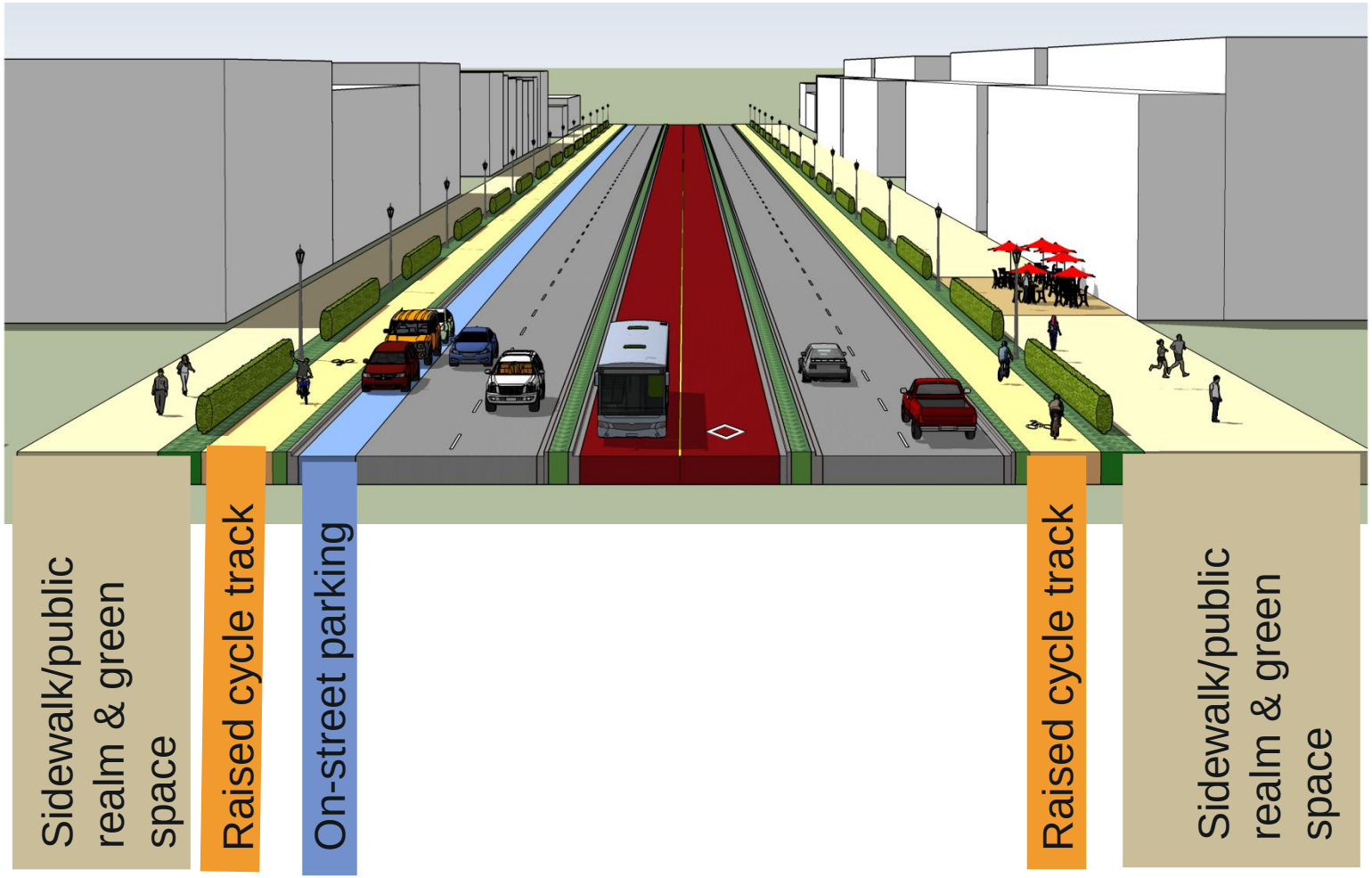
Example – Option #4



Example – Option #5



Example – Option #6



Activity – Putting it all together

- Thinking about the future of 17 Ave. S.E., work in groups to decide the type and location of facilities that best fit the needs of the corridor
- Which example do you prefer and why?

Evaluation Framework - how will a preferred concept be selected?

The team will use the framework to give each option a score from 1 to 5 in each category.

Category	Considerations
Pedestrian Environment and Public Realm	• Width of sidewalk, width of street crossing distance • Width, opportunities for social activity within the corridor, and integration with natural features
Cycling Facilities	• Width and degree of physical protection from vehicles
Transit Integration	• Community connectivity to facilitate access and support ridership
Vehicle and Parking Accommodation	• On-street parking helps businesses & helps to slow traffic • No parking provides more space for walking/cycling, or reduces street width • Create transportation infrastructure to accommodate continuous traffic flow
Goods Movement	• Provision of opportunities/spaces for loading and unloading
Cost	• Construction and maintenance cost estimates, land costs
Social/Environmental	• Wetland impacts, construction impacts to the community

Staging – building the corridor over time

Staging - short, medium and long-term plans for the corridor

- 17 Ave. S.E. will become an urban street in the next 30+ years
- Why is staging important?
  - Establishing the final boundary between the road and sidewalk before adjacent land is developed provides clarity for all
  - Integrating community needs before the final concept is built, if possible
- Factors that will influence when different stages are implemented:
  - Timing of land development
  - Growth in traffic & cyclist volumes as well as transit demand
- Questions
  - What facilities do you think should be developed first? Why?

Next Steps

- Use what we heard today and online to develop 2-3 corridor options
- Get public feedback on the options at an open house in November/December 2015

Thank you for attending!

- Visit www.calgary.ca/17avestudy for more information or to provide your feedback online
- Or contact us

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