Integrated Infrastructure Services
Infrastructure Planning and Design

CITE

Jasper Avenue - You've Never Seen Like This Before

Integrated Infrastructure Services

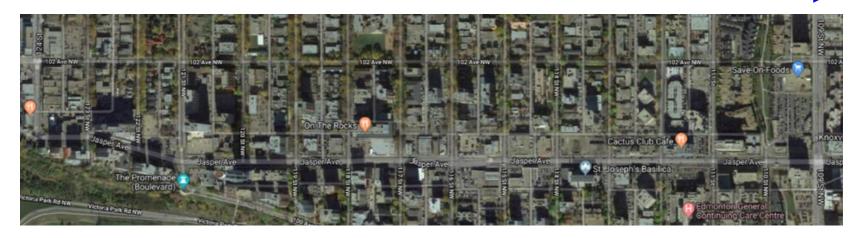
Background - How did we get here?

- Arterial Road Reconstruction between 109 Street to 124 Street (funding approved in 2015-18 Capital Budget - \$ 18.98 million)
- Council requested a Complete Streets approach to the project
- Main Streets Policy Approved in 2015; Jasper Avenue designated a Main Street in 2015.

Background - What do We Have Today?

124 St. to 121 St. 4 Lanes 121 St. to 119 St. (7 Lanes) 4 Lanes+EB Left Turn 2 Peak Hr. bus lanes/Off Peak Parking

119 St. to 109 St. (7 Lanes) 4 Lanes + Left Turn Lane 2 Peak Hr. bus lanes/Off Peak Parking



Typical Cross sections

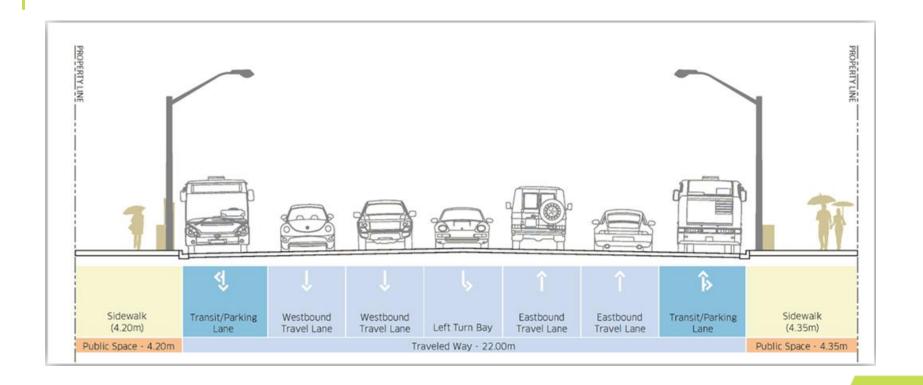


Jasper Avenue between 112 Street and 113 Street

Jasper Avenue between 122 Street and 123 Street



Existing Jasper Avenue - 109 to 121 Street



Main Streets Guideline

Main Streets serve a dual purpose; **Transportation** and **Destination**

Modal Hierarchy

- 1. Pedestrians
- 2. Vehicles
- 3. Transit
- 4. Bikes



Design Principles

Jasper Avenue was our first Main Street design project

- Create a vibrant, all seasons destination
 a safe place of gathering for all ages and abilities
- **Shape a community street** celebrate the history and diversity of its people
- Put pedestrians first, ensuring travel options for all users
- Increase the green
 enhance and beautify with trees and plantings
- Consider the big picture reinforce connections and promote quality development

Jasper Avenue Development Potential

Highest redevelopment potential



Minor

Intersections

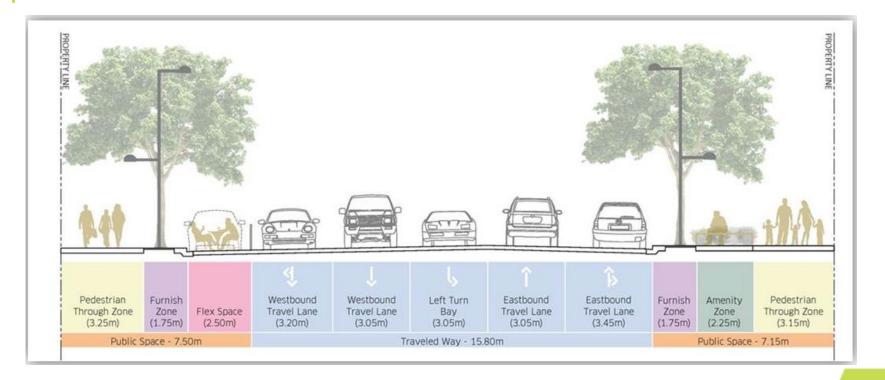
Major Transportation

Intersections

Community

Intersections

Proposed Jasper Avenue - 109 to 118 Street





What is Changing?

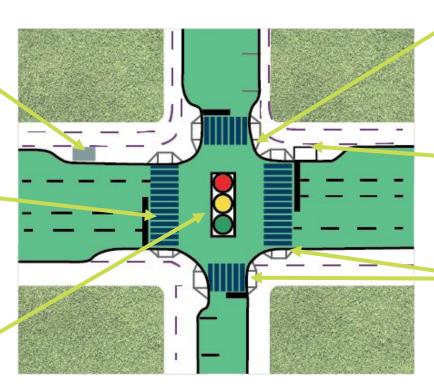
From	То
Sidewalks obstructed with streetlights, transit shelters, street furniture	3 m clear pedestrian space Furniture / Landscaping Zone Adaptable Flex space for bike parking, bus shelters, parking, or temporary patios
2 travel lanes in each direction for general traffic + 1 lane for buses (20/hr)	2 travel lanes in each direction for all traffic
No street trees	Many healthy trees in landscape zone
Off-peak on-street parking in bus lane	24/7 parking along parts of Jasper and on side streets
Left-turn lanes at most intersections	Left-turn lanes where needed
Dedicated right-turn lanes at 116 St and 109 St.	Dedicated right-turn lane at 109 Street

Typical Intersection Improvements

Bus stops in curb extensions

Zebra markings to increase visibility

All intersections upgraded to full signal



Curb extensions to reduce pedestrian crossing distance

Bicycle parking provided

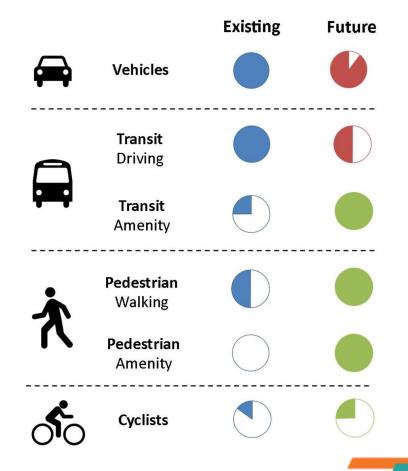
Dual curb ramps in both directions at each corner

Space Allocations

Vehicles and transit have slightly less space

Increase in amenity space and walking space for pedestrians

Slightly better space for cyclists



Design Demonstration Purpose

An innovative public engagement approach which allowed users of Jasper Avenue to experience the proposed IJA changes prior to construction.

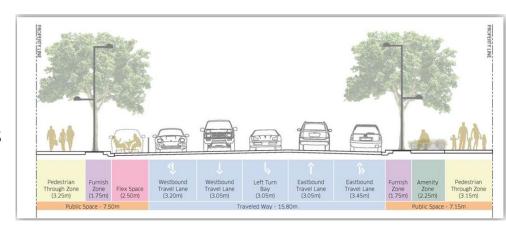
- Location: Jasper Avenue, 109 Street to 115 Street
- Duration: July 15, 2017 October 31, 2017

Feedback and other data collected will influence the design of the Imagine Jasper Avenue project.

Design Demonstration vs. Concept Plan

The Design Demonstration tested only some features of the proposed concept plan:

- Lane configuration
- Flex space
- Curb extensions
- Street furnishings, parklets and patios
- Enhanced crosswalk markings
- Street trees and landscaping
- 24 hour on-street parking
- Extended transit waiting areas



Concept plan configuration

Due to the temporary nature of the design demonstration, some elements could not be tested.

Design Demonstration Elements

Outside bus/parking lanes were closed with temporary flexible posts, event fencing and paint.

The space was used for seating, parking, transit stops, landscaping or other pop-up events and activities.





Pop-up Community Events

Additional activities were available throughout the design demonstration, including:

- Musical performances
- Pop-up shops
- Food truck lunches
- Interactive games
- Live mural painting









Public Engagement

Four major public events were held to provide information and gather feedback

- Envision the Future | Jul 15
 1,100 attendees
- Explore the Possibilities | Aug 26
 400 attendees
- Energize your Body | Sept 16
 400 attendees
- Excite your Senses | Oct 28 1,800 attendees



Experience Jasper Avenue Engagement

- 400 Telephone interviews were conducted with vehicle commuters
- 252 on-street pedestrian surveys were completed
- 20 business surveys were completed
- Over 400 people responded to the online survey
- Over 3700 people attended the four major events

Evaluation Methods

User Experience

- On-site pedestrian survey
- Telephone commuter survey
- Business owner survey
- Online comment form
- 311 calls / emails

Monitoring

- Traffic & pedestrian counts
- Travel time studies
- Speed surveys
- Right-turn queue analysis

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Safety analysis at 109 Street



Observations and Findings

What we Heard

- 63% of pedestrians agreed the changes improved safety
- 58% of drivers believe their commute time increased
- Concerns regarding the temporary elements and their utilization

What we Observed

- 15% increase in speed limit compliance
- Increase in peak hour travel time of 1-2 minutes
- Consistent traffic volumes before and during design demonstration
- High number of pedestrian conflicts with turning vehicles at 109 Street

Lessons Learned

Design/Operational

- Some direct vehicle access to businesses should remain
- 109 Street right-turn bay needed
- Adjust curb extensions to ensure vehicles can turn around them
- Ensure bus stops allow two buses to stop at the same time

Streetscape Elements

- Ensure street trees have a protected environment relative to harsh conditions
- Provide buffer between traffic and seating areas
- Pedestrian-focused lighting required
- Street furnishings should be suitable in all seasons

Lessons Learned (cont'd)

Future similar public engagement projects will consider the following:

- Additional communications efforts to ensure public is aware of the temporary nature of the project and its purpose
- Ensure all new functional areas have adequate wayfinding to alert users to changes
- Engage businesses early in the planning process to ensure enough time for patio permits and licensing



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Next Steps - Imagine Jasper Avenue

The preliminary design for Jasper Avenue from 109 Street to 124 Street is currently underway.

Construction is anticipated to be staged over three or more years beginning in 2020.



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Thank you.

Questions?

