

Active Transportation Plan



The **Growth Plan to Half a Million** (Growth Plan) was developed over two and a half years through a five-phase public engagement process called Growing Forward! Shaping Saskatoon.

The Growth Plan is made up of several themes that, when pieced together, form a new growth model for Saskatoon:

- **Corridor Growth** – Encouraging growth and development near our existing major corridors
- **Transit** – Making transit more attractive to more people as we grow
- **Core Area Bridges** – Making the most of our existing road infrastructure
- **Employment Areas** – Ensuring we have the right amount of employment in the right areas
- **ACTIVE TRANSPORTATION** – Providing more choices for how people move around the city
- **Financing Growth** – Planning ahead for the costs of growth

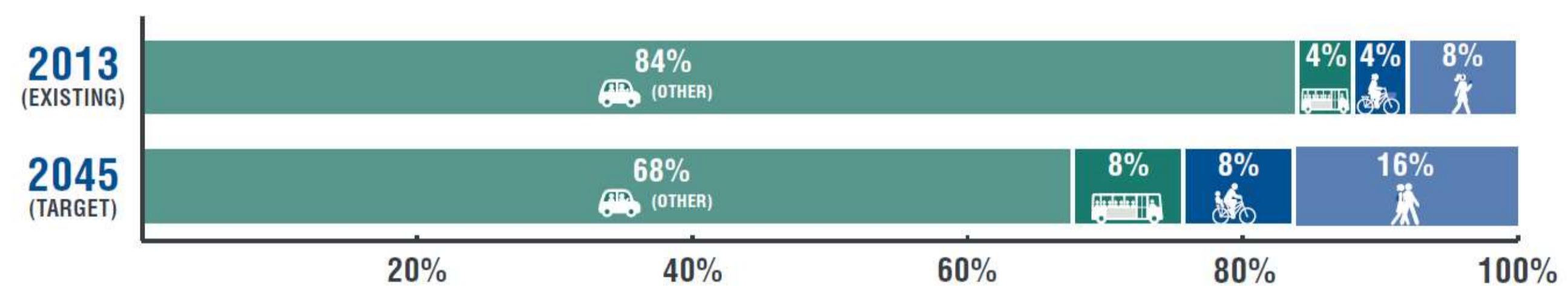
The purpose of **Saskatoon's Active Transportation Plan** (ATP) is to increase transportation choices within the city and establish a long-term vision for active transportation that complements the City of Saskatoon's existing strategic vision.

Approved by City Council on June 27, 2016, the ATP will contribute to increased transportation options by improving the accessibility, comfort, convenience and safety of active transportation in Saskatoon, as the city grows to half a million people over the next 30 to 40 years.

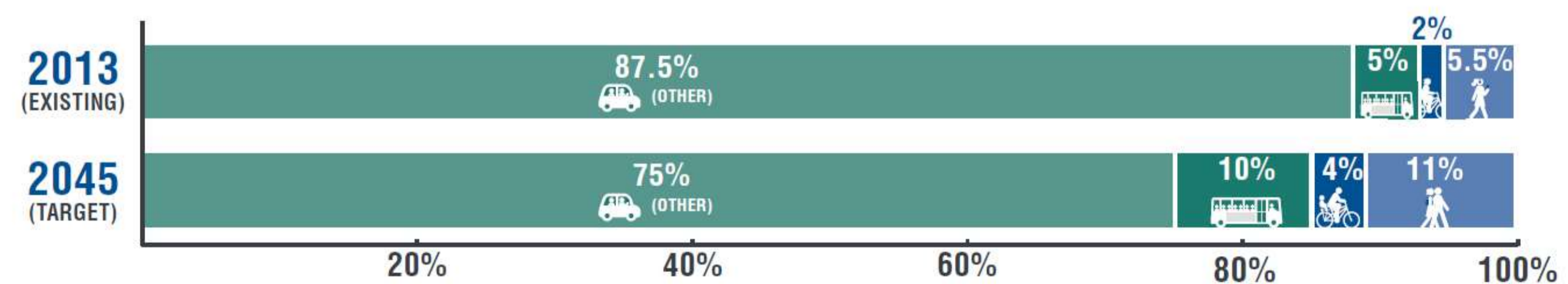
Goals

- 1 **MORE** walking and cycling
- 2 **SAFER** walking and cycling
- 3 More **PLACES** for walking and cycling
- 4 Build a **CULTURE** for active transportation
- 5 **ENCOURAGE** other forms of active transportation

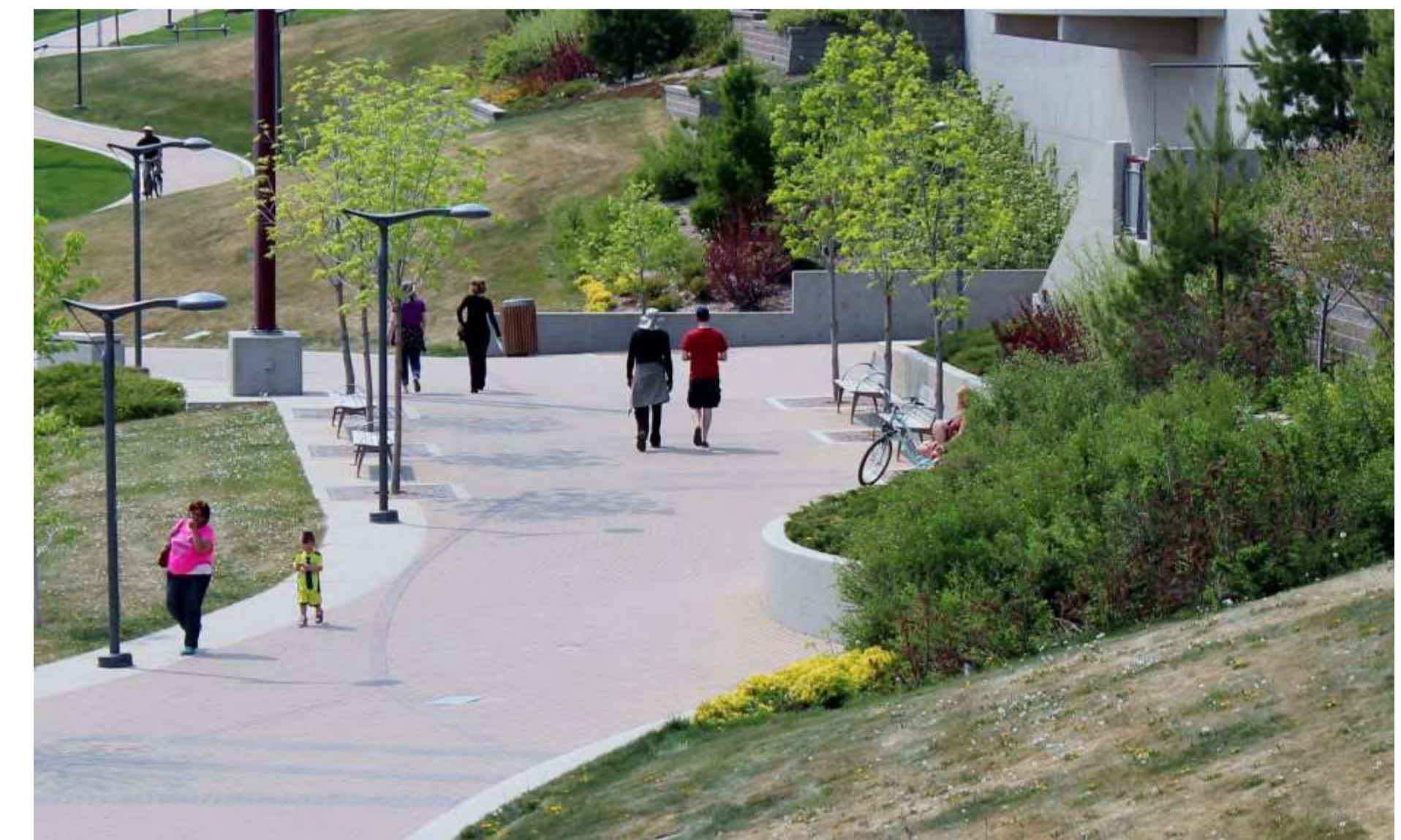
Targets



Active Transportation Targets for All Trips



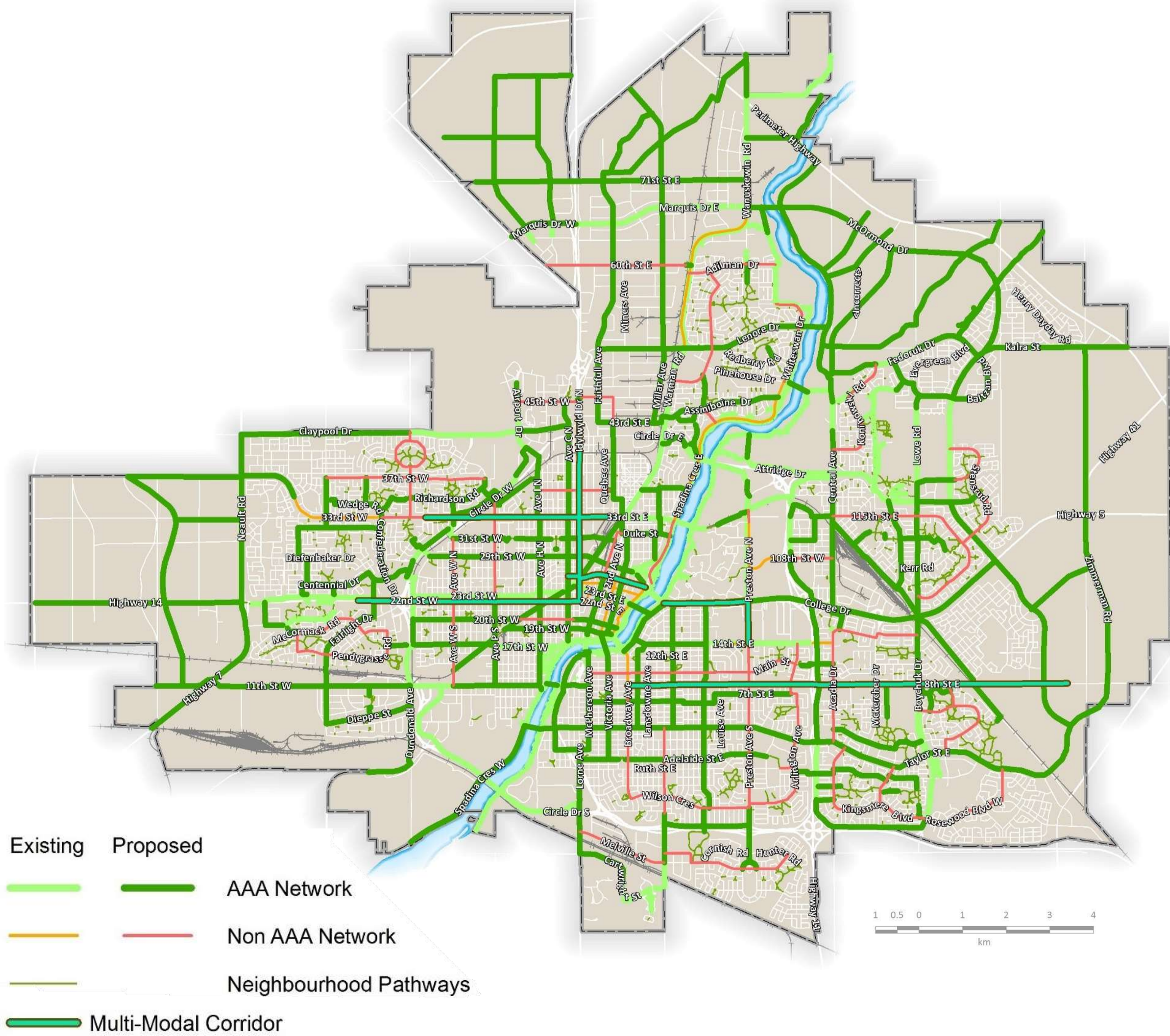
Active Transportation Targets for Commute Trips



All Ages and Abilities (AAA) Bicycle Network

Guiding Principles

- Attractive for all users
- Suitable for persons aged 8 to 80 years old
- Comfortable for most cyclists regardless of ability and experience



All Ages & Abilities



Multi-Use Pathway



Protected Bicycle Lane



Bicycle Boulevard

Secondary (non-AAA)



On-Street Bicycle Lane



Buffered Bicycle Lane



Shared Use Lanes (sharrows)

Overview

Background

- The Active Transportation Plan identified both 19th Street and 20th Street as priorities for expansion of the bicycle network.
 - 19th Street: AAA Network (protected or separated bike lanes)
 - 20th Street: Non AA Network (on-street bike lanes, buffered bike lanes or sharrows)

What has been done so far?

- Approval from City Council to reduce travel lanes on 19th Street from four lanes to two lanes.
- Added paid parking on south side from Avenue A to Avenue C.
- Added parking on the south side from Ave C to Avenue H.

Why is more study needed?

- City Council asked for an evaluation AAA cycling facilities on either 19th Street or 20th Street between Idylwyld and Avenue H.

Recommendation

- Protected bike lanes on 19th Street

What's next?

- Report to City Council in Fall 2017.
- Phased installation could begin as soon as 2018.

Existing and proposed AAA Bicycle Network



Evaluation Criteria



Bicycle Network

	19th Street	20th Street
Linkages to surrounding areas Corridors providing better linkages across major barriers such as busy streets and river crossings should be preferred.	✓	✓
Linkages with other bicycle facilities Corridors that offer a strong potential for interconnection with existing and planned City bicycle facilities and interconnections should be preferred. 19 th Street: Connects to Southwest MUP in the CP right-of-way to the west. Connects to Traffic Bridge and 4 th Avenue protected bike lanes to the east. 20 th Street: Not as connected to 19 th Street plans	✓	
Current and potential bicycle traffic Corridors in which a large number of bicycle and non-bicycle trips originate and terminate should be preferred. 19 th Street: Besides the Farmer's Market and business at Avenue A, most of the segment is residential flankage 20 th Street: Retail and restaurants attract more trips		✓



Cyclist Safety

Merit of segregation Corridors with higher overall traffic volumes, higher truck traffic volumes, higher traffic speeds, and which have a higher potential for illegal stopping should be strongly preferred. Separation on such corridors will provide the greatest benefit to cyclists.	✓	✓
Conflict with vehicles Corridors with fewer number of turning movements at intersections, driveways, and lanes should be preferred 19 th Street: Fewer cross-street movements 20 th Street: More turning & through cross-street movements	✓	



People Driving

Automobile travel time Corridors with the least impact on automobile travel time should be preferred. 19 th Street: Current +10s, future +20s 20 th Street: Current +25s, future +3 minutes	✓	
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Transit

	19th Street	20th Street
Transit stop conflicts Corridors with fewer bus stops and lower frequency of bus service should be preferred as there will be fewer conflicts between cyclists and passengers entering or exiting buses. 19 th Street: 1 bus route (9), 3 stops each direction 20 th Street: 2 bus routes (2, 10), 4 stops each direction	✓	
Transit operations Corridors with the least impact on transit travel time should be preferred. 19 th Street: Traffic flow less affected by lane reduction 20 th Street: Preferred by Transit for higher frequency service	✓	



People Walking

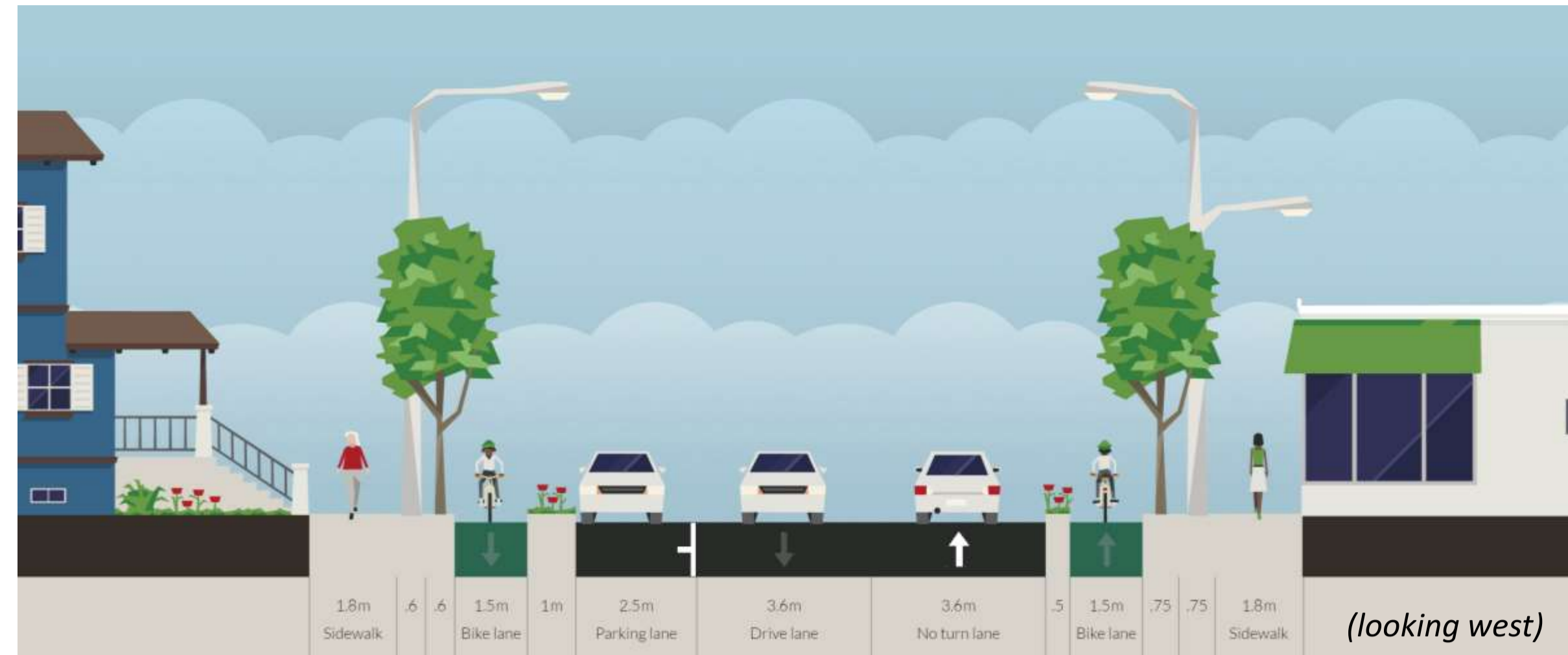
Pedestrian improvements Corridor projects that have potential to improve the pedestrian safety at intersections should be preferred. 19 th Street: Opportunities to streetscape and add curb extensions 20 th Street: Already fully streetscaped with signals	✓	
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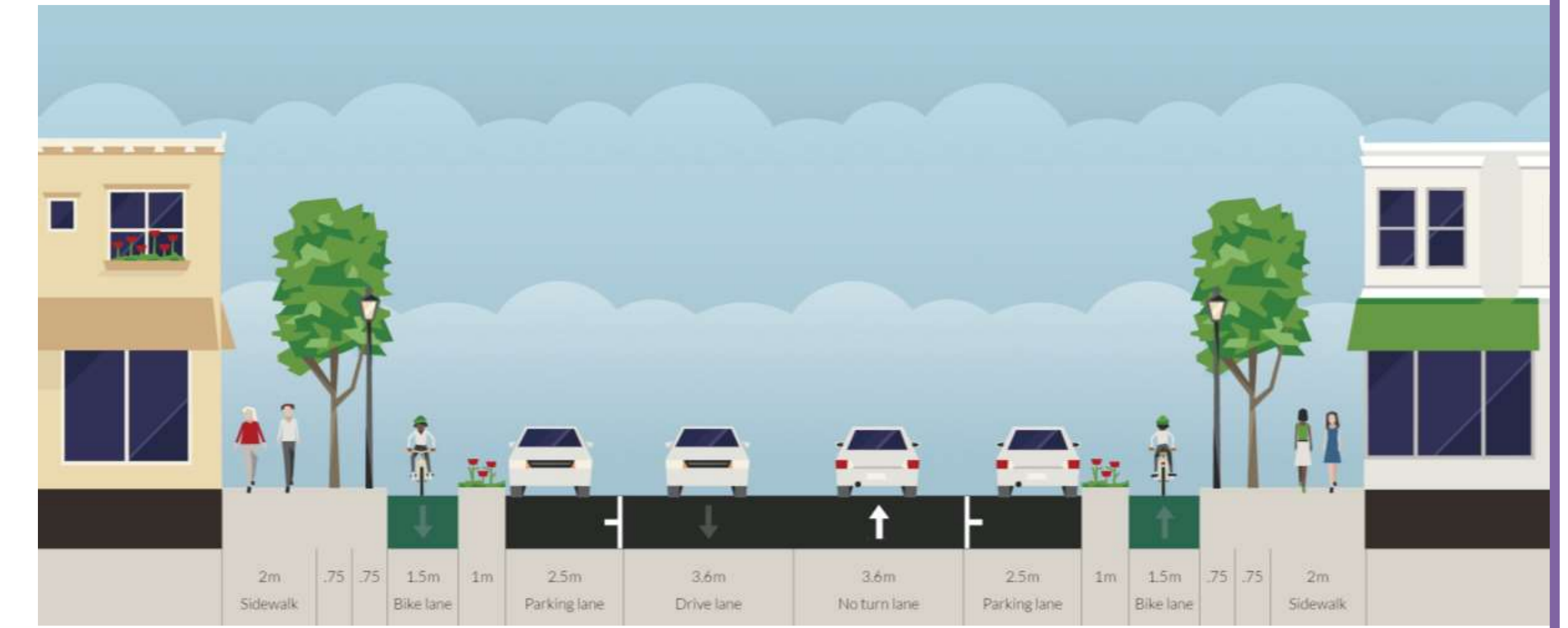
Business








Parking Corridors in which implementation of the bicycle facility will have the lowest relative impact on the total parking supply should be preferred. 19 th Street: Low turnover, except for weekends 20 th Street: High turnover, two sides of parking (-20 spaces)	✓	
Shopping environment Implementation of the bicycle facility will provide sidewalks with additional buffering from automobiles and improve the pedestrian environment, with likely benefits for street-level commerce. Corridors with a significant amount of street-level commerce should therefore be preferred	✓	✓

19th Street



20th Street



 Bicycle Network	<input checked="" type="checkbox"/> linkages to surrounding areas <input checked="" type="checkbox"/> linkages with other bicycle facilities <input type="checkbox"/> current and potential bicycle traffic	<input checked="" type="checkbox"/> linkages to surrounding areas <input type="checkbox"/> linkages with other bicycle facilities <input checked="" type="checkbox"/> current and potential bicycle traffic
 Cyclist Safety	<input checked="" type="checkbox"/> merits segregation <input checked="" type="checkbox"/> lower vehicle conflicts	<input checked="" type="checkbox"/> merits segregation <input type="checkbox"/> greater vehicle conflicts
 People Driving	<input checked="" type="checkbox"/> small increases in travel time	<input type="checkbox"/> large increases travel time
 Transit	<input checked="" type="checkbox"/> fewer transit stop conflicts <input checked="" type="checkbox"/> low impact to transit operations	<input type="checkbox"/> greater transit stop conflicts <input type="checkbox"/> high impact to transit operations
 People Walking	<input checked="" type="checkbox"/> potential for pedestrian improvements	<input type="checkbox"/> pedestrian improvements already in place
 Business	<input checked="" type="checkbox"/> lower parking turnover <input checked="" type="checkbox"/> improves shopping environment	<input type="checkbox"/> reduces parking <input checked="" type="checkbox"/> improves shopping environment
 Cost	<input checked="" type="checkbox"/> good opportunity for phasing	<input type="checkbox"/> little opportunity for phasing

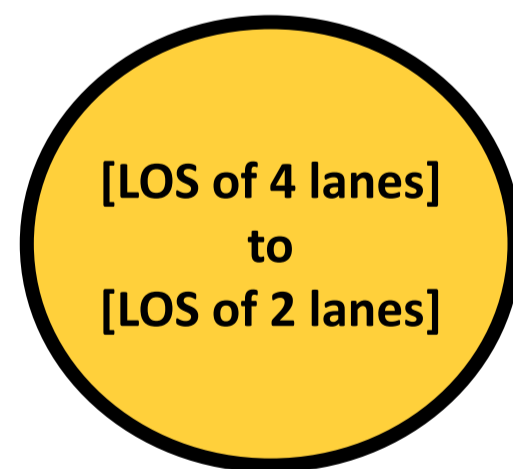
Motor Vehicles: Traffic Flow

The City of Saskatoon uses the Highway Capacity Manual (HCM) to determine Level of Service (LOS) based on average vehicle delay. Generally, a Level of Service D or less is acceptable.

The reduction of travel lanes will have a positive impact on safety by narrowing the roadway and reducing speed, and also reducing the distance for pedestrians to cross.

Why does 20th Street flow change so much?

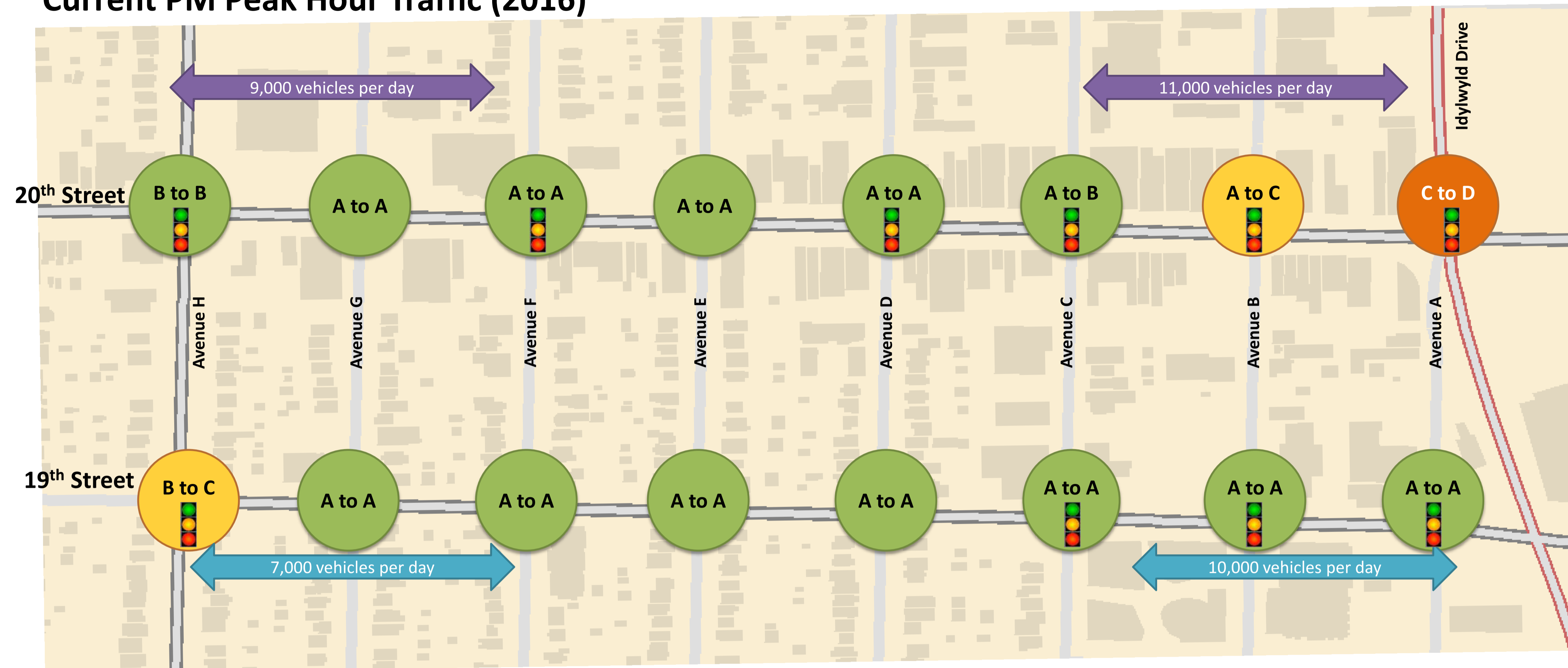
- Blockage from parking manoeuvres
- High number of turning movements
- High volumes on Idylwyld Drive.



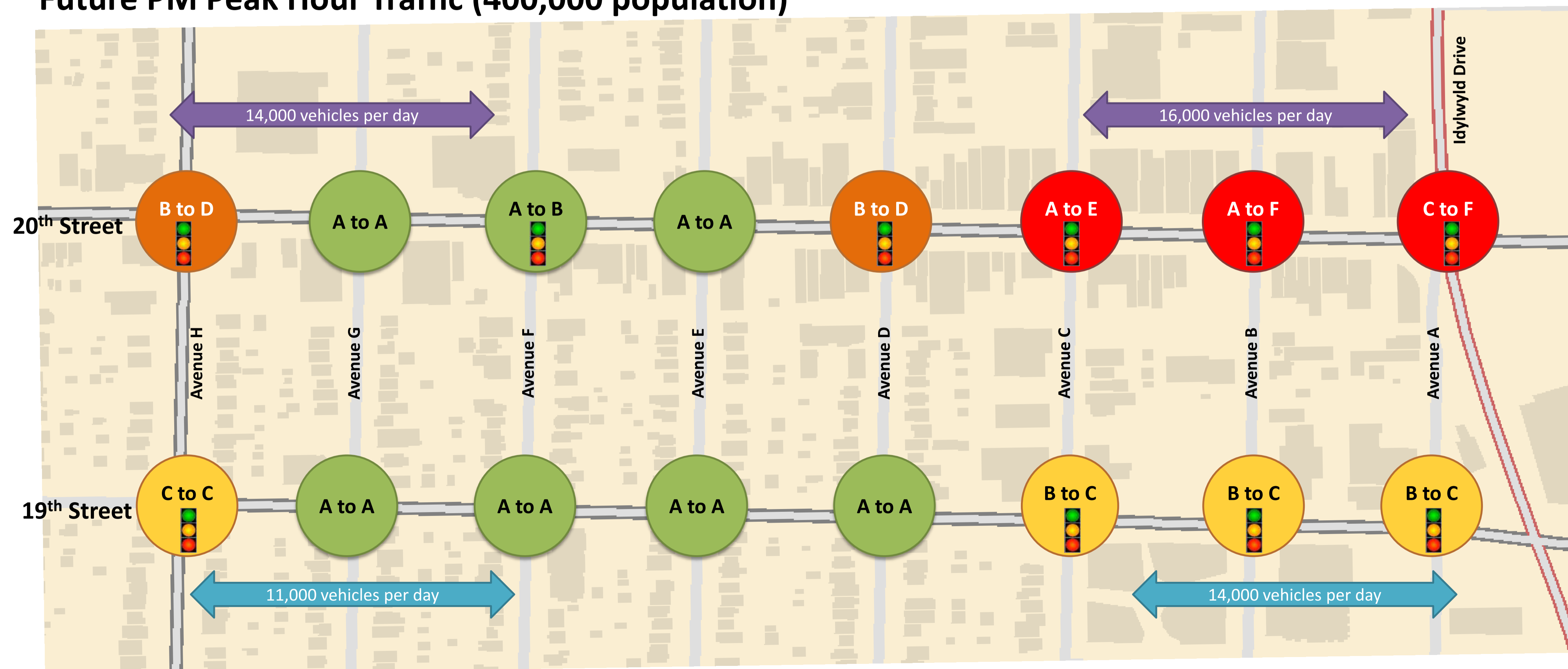
Level of Service from 4 travel lanes to 2 travel lanes is shown.

Level of Service	Average Delay per Vehicle (seconds)	
	Unsignalized	Signalized
A	0 - 10	0 - 10
B	> 10 - 15	> 10 - 20
C	> 15 - 25	> 20 - 35
D	> 25 - 35	> 35 - 55
E	> 35 - 50	> 55 - 80
F	> 50	> 80

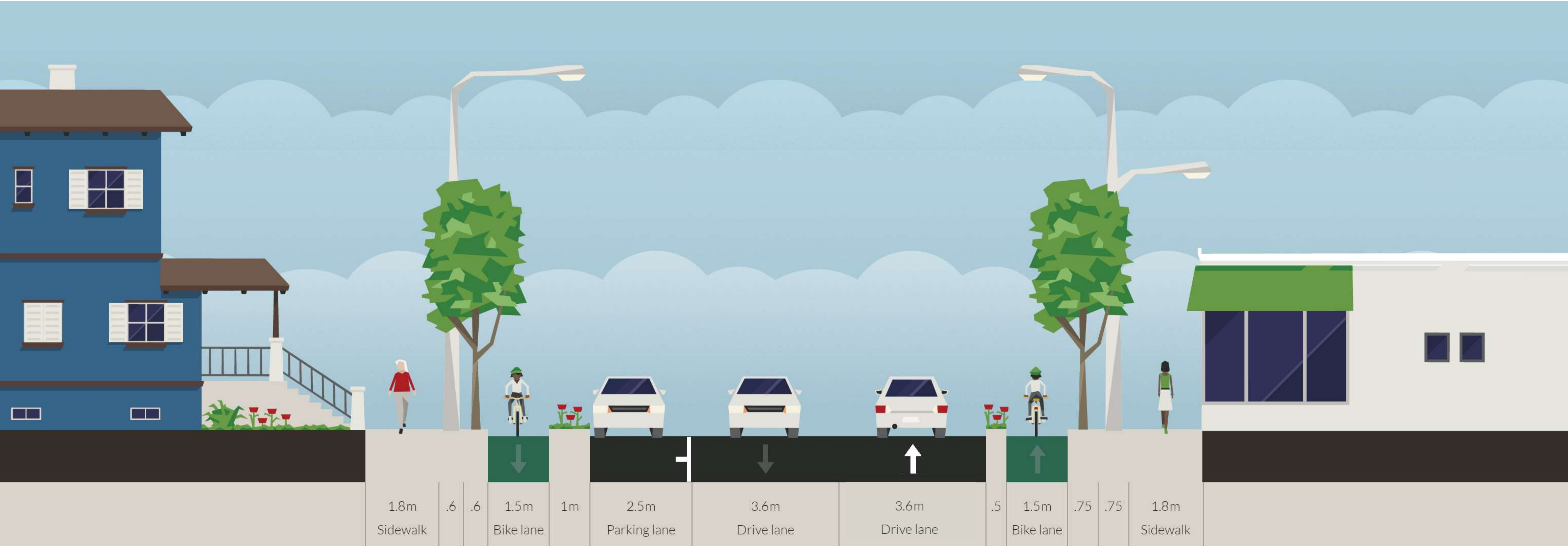
Current PM Peak Hour Traffic (2016)



Future PM Peak Hour Traffic (400,000 population)



19th Street Protected Bike Lane



Design will include:

- Bus platforms
- Curbs
- Barrier: Yet to be determined
- Potential for aesthetic features
- Durable pavement markings
- Signs scaled for cyclists and pedestrians

