# TRANSPORTATION 2050

## CITY OF LANGLEY

# TRANSPORTATION PLAN

DRAFT

July 22, 2024

Langley City
THE PLACE TO BE

# Acknowledgements


### Territorial Acknowledgement

The City of Langley is located within the traditional and unceded territories of the Katzie, Kwantlen, Matsqui and Semiahmoo First Nations.

### Community Acknowledgement

Many members of the City of Langley community participated in the Transportation Plan update process. We appreciate your contribution. This work was inspired by the community's passion and commitment to improve the City, making it the Place to Be.

# Contents

# 1. Introduction

## 1.1 Purpose of the Plan

The City of Langley is a Regional City Centre with a rich heritage and character. The City has a unique transportation context as the nexus between Metro Vancouver and the Fraser Valley, serving a large visitor base and a rapidly growing and changing population.

The City will soon welcome Surrey Langley SkyTrain extension and Bus Rapid Transit (BRT) Service. Transportation 2050 is designed to support other City aspirations and to create sustainable transportation solutions that consider population growth and density, rapid transit, and proactively addresses future transportation issues and opportunities.

**The purpose of Transportation 2050 is to provide a multimodal transportation strategy to guide transportation policy and investments over the next 25 years.** The Plan envisions a complete transportation system for all users that ensures the safe and efficient movement of people and goods locally and regionally.

## 1.2 The Process

Transportation 2050 has been developed through a five-phase process ending in Summer 2024 (**Figure 1**).

The Plan was developed based on a comprehensive technical assessment of current day conditions as well as input from the community, agency partners, and City Council to ensure it aligns with the local context, as well as future needs and aspirations.

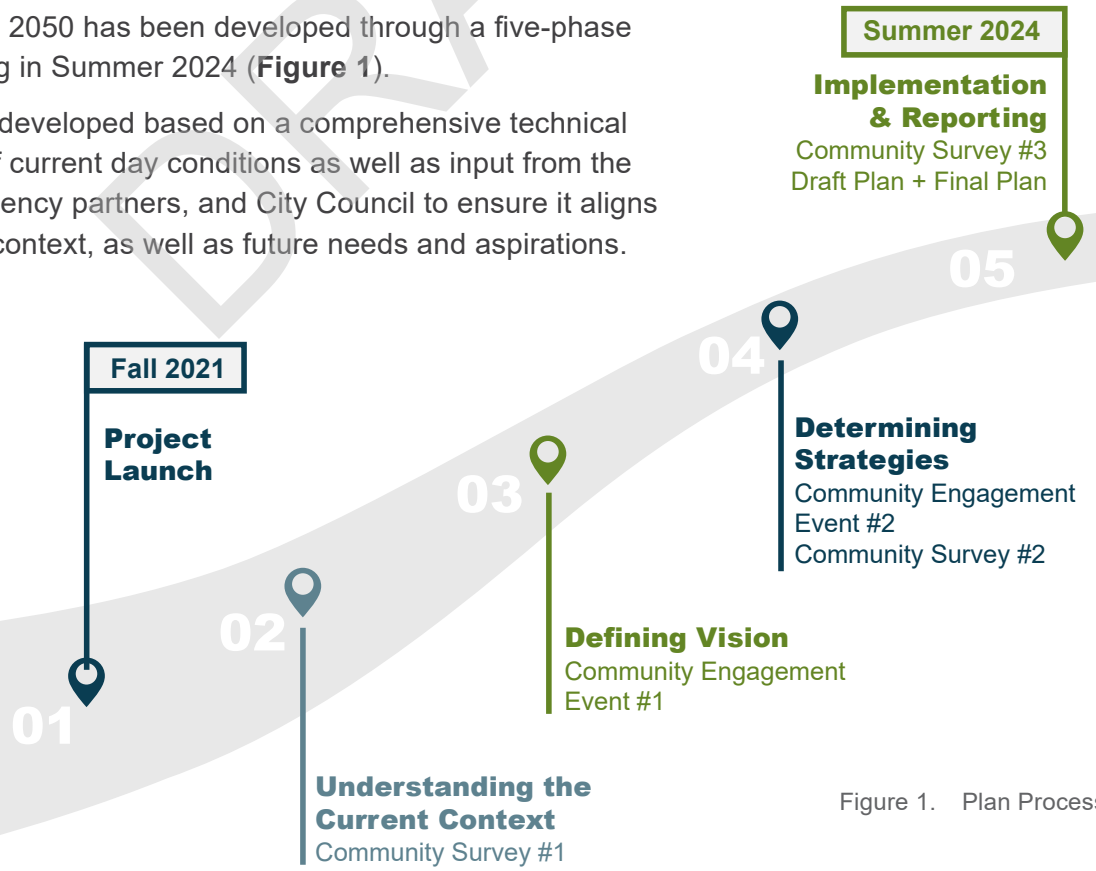



Figure 1. Plan Process

## 1.3 Engaging Community and Council

An important component of developing Transportation 2050 was engaging with community members, agency partners, interest groups, City Council, and staff. There were three rounds of engagement throughout the project planning process and several methods used to raise awareness about the project. This included updates on the City website, posts on social media, and newsletter articles.

### Engagement Round 1 – Issues and Opportunities (Fall 2021)

The information collected during Engagement Round 1 indicated the community's needs and priorities for transportation in the City today, and formed the basis for the vision, goals, and direction of the Plan. Round 1 engagement included:

- Online Community Survey #1 (426 responses) – October 29 to November 30, 2021
- Virtual Open Houses (2 events and 10 attendees) – December 2, 2021
- Virtual Stakeholder Meeting (14 attendees) – December 9, 2021

**Meeting with Council Vision & Goals – March 21, 2022**

### Engagement Round 2 – Draft Strategies, Actions and Network Recommendations (Spring 2022)

The preliminary ideas and recommendations of the Plan were presented during Engagement Round 2. Based on the feedback collected, recommendations were refined and incorporated into the draft Plan. Round 2 engagement included:

- Online Community Survey #2 (247 responses) – June 6 to June 29, 2022
- Community Day Pop-up (100+ interactions) – June 18, 2022
- Virtual Stakeholder Meeting (17 attendees) – June 29, 2022

### Engagement Round 3 – Draft Plan (Summer 2024)

The final round of engagement was designed to share the draft Plan before finalizing the document. Additional feedback was collected from the community and meetings with agency partners. It is important to align the Plan with regional and inter-municipal plans and initiatives. Round 3 engagement included:

- Online Community Survey #3
- Open House Event – September 2024

# 2. Current Conditions and Planning Context

## 2.1 City Profile

The City is a compact community with a unique small-town character, and a population of nearly 29,000. The City covers a land area of 10.2 square kilometres with a variety of land uses, including residential, agricultural, park lands, a historic downtown core, industrial, and service commercial. This relatively small land area means that most residents could be within a short travel distance, by any mode of transportation, to their daily needs.

The City's location within Metro Vancouver, proximity to the Fraser Valley, and being bordered by the Township of Langley and the City of Surrey, places the City in a unique transportation situation (**Figure 2**). The northern portion of the City of Langley, along with a portion of the Township of Langley, have been designated as a Regional City Centre by Metro Vancouver (Metro 2050). Regional Centres have a greater proportion of employment, services, higher density housing, commercial land use, cultural, entertainment, institutional, and mixed uses, as well as transit service. As a result, the City has become a regional hub for employment, shopping, and recreation, attracting visitors from all over the region.

The population and employment within the City and surrounding communities are expected to grow rapidly in the coming decades, especially with the opening of the 16-kilometre long Surrey Langley SkyTrain extension in 2028.



The City has updated its Official Community Plan (OCP) in 2021. The OCP identifies the opportunity for the City to become the “Nexus of Community”, where Langley City connects the Fraser Valley and Metro Vancouver, strengthening the quality of life. The OCP is centred on four key themes: community, experiences, connection, and integration. An important component of this vision is ensuring the community is compact, walkable, and cycling friendly.

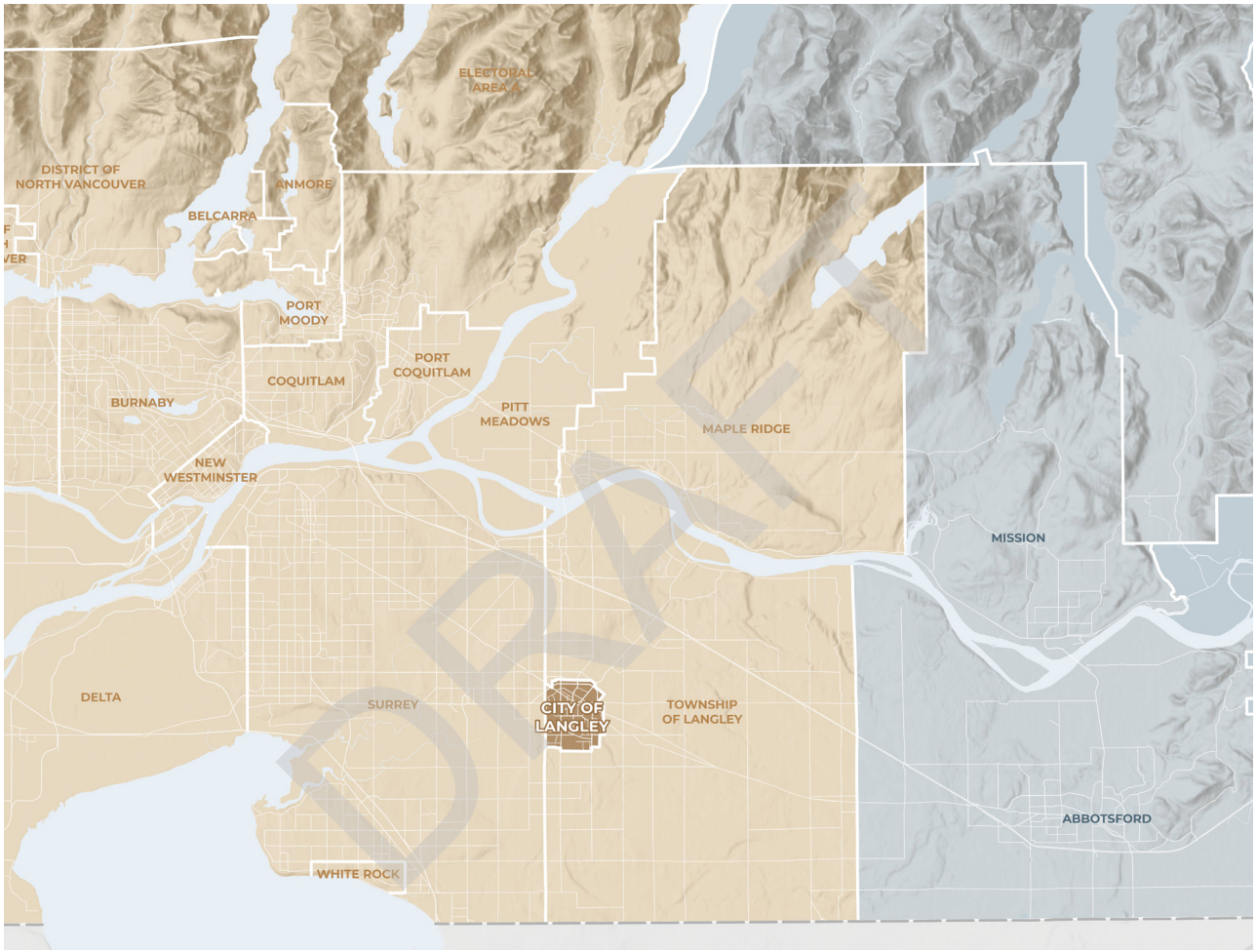
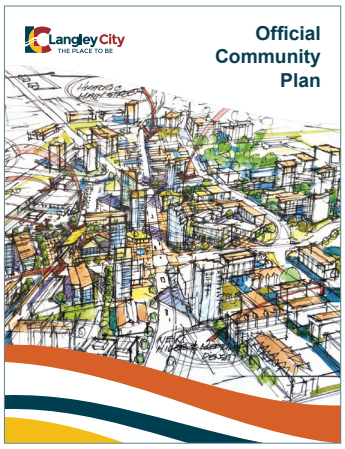
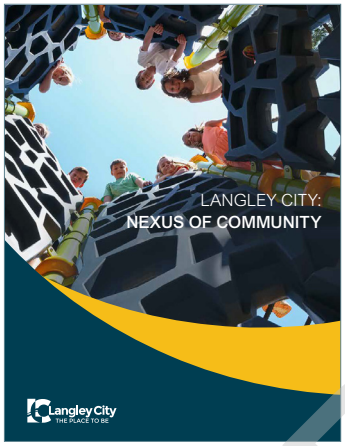


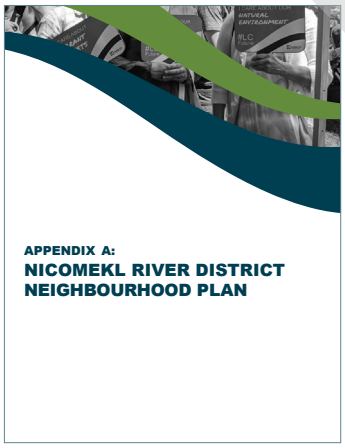

Figure 2. Regional Context

## 2.2 Strategic Policies and Direction

Transportation 2050 is guided by several official policies, strategies, and plans, summarized as follows:




### Local Policy Context

**Council Strategic Plan (2023-2028).** The Plan identifies several related themes and actions that highlight the need to improve connectivity within the City with accessible and multi-modal transportation facilities that transitions seamlessly to regional networks beyond the City limits.

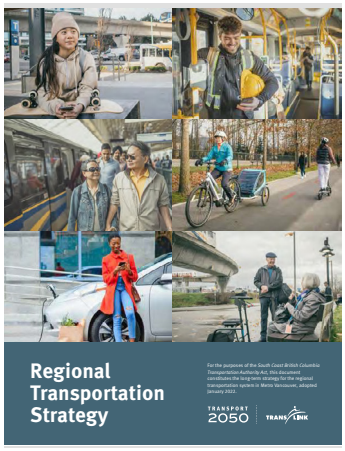
**Official Community Plan & Zoning Bylaw (2021).** The Plan and Bylaw provide important directions centred on improving housing and transportation. The Plan highlights the aspiration and need for a highly-connected City aligned with rapid transit.

**Nexus of Community (2018).** Capitalizing on the introduction of SkyTrain to Langley, the Plan highlights a commitment to work with Metro Vancouver to support increases in population and employment growth, and to create pedestrian-scale spaces that promote livability with low and mid-rise density.

**Master Transportation Plan (2014).** The 2014 Plan provided historical context for growth and investment in transportation within the City recognizing the significant changes that now include the extension of SkyTrain and BRT to Langley.

### Other City Documents:

- **Parks, Recreation, and Culture Plan (2023)**
- **Design Criteria Manual (DCM) (2022)**
- **Nicomekl River District Neighbourhood Plan (2021)**
- **Financial Plan (2024-2028)**
- **Downtown Master Plan (2007-2009)**





## Regional & Provincial Policy Context

The Ministry of Transportation and Infrastructure (Ministry) and TransLink share ownership and responsibility for elements of the City's transportation network. Relevant plans and policies influencing the Plan are briefly highlighted.

**Transport 2050, TransLink.** The regional transportation network goals are centred on convenience, reliability, affordability, safety and comfort, and sustainability (carbon-free). Transport 2050 targets include: 50% of all trips are by sustainable modes; 20% less time in congestion; housing and transportation costs a maximum of 45% of household income; serious traffic injuries and fatalities are reduced by 5% annually to reach zero by 2050; and eliminating transportation related carbon by 2050.

**Transport 2050: 10-year Priorities, TransLink.** The 10-Year regional priorities include:

- Surrey-Langley SkyTrain Implementation (0-5 years)
- RapidBus: Langley – Haney Place 200 Street Rapid Bus Service (0-5 years)
- RapidBus: Langley - White Rock (6-10 years)

**CleanBC, BC Ministry of Transportation and Infrastructure.** CleanBC is the provincial plan to lower emissions related to climate change. The CleanBC Roadmap to 2023 outlines a target to increase the share of trips (e.g., commuting for work and personal activities) made by walking, cycling, transit to 30% by 2030, 40% by 2040 and 50% by 2050.

**Metro 2050, Metro Vancouver.** This strategy aims to support the development of compact, complete, and transit-oriented communities, focusing 16% of all residential growth and 19% of employment growth in Regional City Centres such as the City of Langley.

## 2.3 Land Use Patterns

Some of the existing land uses in the City include the historic downtown core, civic centre, the transit-oriented core, industrial, and mixed employment areas. The City's forward-thinking land use plan emphasizes the missing middle and multifamily housing types, the need for mixed-use nodes to create walkable and complete neighbourhoods, and the presence of existing employment lands that are ready to be densified.

Some of the major destinations within the City include several senior centres, community and recreation centres, the library, Kwantlen University – Langley Campus, the trail network along the Nicomekl River, and the current transit exchange on Logan Avenue. The key destinations in the City are located north of the Nicomekl River. There are five elementary schools in the City, one middle school and one multi-level school. Secondary school students attend school in the Township of Langley.

The existing OCP, the current planning document that provides guidance on future land use, recognizes that the City is "on the precipice of population and employment growth that will be shaped around rapid transit and the downtown".

The importance of the relationship between land use planning and transportation can not be overlooked. The guidance provided in the current OCP significantly influenced Transportation 2050.

The OCP highlights that transit-oriented land uses around the future SkyTrain stations at 203 Street (Langley City Centre Station) and 196 Street (Willowbrook Station), as well as densification along major road corridors (208 Street and 200 Street). These land use plans highlight the important role transit will play in shaping growth and development. Linking transportation and land use with active transportation modes are essential to reducing vehicle travel and enhancing mobility in the City.

In late 2023, the Province introduced legislation designed to increase housing supply. This will also have an impact on travel patterns for the City and its surrounding areas.

Bill 44, often referred to as the Small-Scale Multi-Unit Housing Initiative, requires local governments to update zoning bylaws to allow either a minimum of one secondary suite or detached accessory dwelling unit, a minimum of three to four dwelling units, or a minimum of six dwelling units in selected areas near bus stops with frequent transit service. Through Bill 47, transit-oriented area (TOA) requirements have been established which prescribe the minimum allowable densities and restricts local governments' ability to mandate residential parking in these areas.

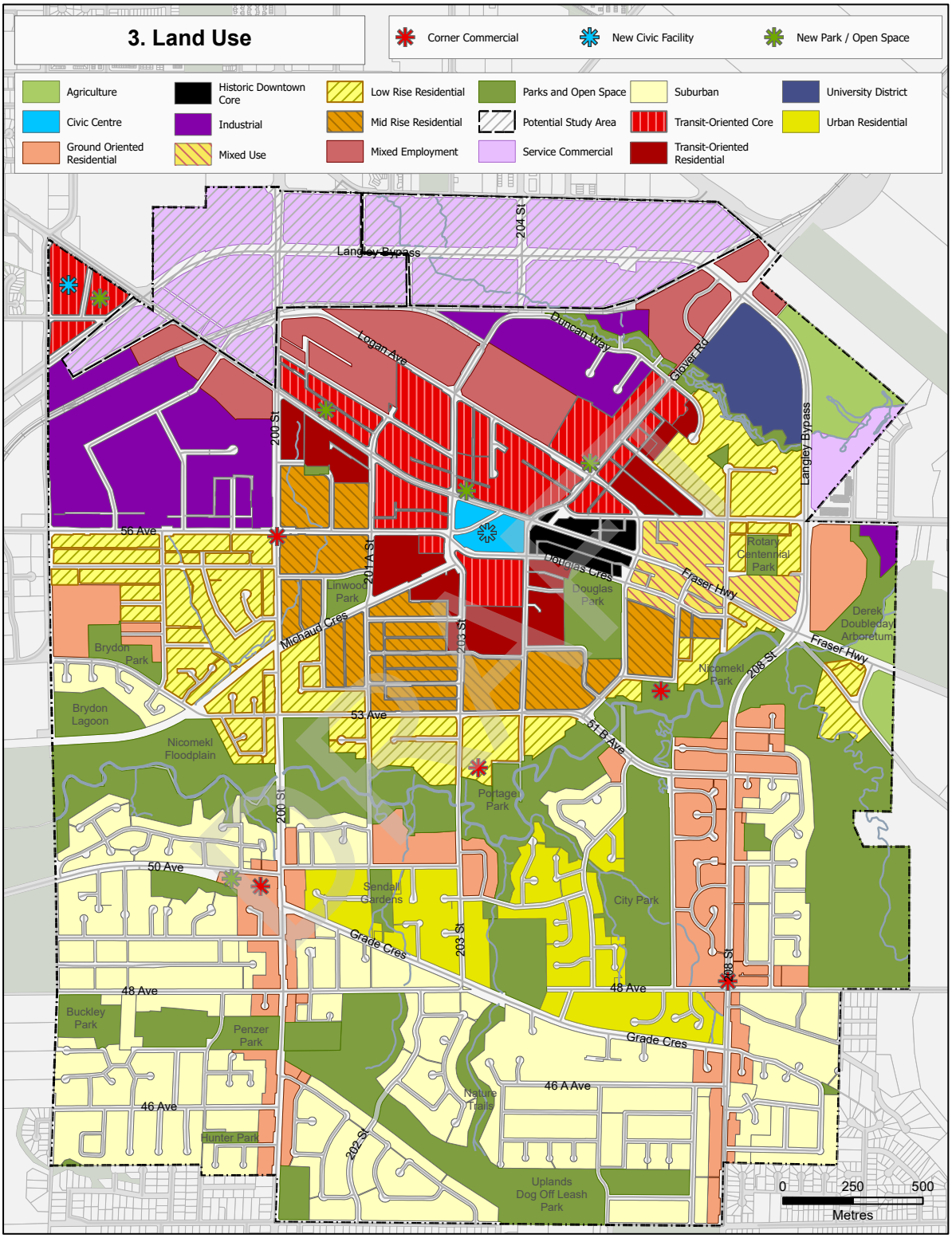



Figure 3. Official Community Plan Land Use Map
Source: Langley City Official Community Plan

## 2.4 Demographics and Diversity

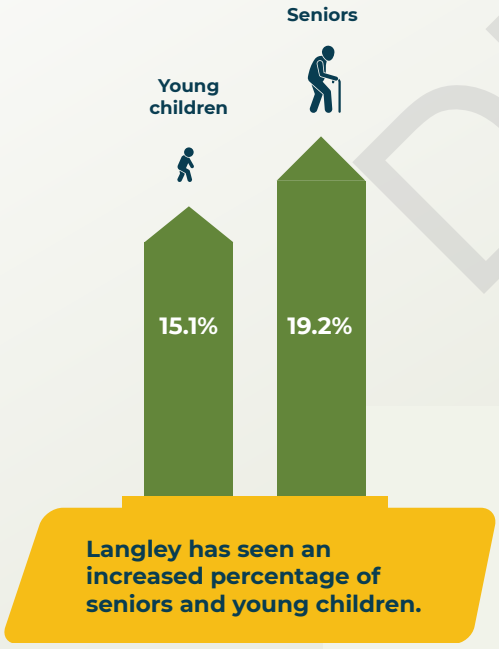
Between 2016 and 2020, the City's population increased from 25,888 to 28,963 – an increase of nearly 12%. During this same period, the number of jobs in the City has also increased.

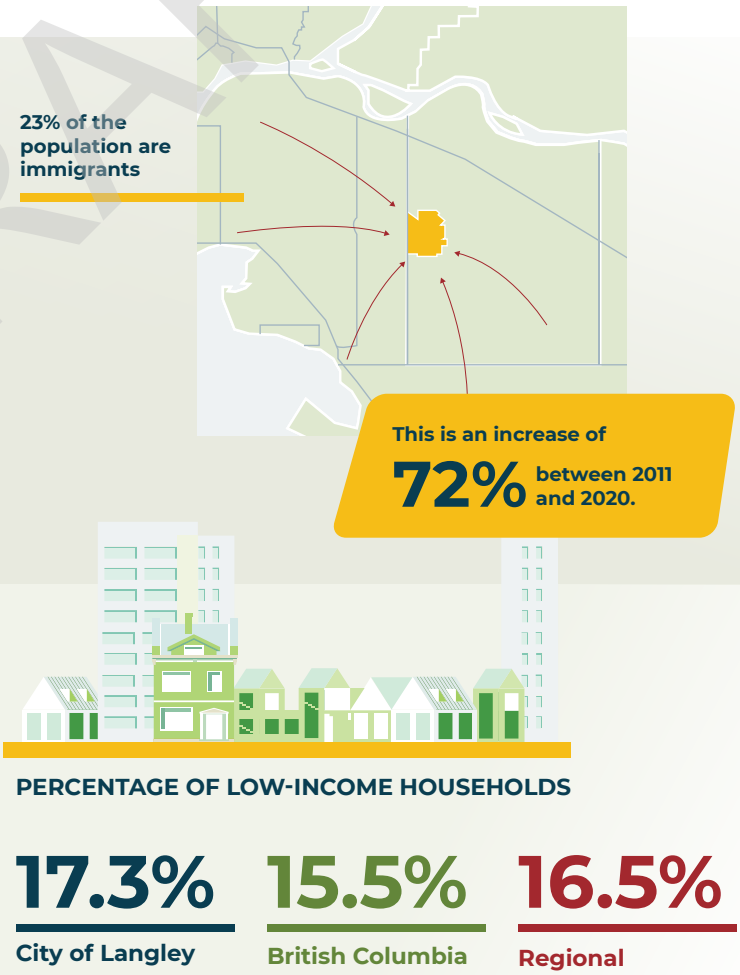
Some insights on the composition and characteristics of the City's population are summarized below:

- A higher percentage of seniors (19.2%) and young children (15.1%), highlights a need for infrastructure for people of all ages and abilities.
- A slightly higher percentage of low-income household (17.3%) compared to the provincial average in B.C. (15.5%) and compared to the regional average (16.5%).
- 23% of the population are immigrants. Census data indicates this is an increase of 72% between 2011 and 2020.

Youth and seniors, lower income households and immigrants benefit from investments and affordable transportation modes such as walking, cycling, and transit.

The City anticipates a significant increase in population and jobs.



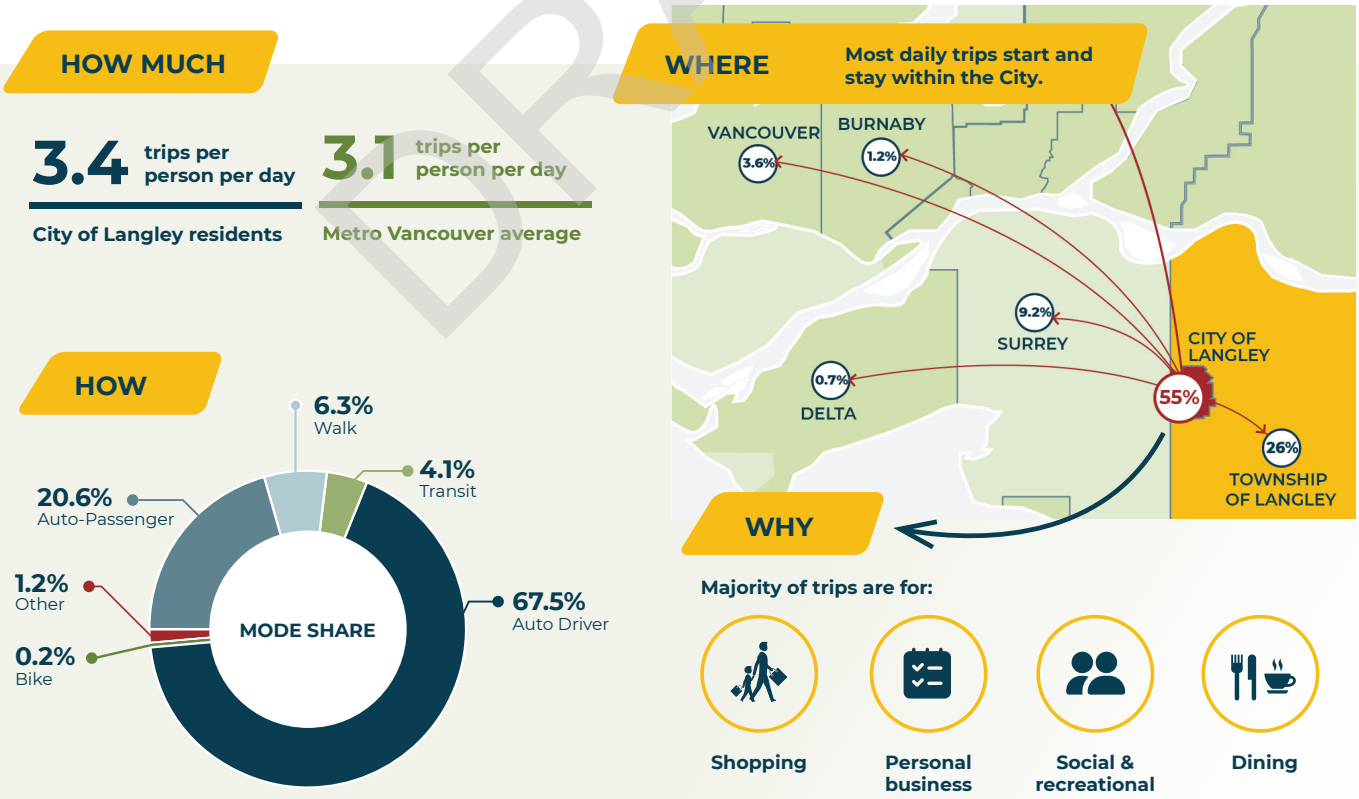



## 2.5 Travel Characteristics

In addition to demographics, understanding how, where, and why people travel is important to plan a transportation system that supports current needs and shapes future choices. TransLink's Regional Trip Diary Survey (2017) indicates characteristics of trips generated in the community as summarized below:

- **How much people travel.** Based on TransLink's 2017 Trip Diary, City of Langley residents make approximately 3.4 trips per person per day, which is slightly higher than the Metro Vancouver average of 3.1 trips per person per day.
- **Where people travel.** Most daily trips (55%) start and stay within the City. Approximately, 30% of trips originating in the City are to neighbouring municipalities with 26% to the Township of Langley and 9% to the City of Surrey.
- **Why people travel.** The majority (55%) of trips are for shopping, personal business, social, recreational, or dining purposes. Less than one third (27%) of all trips made by the City residents are for work or post-secondary institutions.
- **How people travel.** Approximately 88% of daily trips are made by motor vehicles (67.5% driver and 20.6% passenger), 6.3% on foot, 4.1% by transit, 0.2% by bicycle, and 1.2% by other modes. In 2017, the City's Vehicle Kilometres Traveled (VKT) was 21.1 km per person per day, which is slightly above the Metro Vancouver average of 18.1 km per person per day.





This information highlights that more trips are generated, and longer distances are travelled, per day than the regional averages. Most of these trips are being made by motor vehicles. As most trips that stay within the City are relatively short distance trips, there is an opportunity to create conditions to encourage residents to travel by walking, cycling, and transit and reduce the use of motor vehicles.

## 2.6 Transportation Network

This section highlights mode-specific policies and networks across the City as well as the core challenges and opportunities for transportation.

### Walking

Walking is the most fundamental form of transportation, it can connect people with other transportation modes, or it can be used for an entire trip. Walking trips include people travelling to school, work, transit, and to run errands. When referenced in Transportation 2050, walking includes people using mobility devices such as wheelchairs, mobility scooters, walkers, and strollers. With a walkable and compact environment served by a complete, and inter-connected sidewalk and walkway network, walking can become the preferred and easiest choice for people.

#### Supporting Plans & Policies

Several City plans and policies call for enhanced walking infrastructure to support broader aspirations. The key themes are highlighted below.

**Official Community Plan**

- Complete and enhance the sidewalk network including recommendations to connect sidewalks with paths and trails.
- Give pedestrians priority through adjustments to signal timings, including leading pedestrian signals.
- Investments in walking are to be prioritized in the core and shoulder areas of the planned SkyTrain stations, and around schools and parks.

**Nicomekl River District Neighbourhood Plan**

- Creating a pedestrian-oriented complete neighbourhood with attractive and diverse experiences and features within a 10-minute walk of downtown and SkyTrain.

**Nexus of the Community**

- Provide enhanced public realm infrastructure like patios and wide sidewalks for outdoor gathering.
- Use the City's grid of roads, rivers, and trails to create a walkable web of small-scale commerce in communities throughout the City.

## Existing Conditions

The City's walking network includes sidewalks, multi-use paths, trails, walkways, accessible pedestrian signals, street lighting, and crosswalks with wheelchair ramps. **Figure 4** illustrates the coverage of sidewalks across the City and the walkshed of the key pedestrian generators (approximately 200 metre or a 5-minute walk).

Overall, 77% of the streets in the City have sidewalks on one or both sides of the street. Conversely, approximately 23% of the streets (accounting for about 25 km) do not have a sidewalk today. Consistent with current policies, most of the core areas within Langley have sidewalks on both sides of the streets. This is also true within 800m (or a 10-minute walk) of the future Langley City Centre Station except for Logan Avenue, 203 A Street, and Industrial Avenue.

In additional to the Pedestrian Priority Area in the City's urban core area, well connected and wheelchair accessible facilities need to be prioritized within 200, of schools, commercial nodes, and bus routes. Currently, there are gaps in the pedestrian network mostly on local roads as well as some major arterial and collector roads (e.g. 53 Avenue; Grade Crescent; 48 Avenue; 46 Avenue; 196 Street; and Langley Bypass (Ministry).



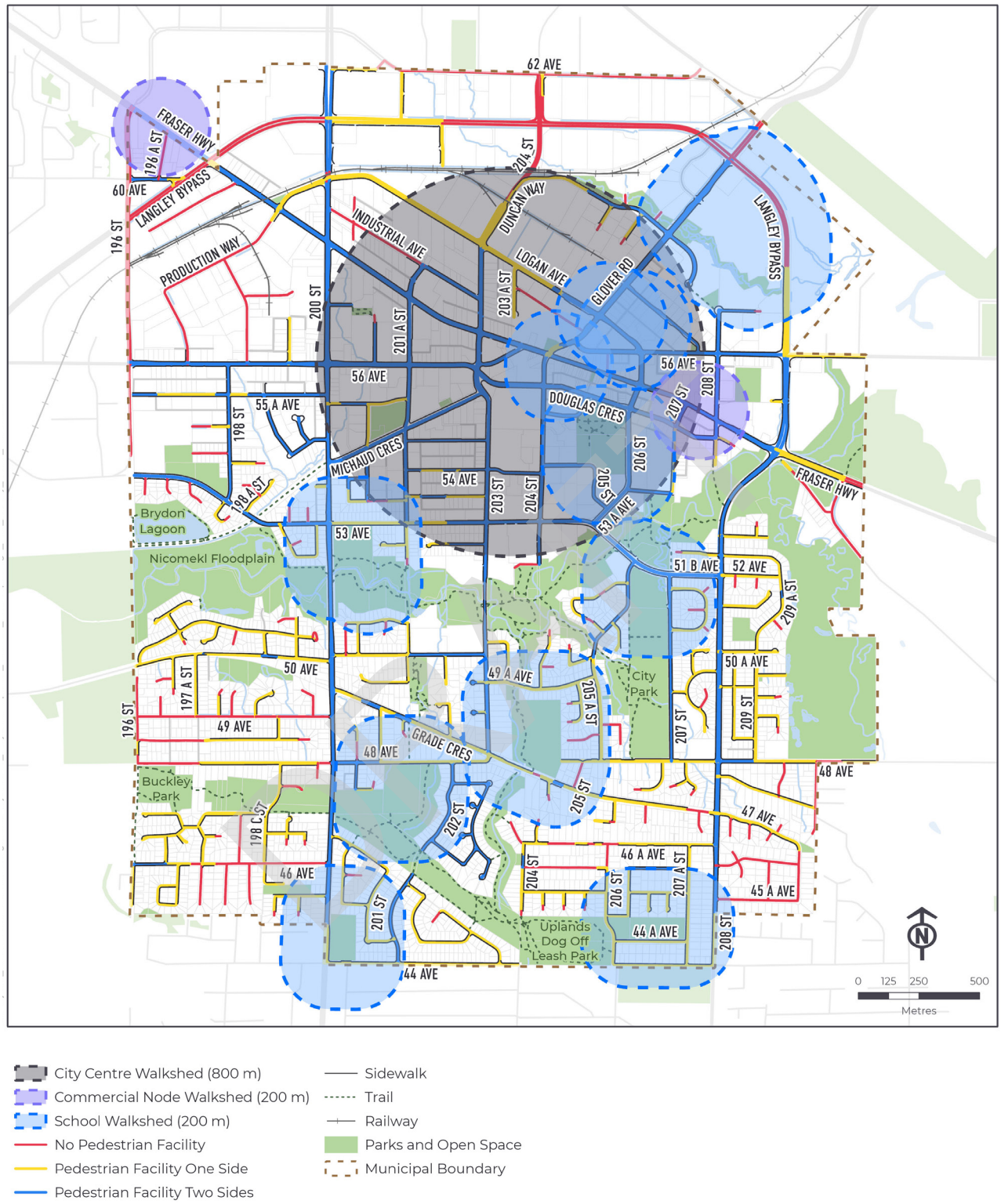



Figure 4. Existing Pedestrian Network Gaps

## Core Challenges and Opportunities for the Plan

The core challenges to walking in Langley and opportunities considered in Transportation 2050 are summarized below.

**Pedestrian Network Coverage.** Gaps in the pedestrian network create accessibility and safety issues and make walking uncomfortable and undesirable. Existing pedestrian network gaps include portions of Logan Avenue, 203 A Avenue, 53 Avenue, Grade Avenue, and 48 Avenue.

**Intersection and Street Crossings.** The design and lack of crosswalks in high demand pedestrian areas can affect comfort and safety of walking. Community stakeholders identified the need for additional crossings along corridors such as 200 Street, 208 Street, Grade Crescent, Langley Bypass, and Fraser Highway. In some cases, curb extensions would reduce crossing distances and signal timing could be adjusted at existing crosswalks to improve pedestrian comfort and safety.

**Accessibility Barriers.** Currently, there are intersections and other locations where wheelchair ramps from sidewalks to the road or crosswalk are missing or do not meet current standards. Some of notable locations include Fraser Highway, Logan Avenue, and Douglas Crescent.

**Sidewalk Width and Surface Condition.** The City has locations where sidewalks are narrow due to obstructions or old standards, and the surface is uneven due to age and deterioration. Locations identified include portions of Fraser Highway, 56 Avenue, 53 Avenue, 204 Street, and 208 Street.



## Cycling

Cycling refers to the use of a bicycle or e-bikes. Other wheeled and micromobility devices such e-scooters, rollerblades, and skateboards are often included under cycling, as they often use the same infrastructure as cyclists.

Cycling trips service daily travel needs (e.g. travelling to school, work, transit and to run errands) as well as recreational trips. With the rapid growth in electric bicycles (e-bikes) for personal transportation and goods movement has opened new markets for active transportation. E-bikes can make cycling more practical for seniors, older adults, people with reduced mobility, and anyone travelling longer distances or in areas with steeper topography.

Within the City of Langley, cycling can offer a competitive alternative to driving for trips under 10 kilometres that is affordable, convenient, fun, and healthy.

### Supporting Plans & Policies

A number of City plans and policies call for attractive cycling facilities to support broader goals and aspirations. These align with climate action on sustainability goals and regional mode split targets.

#### Official Community Plan

- Develop and maintain a bicycle network. The network should connect as many residents as possible to key community destinations such as major employment, education, and amenity and service centres.
- Provide amenities to support cycling. Providing safe, secure, weather protected, and conveniently located bicycle parking at key destinations throughout the community is a priority, especially at major transit locations, including future SkyTrain stations.
- Ensure comfort. Provide infrastructure that is comfortable for people of all ages and abilities.

#### Nicomekl River District Neighbourhood Plan

- Developing a cycling-friendly neighbourhood is identified as a secondary goal of the Plan.

#### Nexus of the Community

- The proposed Major Bikeway Network corridors in the City of Langley run along 196 Street, Fraser Highway, 200 Street, 203 Street (south of Fraser Highway), Glover Road, 56 Avenue, and along the Nicomekl River.

## Existing Conditions

The City's existing cycling network includes over 30 kilometres of on- and off-street routes (**Figure 5**). The City has a variety of cycling facilities such as painted bicycle lanes, trails, and separated cycling facilities. Separated cycling facilities include protected bicycle lanes, and multi-use pathways.

The City has been working to provide more all ages and abilities (AAA) facilities, filling in gaps in the network, and providing connections into downtown. AAA facilities are comfortable all users – including novice and expert users, children, women, and seniors. These safe and comfortable facilities include protected bicycle lanes and multi-use pathways that are physically separated from traffic on busy streets ,and shared street level facilities along local streets, referred to as neighbourhood bikeways, with low traffic volumes and speeds.

Currently, there are major gaps in the network and limited access to continuous cycling connections and high-quality separated facilities.

Existing painted bicycle lanes on arterial and collector streets including portions of 196 Street, 53 Avenue, 56 Avenue, 204 Street, and 48 Avenue provide connections to commercial and industrial land uses and schools. However, painted bicycle lanes are not suitable for users of all ages and abilities.

## Core Challenges and Opportunities of the Plan

The core challenges to cycling in Langley and opportunities are summarized below.

**Cycling Network and Facility Type.** To support planned transit-oriented developments and other community destinations, there are opportunities to enhance the cycling network. Focus should be on connections to schools, SkyTrain and bus transit services, downtown, and other amenities. Separated cycling facilities would be suitable for corridors such as Grade Crescent, 53A Avenue/206 Street, 205 A Street, Industrial Way, Fraser Highway, and other major road corridors.

**Bicycle Parking and End of Trip Facilities.** The City currently has some short-term bicycle parking that has been installed along corridors including Fraser Highway and Douglas Crescent. Some parking is also available at municipal destinations, including municipal hall and the library, schools, and community centres. With the introduction of SkyTrain, there is an opportunity to integrate SkyTrain and bus routes with cycling facilities. This can be done through the provision of secure bicycle parking and electric bike (e-bike) charging.

**Education and Encouragement.** Educational programs, wayfinding, and route maps can equip people of all ages with the knowledge to safely and confidently use their bicycle. The City can strengthen support for programs such as Safe and Active Routes to School and Cycling without Age, install more bicycle wayfinding on all new cycling routes, and provide a cycling route map to help encourage more cycling.

**Micromobility.** There are currently no shared bicycle or micromobility services in the City. There is a growing popularity for municipalities to implement privately operated shared micromobility services. Micromobility devices can provide residents with more low-cost and low-carbon mobility options and offer a first and last kilometre solution when paired with transit. With popularity of such devices increasing, there is a desire for more guidance and regulation around use and how to mitigate conflicts with others including pedestrians and people cycling. Planning for micromobility includes providing access to charging and designing bicycle infrastructure to be wide enough to include passing.

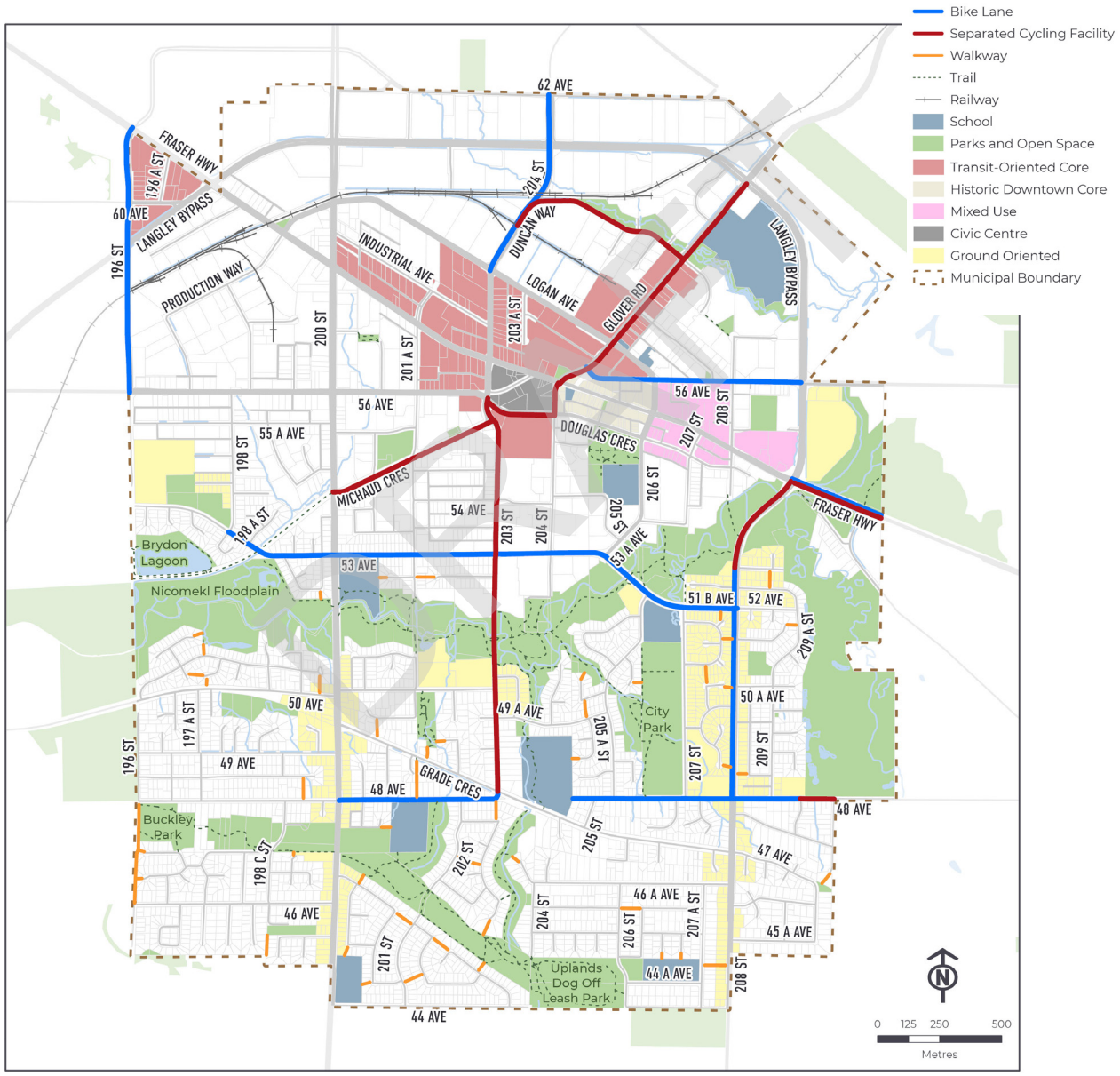



Figure 5. Existing Cycling Network

### All Ages and Abilities (AAA) or Comfortable for Most Cycling Infrastructure

Cycling facilities should be comfortable, convenient, safe, and attractive for everyone, regardless of age or ability. This is often referred to as All Ages and Abilities (AAA) infrastructure. Municipalities and regions throughout Metro Vancouver and North America have been moving towards implementing networks of AAA facilities.

AAA facilities are typically physically separated from other motor vehicles and include protected or separated bicycle lanes or multi-use pathways. A designated cycling street (shared with motor vehicles) that has low motor vehicle volumes and speeds can also be considered AAA and are often referred to as a local street bikeway or neighbourhood bikeway. Neighbourhood bikeways may include treatments such as signage, pavement markings, traffic calming, and traffic diversion to prioritize bicycles and make the facility comfortable for people of all ages and abilities.



## Transit

TransLink as the regional transportation provides transit service across Metro Vancouver that includes buses, SkyTrain, HandyDART, and West Coast Express. When transit is convenient and attractive, it can create a vibrant community and a sustainable and affordable transportation system. Transit provides an efficient and lower emission alternative to automobile use for both local and regional trips.

The City has direct control over the roadway network that buses operate on, land use and development decisions that impact routing and service frequency, and supporting facilities, including bus stops and accessible walking and cycling connections to transit.

### Supporting Plans & Policies

City plans and policies have recognized the increasing role transit and expanded rapid transit from across Metro Vancouver into Langley plays in achieving broader community aspirations. Specific transit themes are highlighted to provide guidance on the needs for enhanced transit facilities across the City.

#### Official Community Plan

The City will work with partners to build a long-term transit network, relocate the transit exchange to 203 Street SkyTrain Station, focus on transit-oriented development, and support the design of the SkyTrain stations and guideway.

#### Transport 2050 (TransLink) - Future Transit Projects (10-year priorities)

In addition to the Surrey Langley SkyTrain extension, the transit network is expected to introduce an east-west express/interregional transit line to Langley City, as well as two north-south Major Transit Network routes.

- RapidBus: Langley – Haney Place 200 Street Rapid Bus Service (0-5 years)
- RapidBus: Langley - White Rock (6-10 years)

## Existing Conditions

TransLink currently operates 15 bus transit routes within the  City, with a designated Frequent Transit Network corridor along Fraser Highway (**Figure 6**). The Langley Centre Transit Exchange is located on Logan Avenue that will be relocated to Langley City Centre SkyTrain at the corner of Industrial Avenue and 203 Street.

Transit in Langley is expected to undergo significant change in the coming years with the introduction of SkyTrain. Additionally, planning work is underway for BRT service between Maple Ridge and Langley Centre. Higher density development is planned around the SkyTrain stations, creating more demand for transit and access to and from the stations and exchange. Similarly, higher density developments are envisioned along 200 Street and 208 Street to utilize future enhanced transit service along these corridors.

Such investments in transit highlight an opportunity to better integrate transit with other modes of transportation and land uses and continue to work with TransLink to ensure the City is adequately serviced by transit now and into the future.



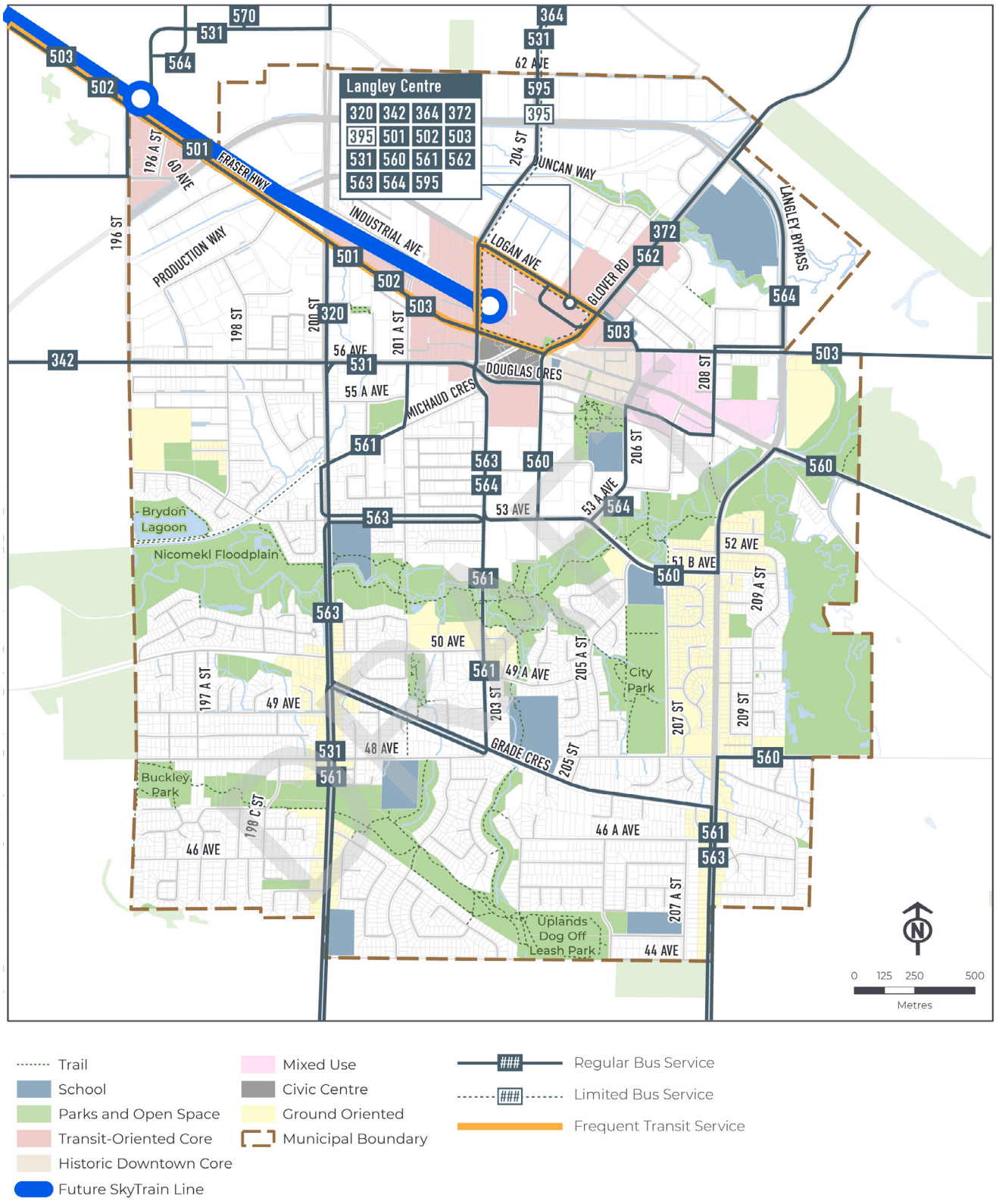



Figure 6. Existing Transit Network

## Core Challenges and Opportunities of the Plan:

Based on a technical review of existing conditions and input from the community, the following summarizes the core challenges to greater transit use in Langley and opportunities considered through Transportation 2050.

**Service Gaps and Frequency.** There are several areas and major road corridors in Langley that do not have bus service. Service gaps were identified along the western and southern border of the City, along Langley Bypass, Logan Avenue, and portions of 208 Street. There is also a limited number of bus routes and bus stops serving Kwantlen Polytechnic University. Community members identified that infrequent service during the day, evening, and weekends is a major barrier to taking transit.

**Speed and Reliability.** A Bus Speed and Reliability study was undertaken during the development of Transportation 2050. The purpose of this study was to identify key locations for buses facing reliability issues and identify potential improvements. Fraser Highway, 56 Avenue, 200 Street, 203 Street, and Logan Avenue in the downtown are corridors where buses are experiencing the most speed and reliability issues. Traffic congestion and short spacing between traffic signals are the primary causes for these issues. Understanding the long-term plan for all transportation modes will be required to implement features that will improve the speed and reliability of transit service.

**Bus Stop Accessibility and Amenities.** Approximately 90% of bus stops in Langley have been upgraded to make them wheelchair accessible. Some well-used bus stops within the City, including within the downtown, do not have shelters, benches, lighting, or other amenities to make transit more comfortable and attractive.

**Enhanced Transit Bust Bus Service.** Work is currently underway to plan for a BRT service providing a high-quality connection between Langley Centre and Maple Ridge. The Langley terminus for the route has been envisioned in Transport 2050 to be at Langley City Centre Station. The City will be exploring opportunities with TransLink to ensure this new route serves the existing and planned population and employment in downtown Langley.



## Streets and Goods Movement

The City streets also serves the movement of goods and emergency services. Streets provide space for public parking and passenger loading. Appropriately designed truck routes and inter-connected streets can form an efficient transportation network that serves all modes of transportation including walking, cycling, and other non-vehicular travel.

Beyond the transportation functions, City streets can also provide attractive plaza spaces and a public realm that attract residents, visitors, shoppers, students, businesses to shape and define the character of a community.

### Supporting Plans & Policies

City plans and policies acknowledge the role of all modes of transportation using streets. Specific policy and plan themes providing additional guidance on the needs for multi-modal streets across the City are briefly highlighted.

#### Official Community Plan

- Complete road network improvements as per the Transportation and Nicomekl River Neighborhood Plan.
- Develop a public parking strategy with pricing approaches to manage public and on-street parking in the core and shoulder areas.
- Consider a City-owned parkade in the downtown area.

#### Nicomekl River Neighbourhood Plan

- Promote and maintain maintenance and emergency vehicle access.
- Create safe intersections where pedestrians can safely cross.
- Create a new access for vehicles and pedestrian at identified locations.

#### TransLink Major Road Network

Specific themes and directions include:

- In Langley, 200 Street, Fraser Highway, 203 Street, 204 Street and Langley Bypass are designated as part of the Major Road Network.
- TransLink provides funding to help keep the Major Road Network in a state of good repair, as well as upgrading road, cycling, and pedestrian infrastructure.

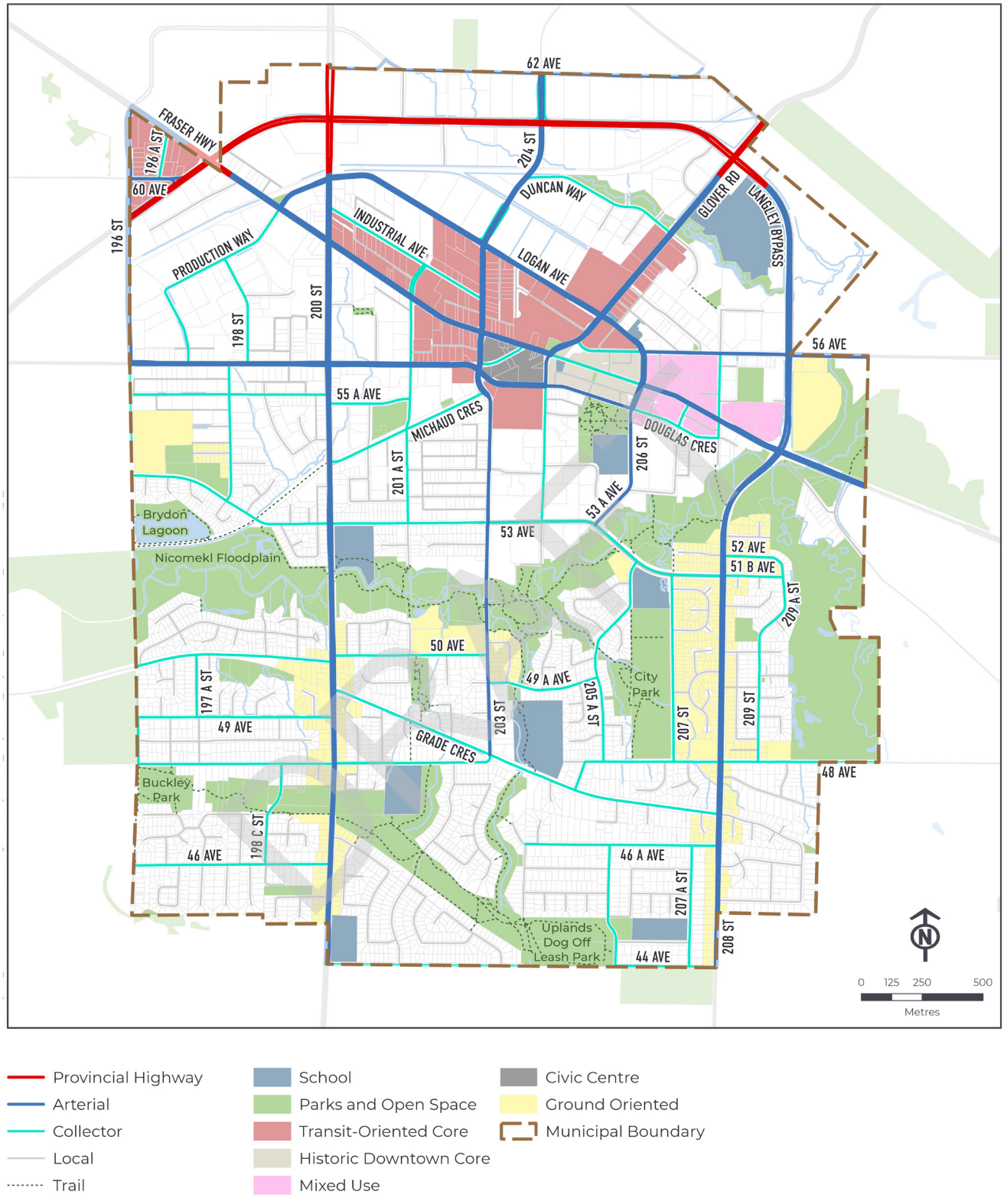
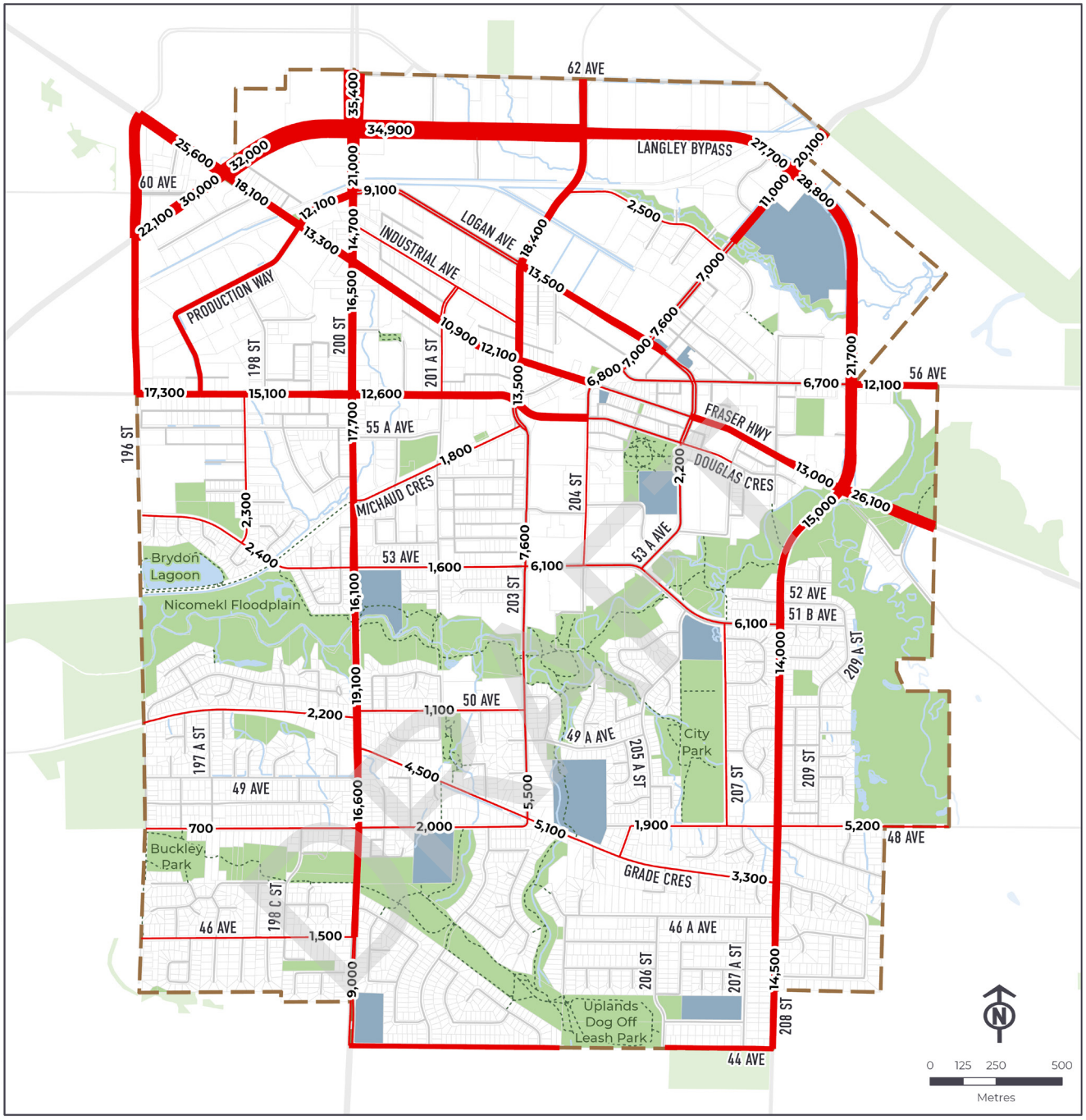



Figure 7. Existing Street Network Classifications




Daily Traffic Volumes
(Vehicles / Day)

- ≤ 10,000
- 10,001 - 20,000
- 20,001 - 30,000
- 30,001 +

- Trail
- School
- Parks and Open Space
- Municipal Boundary

Figure 8. Average Daily Traffic Volumes (Existing)

## Existing Conditions

The City's street classification system illustrated in **Figure 7** is a reflection of the function of each roadway in terms of mixture and volume of traffic as well as land use context. Provincial owned roadways include Langley Bypass and portions of 200 Street, Fraser Highway, and Glover Road. The City is jointly responsible with TransLink for the Major Road Network.

The City operates over 50 traffic signals. The Province, Township of Langley, and Surrey also operate and maintain some traffic signals along the City boundary. The three busiest signalized intersections are located along the Langley Bypass at Glover Road, at 200 Street and at Fraser Highway, all these signals are under the provincial jurisdiction.

Daily traffic volumes are illustrated in **Figure 8**. The Langley Bypass carries the highest daily traffic volumes (up to 35,000 vehicles per day). Among the City's municipal roads, segments of 200 Street, and 203 Street south of Langley Bypass also carry significant traffic volumes ranging from 18,000 to 21,000 vehicles per day. The sections of Fraser Highway and Logan Avenue through the City urban core area carry approximately 12,000 to 13,500 vehicles per day.

Based on the community input, congestion and difficulty finding parking were the top concerns identified. It was recognized that encouraging more trips by active and sustainable modes could mitigate some of these concerns.

## Core Challenges and Opportunities of the Plan

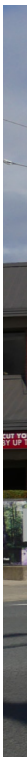
Barriers to the movement of people and goods can include safety concerns, speeding, congestion, and a lack of parking and loading space. Other considerations include the impact of growth and development on the street network and the need to review the existing and form and function of streets. Based on a technical review of existing conditions and further input from the community, the following summarized the core challenges to streets and goods movement in Langley and opportunities to be addressed through Transportation 2050.

**Intersections and Streets.** The streets in the City with the highest vehicle volumes are concentrated in the downtown area and the north side of the City. Overall, the level of service (average delays experienced by motorists at an intersection) is considered good expect for a few intersections on Langley Bypass, 56 Avenue, and Fraser Highway (**Figure 9**).

Two key north-south corridors in the City are 200 Street and 208 Street that serve growing volumes of commuter traffic both within the City and to and the Township. Motor vehicle speeds are an issue on some sections of both streets, with the median speed exceeding the speed limit by 25%.

The City averages approximately 1,800 reported collisions involving a motor vehicle a year (ICBC). The streets with the highest vehicle volumes also have the highest number of collisions. The most collisions took place on Fraser Highway, Langley Bypass, and within the downtown core (**Figure 10**).





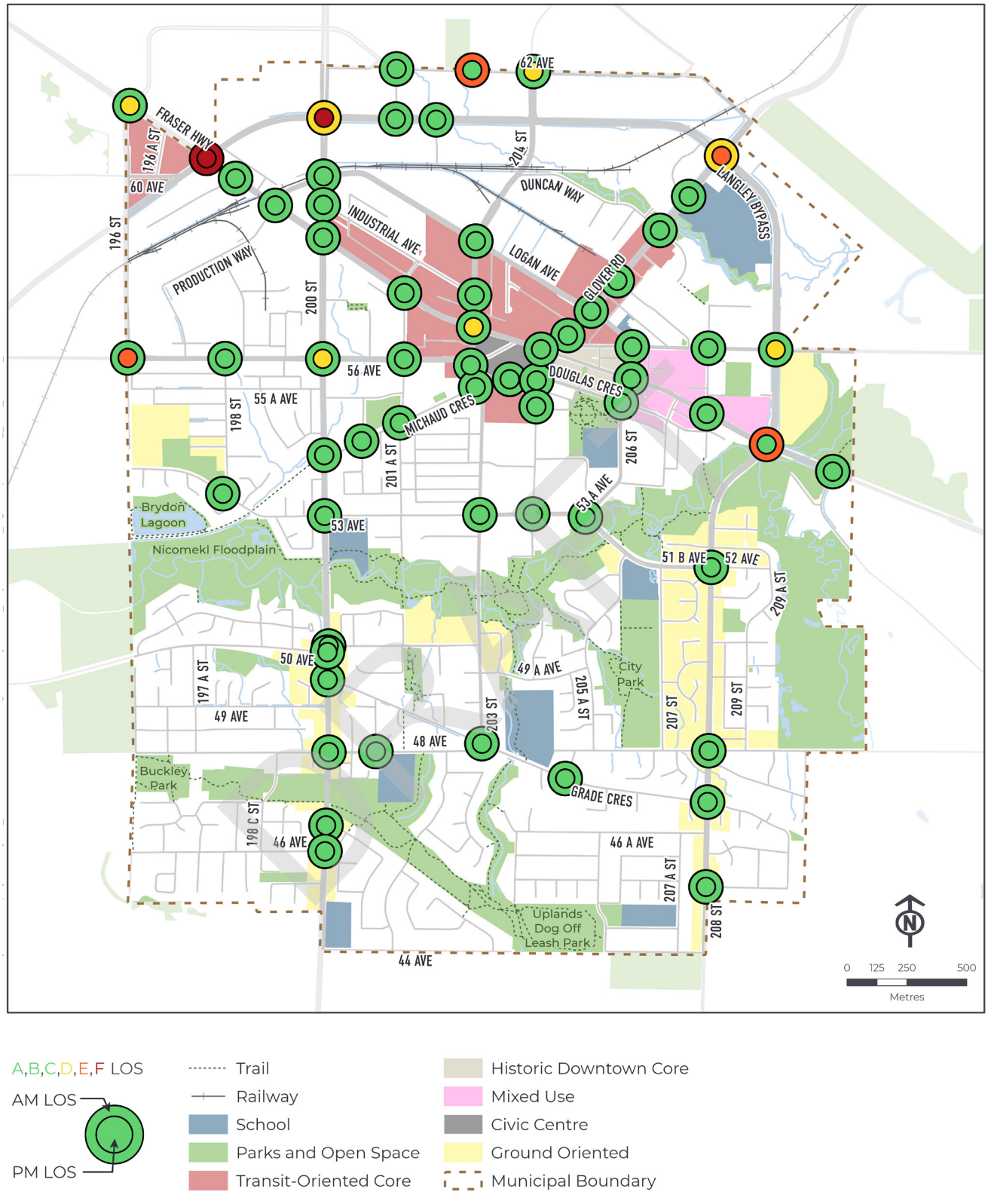
**Goods Movement.** The street and transportation network plays an important role in the movement of goods. Based on a review, the designated truck routes in the City are appropriate, however, some adjustments can be made to better align with neighbouring municipalities. Rail crossings at Fraser Highway, 200 Street, and Highway 10 (Langley Bypass) can create delays for motor vehicles and transit.

**Parking.** Within the City of Langley there are very few on-street parking restrictions except within the downtown. With the introduction of SkyTrain, it is expected that the City's roads will experience higher demand for parking, especially for people looking to park and ride.

**Emerging Trends and New Mobility.** New and emerging forms of mobility are important to consider and understand when planning transportation. Understanding trends within the City and region and incorporating new regulations and Provincial guidance for the ongoing "pilot" program, will be important to support multi-modal integration. Some of these areas for consideration include:

- Currently, there is limited access to any shared transportation services, including bicycle, micromobility devices, or car share, in the City. With increasing population densities, planned rapid transit options, and new protected cycling facilities, the City is creating conditions that are well suited and attractive for shared mobility service providers.
- As electric vehicles are becoming more prevalent the City has actively been working to install more electric vehicle charging stations.






A,B,C,D,E,F LOS

AM LOS

PM LOS

- Trail
- Railway
- School
- Parks and Open Space
- Transit-Oriented Core
- Historic Downtown Core
- Mixed Use
- Civic Centre
- Ground Oriented
- Municipal Boundary

Figure 9. Existing AM/PM Peak Intersection Performance (Levels of Service)

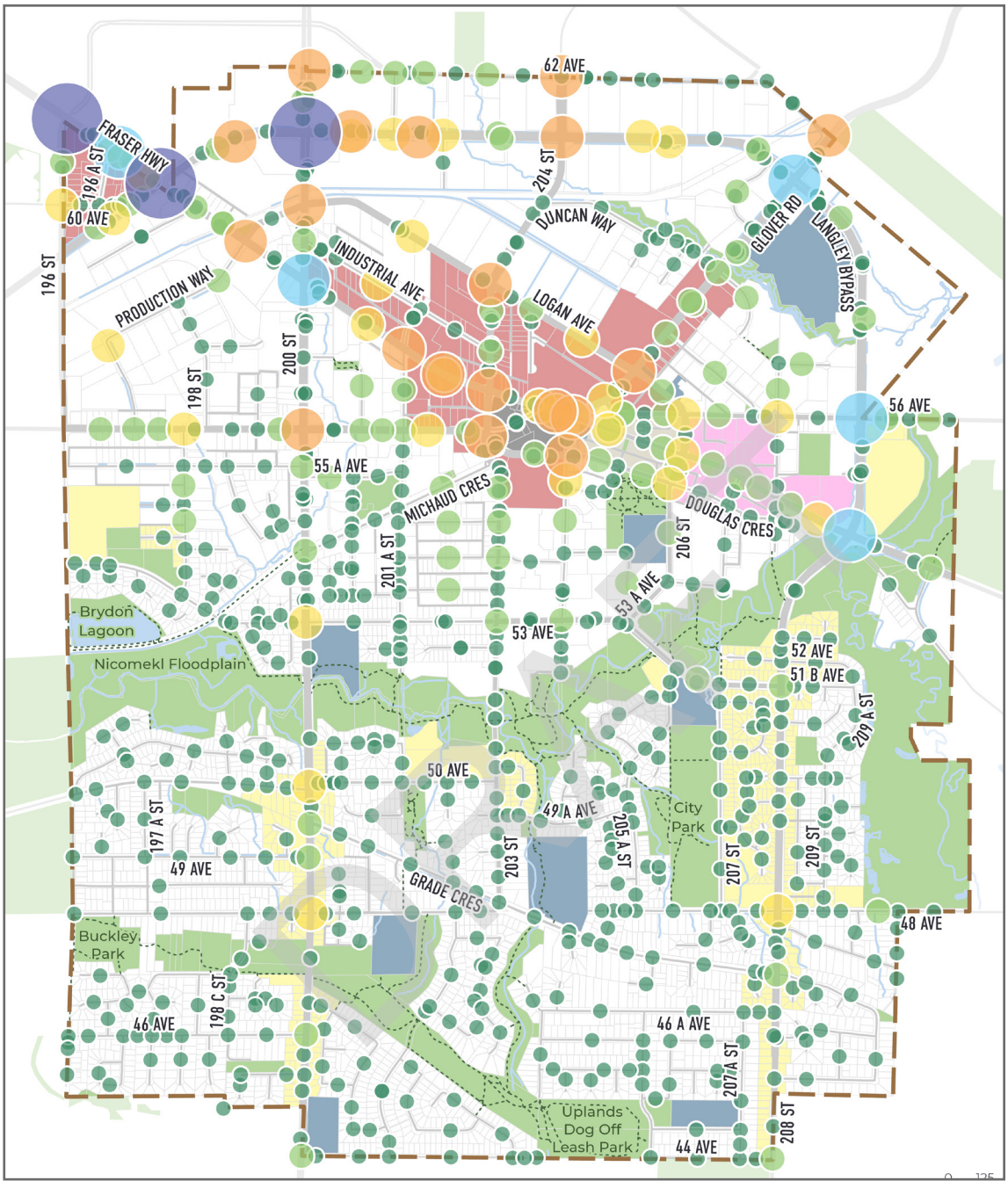



Figure 10. Average Collisions (ICBC 2011-2020)

# 3. Strategic Directions

## 3.1 Vision

A clear vision was established at the initial stage of the planning process for Transportation 2050. It reflects the City's current plans and policies, such as the OCP and Strategic Plan, and what was heard through community engagement and meetings with City Council.

**The City of Langley is a complete and connected community where residents, visitors, and goods travel safely and efficiently to their various destinations.**

**This is achieved through a people-first, forward-thinking, sustainable transportation system supported by rapid transit.**



## 3.2 Goals and Indicators

Goals provide specific directions guided by the overall vision for Transportation 2050. Four goals aligned with the vision were identified to improve transportation for all modes of transportation in the City. These are based on Council, staff, public, and stakeholder input.

The four goals for the Plan are to provide a transportation system in the City that is:

**Safe**

**Inclusive and accessible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

| Strategic Goals | | Measures of Success (Monitoring) |
|---|---|---|
| **Safe** | Make transportation safer and more comfortable. Work towards achieving Vision Zero – zero fatalities and severe injuries to road users. | • Reported ICBC collision data and RCMP data.<br>• Feedback from community members. |
| **Inclusive and accessible** | Build a transportation network that is connected and accessible for all. | • Implementing more accessible transportation infrastructure, including sidewalks, intersection improvements (wheelchair ramps, curb extensions, etc.), and all ages and abilities cycling infrastructure.<br>• Feedback from community members. |
| **Healthy and sustainable** | Increase the proportion of trips made by walking, rolling, cycling, and transit to support the health of community members and the environment. | • A shift in mode share from motor vehicle trips to transit, walking, and cycling. |
| **Efficient, innovative and forward-thinking** | Work towards, and advocate for, a transportation system that is resilient and adaptive to change while being cost-effective, efficient, and forward thinking. | • The number of Vehicle Kilometres Travelled (VKT).<br>• The reliability of buses travelling through Langley<br>• The number of projects implemented using quick-build techniques. |

### What is Vision Zero?

Vision Zero is an approach to road safety which aims to prioritize human health and safety by eliminating all traffic-related fatalities and serious injuries while providing safe, healthy, and equitable mobility for all road users. This is typically done by using a Safe Systems Approach, which is a framework to guide road safety policies and programs. This approach views safe road networks as holistic systems consisting of six elements:

- Safe Speeds
- Safe Road Users
- Safe Vehicles
- Post-Crash Care
- Safe Roads
- Safe Land Use Planning

Each of these elements contributes to overall safety. The six components do not stand alone, but rather they interact with one another such that progress in one area benefits and supports improvement in the others.

## 3.3 Integrated Land Use and Transportation Themes

The City is experiencing considerable growth and other changes. The implementation of SkyTrain, new developments, changing demographics, emerging services and technologies, and challenges such as climate change will continue to influence transportation decisions.

As noted in the OCP, by 2050 it is expected the City will be home to:

- 41,438 residents - an increase of 48% or 13,353 residents, from 2019.
- 22,185 jobs - an increase of 36% or 5,892 jobs, from 2019.
- 20,125 households - an increase of 56% or 7,259 households, from 2019.

These projections highlight the need for housing and the inevitable impact growth will have on the transportation network.

These affect livability, community health, environment, and economy. Proactive transportation planning plays an important role in guiding, managing, and responding to the new and growing challenges. To address these challenges and building on existing City, regional, and provincial policy directions as well as the four goals of the plan (Safe, Inclusive and Accessible, Efficient, Innovative, and Forward-Thinking), the following themes have been identified to guide the recommendations of the Plan and support achieving the Plan's vision and goals.

### Create a complete community

There is a strong connection between land use and transportation. They are influenced by each other and must be considered together to create a livable and accessible community. As outlined in the City's OCP and illustrated in **Figure 3**, the City will have a mix of land uses and a transit-oriented core that will enable residents to access key destinations, services, amenities, and transit within a short journey and without having to depend on a personal motor vehicle.

Based on the OCP and new provincial legislation (Bill 44), the City envisions a range of housing types and densities, businesses and employment options. These areas will need to be well served by frequent transit and active transportation options to create a complete community, safe, inclusive, and accessible community.

### Plan for and develop a rapid and frequent transit network

The City will ensure Langley is a highly connected City aligned with, and leveraging investment, in rapid transit. The City will work with TransLink and other partners to ensure residents have access to faster, more efficient, and more frequent public transit service that is attractive, accessible, and affordable. Transit provides a sustainable way to travel to and from neighbouring municipalities and other destinations in the region.

## Make active transportation comfortable

Providing a complete and connected network of all ages and abilities walking, cycling, and micromobility routes will ensure residents and visitors can use active and sustainable modes within the City. The City will provide amenities to make it enjoyable and convenient to walk, roll, and cycle prioritizing the downtown core, key destinations including parks, schools, community facilities, and to transit. By supporting emerging modes of travel and shared mobility services, the City will provide more transportation options and an opportunity for stronger multi-modal integration.

## Provide a street network that is safe and reliable.

The City will work to provide residents and businesses access to a reliable, safe, well-maintained and efficient road network.

Quality of life, health, wellbeing, and safety of residents is a top priority for the City. The transportation system can be improved to lessen the frequency and severity of crashes. 'Vision Zero' policy is based on the narrative that road safety can be improved by implementing strategies that cover both engineering and non-engineering measures such as education and enforcement.



## 3.4 Long-Term Plan

Transportation 2050 is organized around key priorities for various modes of transportation. These need to be integrated to address key challenges and available opportunities described earlier and thereby meet the Plan's vision and advance the goals. Long-term plans and actions are described for each theme to guide future initiatives and collaboration with other agencies.

For each of the core priorities, the goals of the plan that they align the most closely with have been identified.

**Safe**

**Inclusive and accessible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

### Walking

Walking is part of every trip people make daily. The Plan focuses on creating a more walkable and accessible community for all residents and visitors. Accessible, safe and attractive walking facilities will increase the likelihood people will walk either for the entire trip or to simply connect with other modes such as transit. The core themes and actions to increase walking are briefly described below.

#### Core Priorities for Walking:

| | |
|---|---|
| **W1.** | Fill in the Gaps in the Pedestrian Network |
| **W2.** | Improve Comfort and Accessibility in Pedestrian Priority Areas |
| **W3.** | Provide More and Enhance Existing Pedestrian Crossings at Intersections |
| **W4.** | Support and Encourage Walking in the City |

## W1. Fill in the gaps in the pedestrian network

**Goal Alignment**

- **Implement sidewalks and multi-use pathways on City streets.** Filling in gaps in the pedestrian network will create more continuous and accessible walking routes within Langley. The City has been working to fill in gaps in the pedestrian network through road projects and new development. To identify where it is the highest priority to fill in network gaps, a prioritization criteria was used to identify pedestrian priority locations. The priority walking network gaps and the long-term pedestrian network plan can be seen in **Figure 11**. Through the capital and rehabilitation projects as well as redevelopments, the City will continue to complete pedestrian network gaps.
- **Provide more off-street trails and walkway connections.** The City will formalize trail and walkway connections and achieve shorter clocks and crossing opportunities. These improvements will be gradually achieved through property acquisition and development.

**Priority pedestrian routes were identified based on:**

- Proximity to transit
- Proximity to schools
- Proximity to other community destinations (library, municipal hall, commercial, retail, etc.)
- Network connectivity (connects to an existing sidewalk or multi-use pathway)
- Network need (is there an existing facility on one side of the street)

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

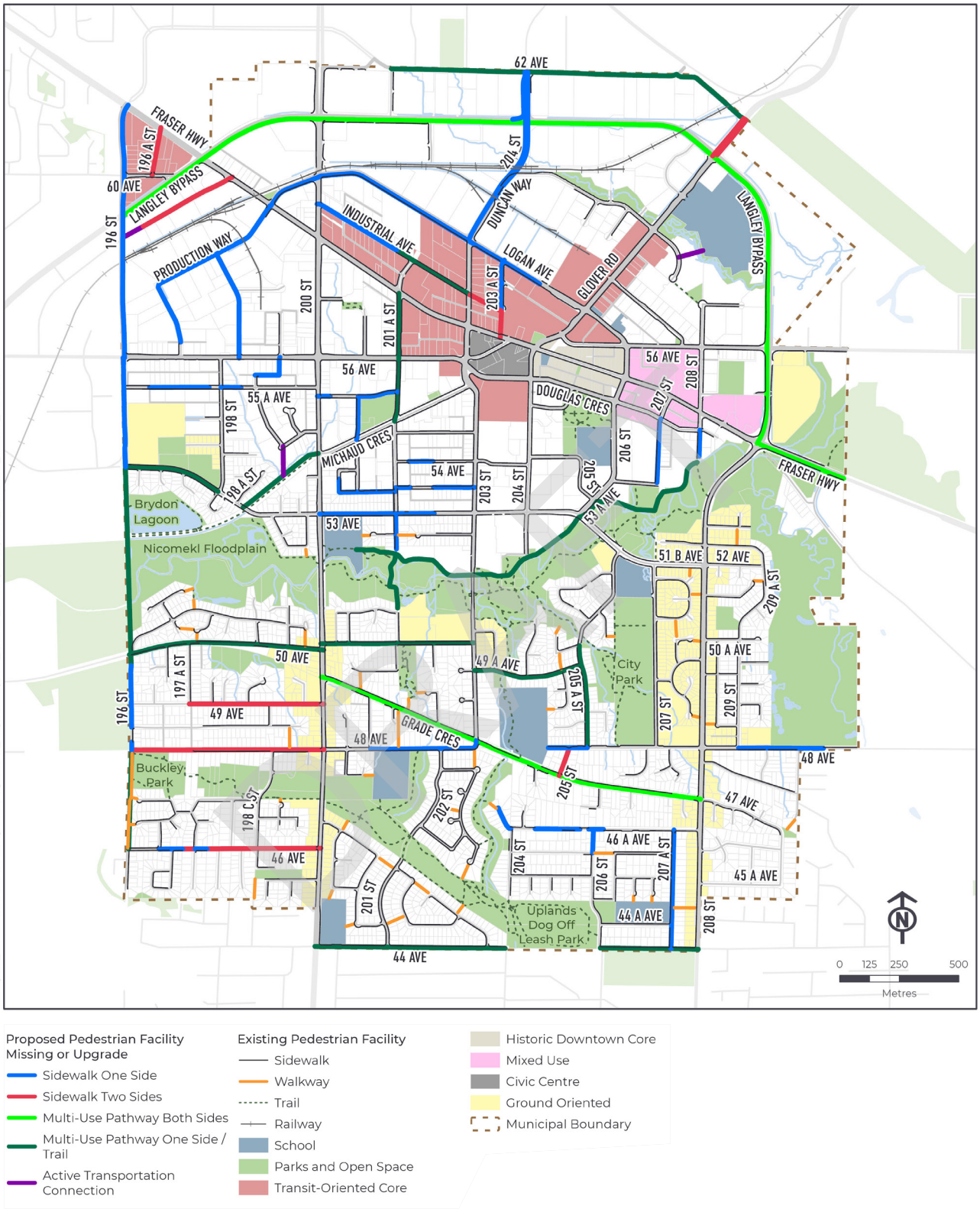



Figure 11. Long-Term Pedestrian Network

## W2. Improve comfort and accessibility in pedestrian priority areas

**Goal Alignment**

- **Widen and enhance sidewalks and pedestrian facilities.** The City will enhance the pedestrian experience within the walkshed of SkyTrain stations and areas of high pedestrian activity (Pedestrian Priority Areas – **Figure 12**). These actions will increase the potential for people to walk and improve multi-modal integration to transit. Pedestrian enhancements include upgrading existing infrastructure with wider sidewalks, buffered areas between sidewalks and vehicle lanes using landscaped boulevards and street trees, street furniture, lighting, placemaking features, and other amenities.

## W3. Provide more and enhance existing pedestrian crossings at intersections

**Goal Alignment**

- **Provide new street crossings.** Provide new pedestrian crossings to ensure that there are safe places to cross busy streets, such as at 200 Street, existing trail crossings, within downtown, near key community destinations like parks and schools, and near bus stops.
- **Follow accessibility best practices.** Apply an accessibility lens when considering, planning and implementing projects (new infrastructure and infrastructure upgrades) to identify and understand:
  - The impacts on persons with disabilities.
  - Potential barriers created within the process and/or the design.
  - Steps to address potential barriers or remove existing ones.
  - Follow accessibility best practices for all new and improved infrastructure as outlined in the City's Design Criteria Manual (DCM) and BC Active Transportation Design Guide and other resources.

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

- Provide wheelchair ramps at all intersections where an existing sidewalk intersects a street.
- Reduce pedestrian crossing distances by providing narrower streets and motor vehicle lanes and retrofitting with curb extensions.

## W4. Support and encourage walking in the city

**Goal Alignment** 

- **Increase support for Safe and Active Routes to School Programs.** Work with School District No. 35, ICBC, TransLink, HUB and Parent Advisory Committees to promote child and youth active travel through programing and initiatives.
- **Provide attractive plaza spaces and public realm areas.** Develop a strategy to create new plazas, parklets, school streets, and slow streets and identify areas to implement amenities that encourage more people to walk.
- **Review and update the City's Wayfinding Strategy.** Continue to provide wayfinding for pedestrians and other users and add signage as new developments, transit stations, and active transportation facilities are built, and new community destinations are established.
- **Improve the personal safety and security of all residents and visitors in public spaces.** Develop a strategy to improve the personal safety and security of all residents and visitors that considers elements of Crime Prevention Through Environmental Design (CPTED). This includes providing more lighting and vegetation maintenance.


**Safe**


**Inclusive and accesible**


**Healthy and sustainable**


**Efficient, innovative and forward-thinking**

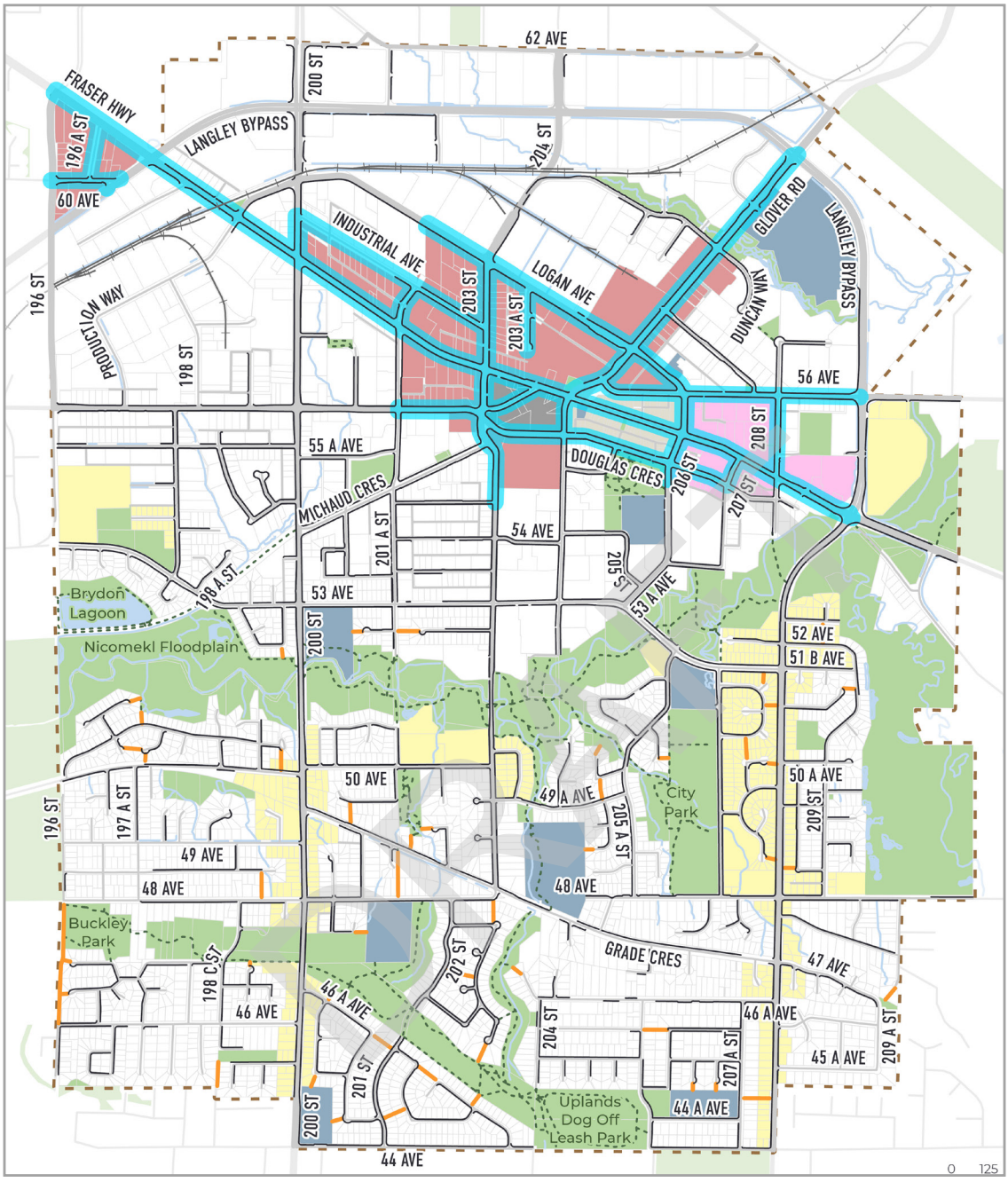



Figure 12. Pedestrian Priority Areas

## Cycling

The plan recommends initiatives to create a more bikeable community for people of all ages and abilities, focusing on providing high quality cycling facilities that connect to key destinations within the community. The core priorities and actions to increase cycling and manage micromobility use within Langley and connect the City's cycling network with other regional networks are briefly described below.

### Core Priorities for Cycling:

| | |
|---|---|
| **C1.** | Provide a Connected Cycling Network |
| **C2.** | Provide Comfortable Routes and Intersection Crossings |
| **C3.** | Support and Encourage Cycling in the City |

Additional priorities for micro and new mobility options can be found in the New Mobility Considerations section later in this chapter.

### C1. Provided a connected cycling network

**Goal Alignment**

- Implement the long-term cycling network. The City's long-term cycling network (**Figure 13**) will connect neighbourhoods to key community destinations such as schools, SkyTrain and transit stations/exchanges, employment centres, community centres and amenities, commercial and retail spaces, and parks forming a close grid network.
- Enhance regional cycling connections. The City will work with other agencies – such as the Ministry of Transportation and Infrastructure, City of Surrey, and Township of Langley – to create high quality cycling and rolling connections across the City and between communities.

## C2. Provide comfortable routes and intersection crossings

**Goal Alignment**

- **Provide a network of bicycle routes that are comfortable for all users.** The proposed bicycle network will consist of neighbourhood bikeways and separated bicycle facilities. Separated facilities can include either protected or separated bicycle lanes or multi-use pathways. These are the three types of cycling infrastructure that are most effective in increasing bicycle ridership.
- **Implement intersection treatments for cyclists.** While implementing the cycling network the City will implement intersection treatments such as signal push-buttons, cross-rides, dedicated bicycle signals, protected intersections, and markings to delineate conflict zones to improve the safety and comfort of cycling at crossing locations.

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

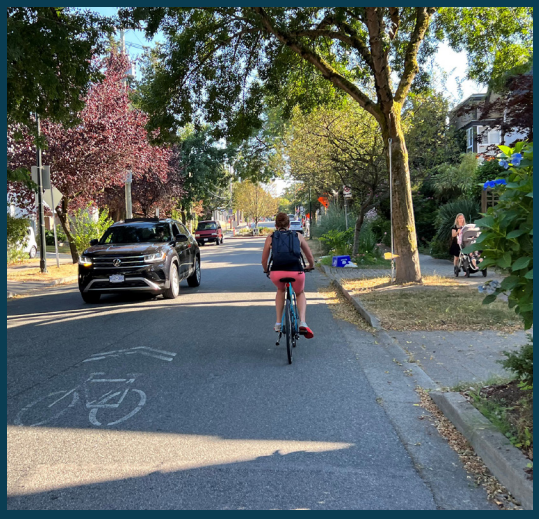
**Efficient, innovative and forward-thinking**



## Facility Types

### Neighbourhood Bikeway

Streets with low motor vehicle speeds and less traffic that are comfortable for most people to ride. In the City, this includes bicycle routes on traffic calmed, local streets. Guidelines suggest that streets with less than 1,000 motor vehicles per day (up to 500 vehicles per day is preferred) and an effective speed limit of 30 km/hour are suitable for a neighbourhood bikeway. Neighbourhood bikeways typically include signage and pavement markings and traffic calming treatments. Intersection treatments are important, particularly where a neighbourhood bikeway intersects with an arterial or collector street.



Neighbourhood bikeway

### Separated Bicycle Lanes or Cycle Tracks

A bicycle lane that is physically separated from motor vehicles is safer and more comfortable. These are also separated from the sidewalk, minimizing interaction and mixing with pedestrians. Separated bicycle lanes may be placed on one or both sides of a street, and they may be designated for one- or two-way travel. There are varying treatments that can be implemented to achieve the physical separation. For example, flexible delineator posts, wheel stops, planter boxes, bike-friendly curbs, raised or landscaped islands, and concrete barriers.

### Multi-Use Pathway or Shared Pathways

Multi-use pathways that are physically separated from motor vehicles and shared between people walking, biking, and using other forms of active transportation, like wheelchairs, skateboards, and scooters (if paved). Multi-use pathways can be located adjacent to the street or through parks and other green spaces.


Protected Bicycle Lane



## C3. Support and encourage cycling in the city

**Goal Alignment**

- **Conduct a bicycle parking review.** The City will conduct a bicycle parking review to understand the bicycle parking supply and demand issues in the City.
- **Develop a program to install secure bicycle parking.** Based on the bicycle parking review, the City will and develop a program to install secured bicycle parking infrastructure in Downtown Langley, as part of the Surrey-Langley SkyTrain project, and at other high activity areas as the cycling network is implemented.
- **Provide more information about cycling routes.** Providing wayfinding and network information, including signage, pavement markings, and maps, help people make decisions about how to navigate the cycling network.

- **Safe**
- **Inclusive and accesible**
- **Healthy and sustainable**
- **Efficient, innovative and forward-thinking**

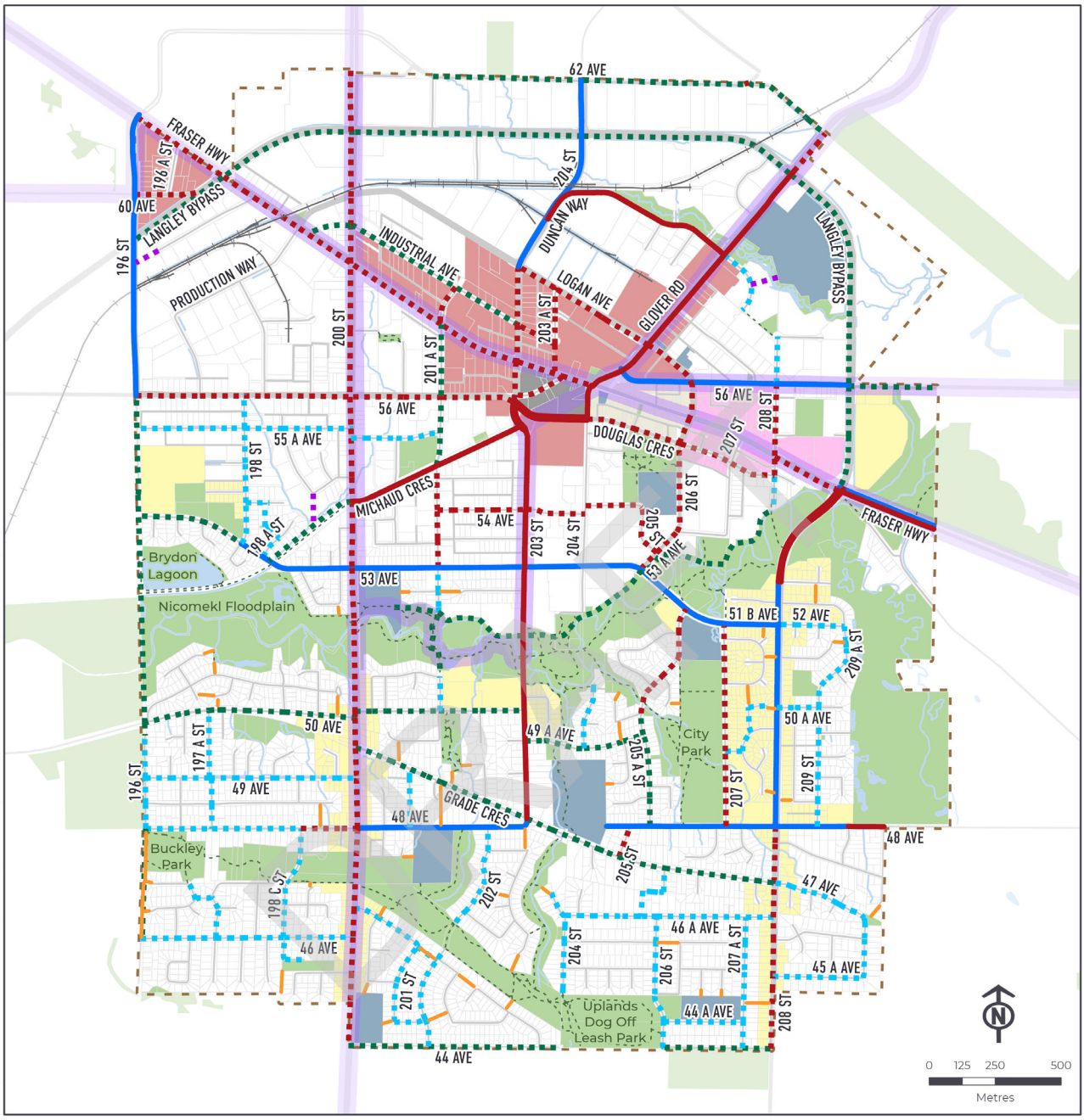



Figure 13. Long-Term Cycling Network

### Rapid Implementation

Cities across Canada recognize the value in rapid implementation or quick build approaches in completing their cycling networks in a flexible, fast, and cost-effective way. Cities can build an All Ages and Abilities (AAA) active transportation network minimizing the initial capital cost, land purchase and time it would otherwise take.

Rapid implementation of active transportation infrastructure provides the opportunity to quickly change the function of a street with low-cost, interim, flexible materials, meaning a faster completion of an active transportation route or network. It also allows necessary adjustments, if any, during the pilot deployment prior to implementing the permanent construction. Ultimately, it is another tool for cities to act quickly, leave room to make modifications if needed, and do so in a cost-effective way.



## Transit Services and Facilities

The long-term plan includes strategies to enhance access to local and regional transit services planned by TransLink and the Province including the proposed Bus Rapid Transit (BRT) and SkyTrain connecting Langley to other communities in Metro Vancouver. The core priorities and action to enhance access to transit as well as the customer experience are briefly highlighted below.

### Core Priorities for Transit:

| | |
|---|---|
| **T1.** | Leverage the Implementation of the SkyTrain and other Priority Transit Projects |
| **T2.** | Improve the Speed and Reliability of Buses in the City |
| **T3.** | Support and Encourage Transit in the City |

### T1. Leverage the implementation of the SkyTrain and other priority transit proejcts

**Goal Alignment**

- **Safe**
- **Inclusive and accesible**
- **Healthy and sustainable**
- **Efficient, innovative and forward-thinking**

The City will leverage the Implementation of the SkyTrain and other priority transit projects (**Figure 14**), including the new BRT to improve transit service in Langley Centre and integration with other modes.

- **Work with TransLink to ensure that transit service, frequency, and routing in the City of Langley supports and encourages SkyTrain ridership.** As part of planning for the opening of the Surrey Langley SkyTrain extension, the City will work with TransLink to ensure the bus transit network supports the employment and population base in downtown Langley and promotes transit use. This includes advocating for frequent bus transit service along 208 Street and 200 Street to support ground oriented higher density uses envisioned in the OCP.

  In addition to TransLink, City will also work with neighbouring municipalities to enhance transit service and address multi-modal transportation needs.

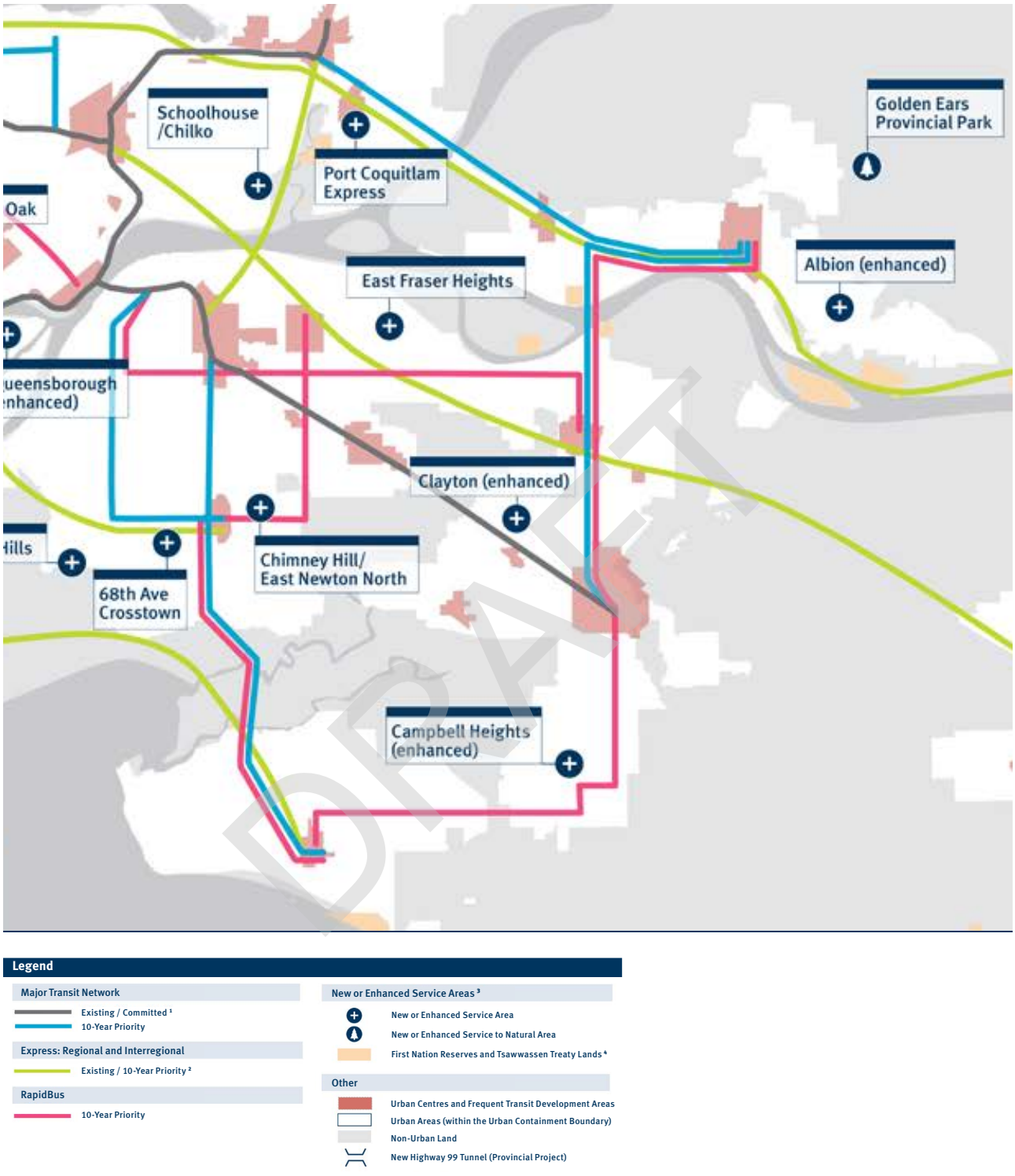



Figure 14. Transport 2050: 10-year Priorities

- **Advance Implementation of BRT service between Langley City and Maple Ridge.** The City will work with TransLink to ensure projects identified in TransLink's Transport 2050 and Transport 2050: Ten Year Priorities provide connections to Langley City Centre Station at 203 Street. Highlighting the importance of this connection for the City's transportation network.

  The regional plan refers to these two services.

  - RapidBus: Langley – Haney Place 200 Street Rapid Bus Service (0-5 years)
  - RapidBus: Langley - White Rock (6-10 years)

  The City is currently working with TransLink to facilitate the terminus station at Langley Centre Exchange. Dedicated bus lanes are included in the Financial Plan to support regional and provincial initiatives.

- **Integrate walking, cycling, and micromobility with transit to provide first- and last-kilometre connections.** Use major transit destinations to create mobility hubs that connect multiple modes of transportation including 'new mobility' and active transportation

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

## T2. Improve the speed and reliability of buses in the city

**Goal Alignment**

- **Implement the transit priority treatments.** The City will continue to work with TransLink to update the local area transport plan and implement appropriate transit priority measures. Potential measures based on existing services were previously identified in the 2022 Bus Speed and Reliability Study (**Figure 15**).

  Invest in transit priority measures in congested locations. Such measures include active or passive Transit Signal Priority (TSP) measures, dedicated bus lanes, limiting parking, providing bus bulges, boarding islands, floating bus stops, and improved platform designs. Bus stop consolidation in lower demand areas can also improve service times.

The City will seek to improve transit reliability and efficiency in conjunction with redevelopments, that may include street parking modifications or frontage design to include bus queue jump lanes.

## T3. Support and encourage transit in the city

**Goal Alignment**

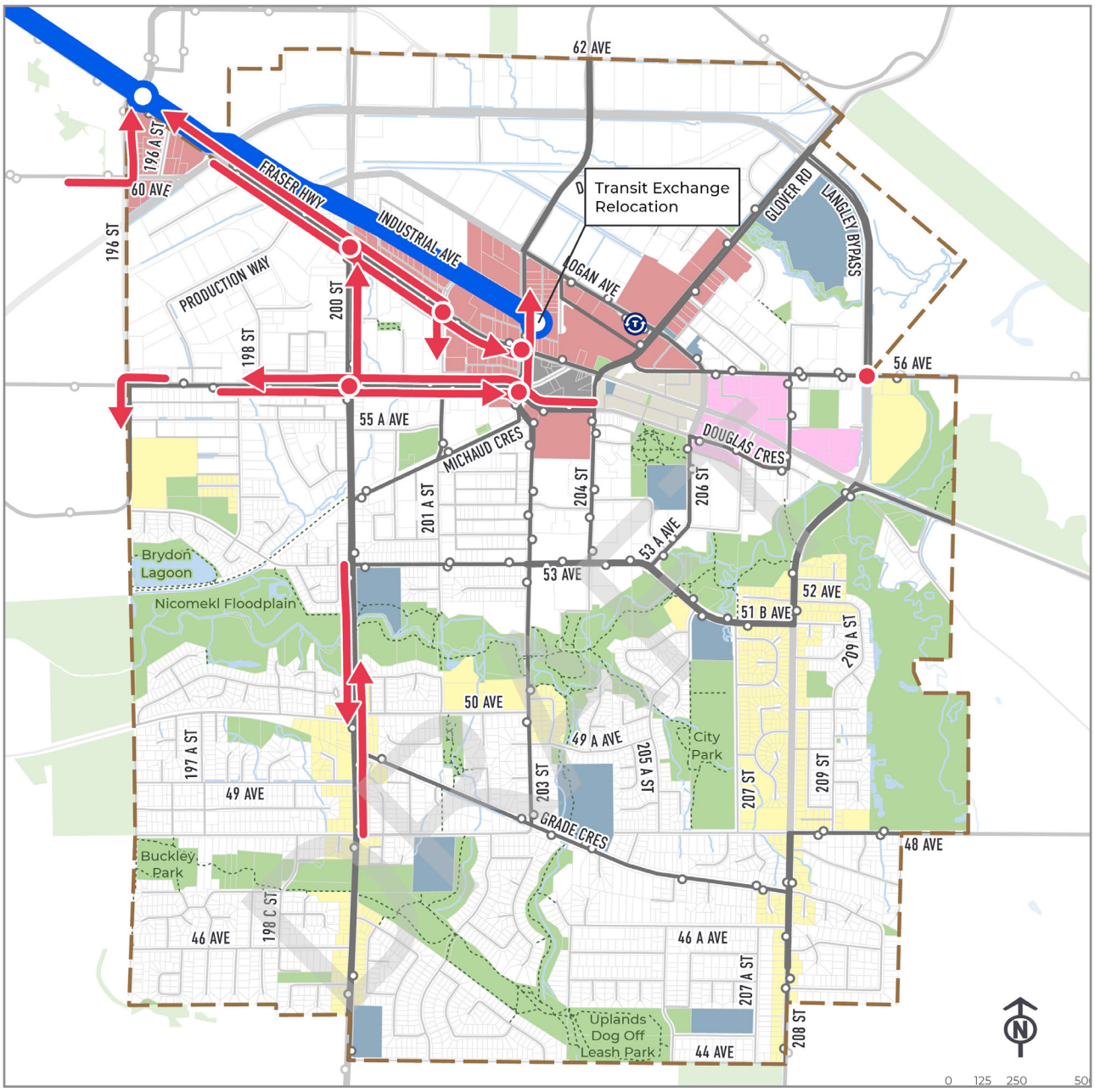
- **Provide accessible bus stops.** The City currently has one of the highest percentages of stops that are accessible. The City will upgrade the remaining bus stops to be accessible based on TransLink's Bus Infrastructure Design Guidelines.
- **Provide more bus passenger amenities** at high activity bus stops, including shelters, benches, lighting and waste receptacles. Continue to secure needed rights-of-way for bus shelters, through the development application review process.
- **Review and implement transit wayfinding,** encouraging TransLink to roll out real-time next bus signs at major stops.
- **Encourage developments that provide a range of housing types and densities and ensure they are well served by frequent transit service and the active transportation network.**
    - As envisioned, and recently legislated by the Province, align land use and transportation, working towards most residents, destinations and businesses being within 400m of the Frequent Transit Network.
    - Encourage new developments around the Langley City Centre Station and Willowbrook Station, ensuring they are compact, high-density, mixed-use buildings.

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**




Locations for Transit Improvement Projects
Transit Exchange
Future SkyTrain Line
Existing Bus Route
School
Parks and Open Space
Transit-Oriented Core
Historic Downtown Core
Mixed Use
Civic Centre
Ground Oriented
Municipal Boundary

Figure 15. 2022 Potential Bus Speed and Reliability Improvements

## Streets and Goods Movement

The City's street network needs to support movement of people by all modes of travel as well as the movement of goods and commercial services for economic prosperity, as well as emergency services. The plan recommends multi-modal investments that can be advanced as either new capital or rehabilitation projects. The City will work with other municipalities, RCMP, ICBC, TransLink and the Ministry to partner to improve streets under the following priorities.

### Core Priorities for Streets:

| | |
|---|---|
| **S1.** | Implement a Connected and Efficient Street Network |
| **S2.** | Deter Speeding on City Streets and Improve Safety |
| **S3.** | Understand Parking and Loading Inventory and Demand |
| **S4.** | Facilitate the Movement of Goods |

### S1. Implement a connected and efficient street network

**Goal Alignment**

- **Update the City's street classification.** Update the City's Street Classification as identified in **Figure 16** to align with the City's climate action goals and vision for network efficiency and safety.
- **Consider multimodal design elements in all street projects (new and rehabilitation).** Continue to design new streets and retrofit existing streets to incorporate multimodal design aspects as specified in the DCM. Road rehabilitation, redevelopments and other capital projects provide an opportunity to re-imagine a corridor. Several corridors in the City (Grade Crescent, Michaud Crescent, Fraser Highway, 206 Street (Logan Avenue), and 203 Street) have opportunities to reallocate space for active transportation, transit, and to improve safety and mitigate congestion concerns.

**Safe**

**Inclusive and accesible**

**Healthy and sustainable**

**Efficient, innovative and forward-thinking**

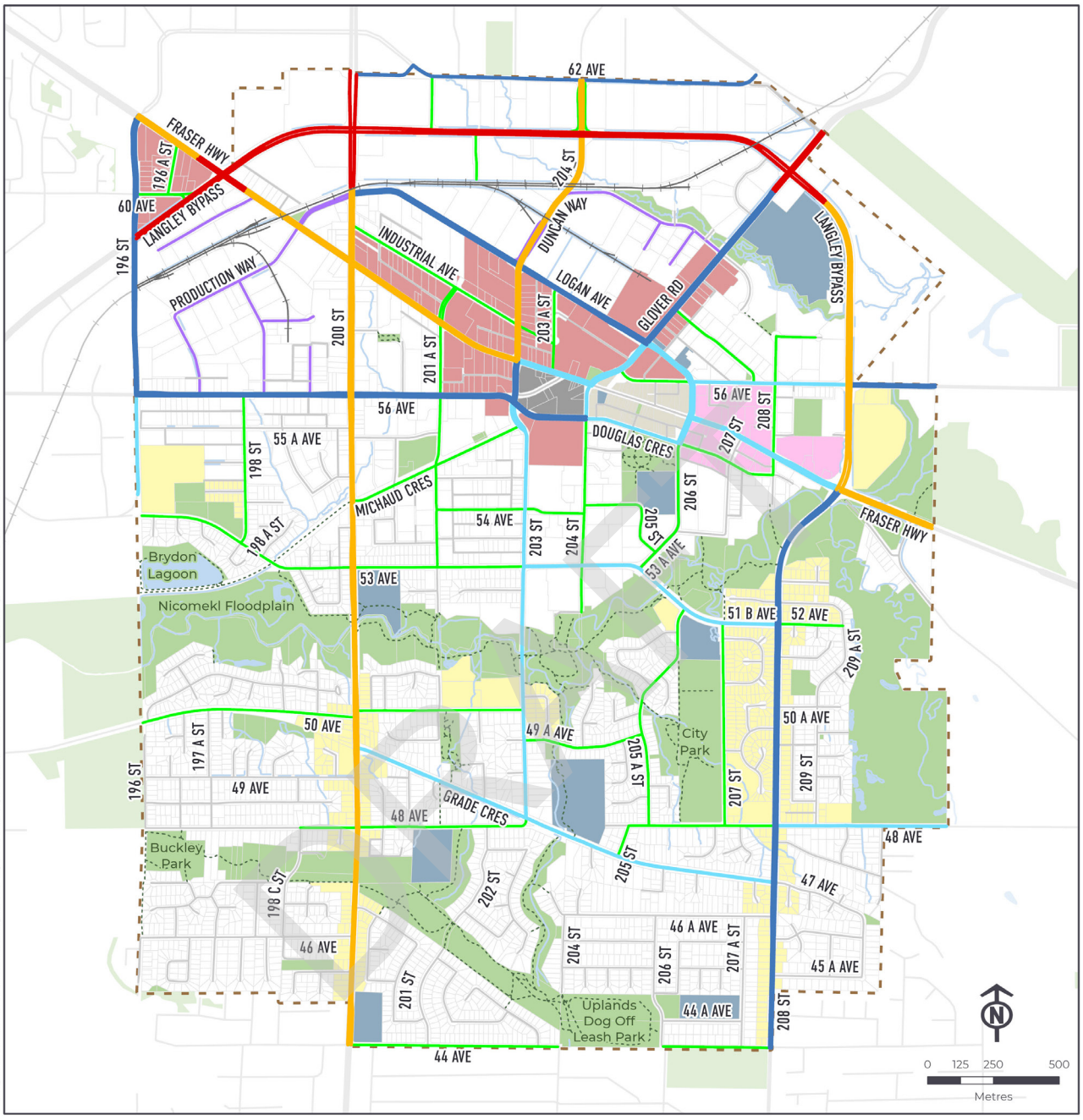



Figure 16. Updated Street Classification

- **Improve safety, capacity, efficiency and accessibility for all modes. Figure 17** and **Appendix A** identifies street and intersection improvement locations based on technical analysis and an understanding of existing and future travel patterns. Locations have been identified where the City can implement:
  - **Intersection safety and capacity upgrades.** These improvements, along street corridors and intersections, together with traffic signal timing coordination and optimization, will address safety issues and congestion. The primary focus is on the major corridors, including 56 Avenue, Fraser Highway, 200 Street, and 208 Street.
  - **Street network and laneway connectivity and access improvements.** New street and laneway connections are recommended to enhance traffic movement, increase permeability and reduce congestion. The City will require rear lane access where ground-oriented developments front onto 208 Street, 200 Street, and developments along Langley Bypass, 62 Avenue, and other major streets.
  - **Street safety improvements.** Improvements throughout the City are recommended to improve safety through a variety of treatments such as, reducing vehicle lane widths to deter speeding, providing improved intersection geometry, or installing center medians.
- **Work with the Ministry of Transportation and Infrastructure to minimize congestion and improve safety for all modes on the Langley Bypass.** The Langley Bypass intersections have the highest levels of congestion and reported collisions within the City. The City recommends a corridor review to address such issues. TransLink has partnered with the City to address safety and congestion issues on the Bypass at 56 Avenue and at Fraser Highway at the eastern perimeter.
- **Prioritize 200 Street corridor improvements.** Conduct a study for the 200 Street corridor to improve the provincial and regional transportation networks and seek external funding for the Roberts Bank Rail Corridor overpass. Several studies are currently underway to determine the future of the 200 Street corridor north of Fraser Highway. These studies are exploring options for bus rapid transit along the corridor. The City and the Township both support and advocate for a future overpass on 200 Street above the railway and the Langley Bypass.

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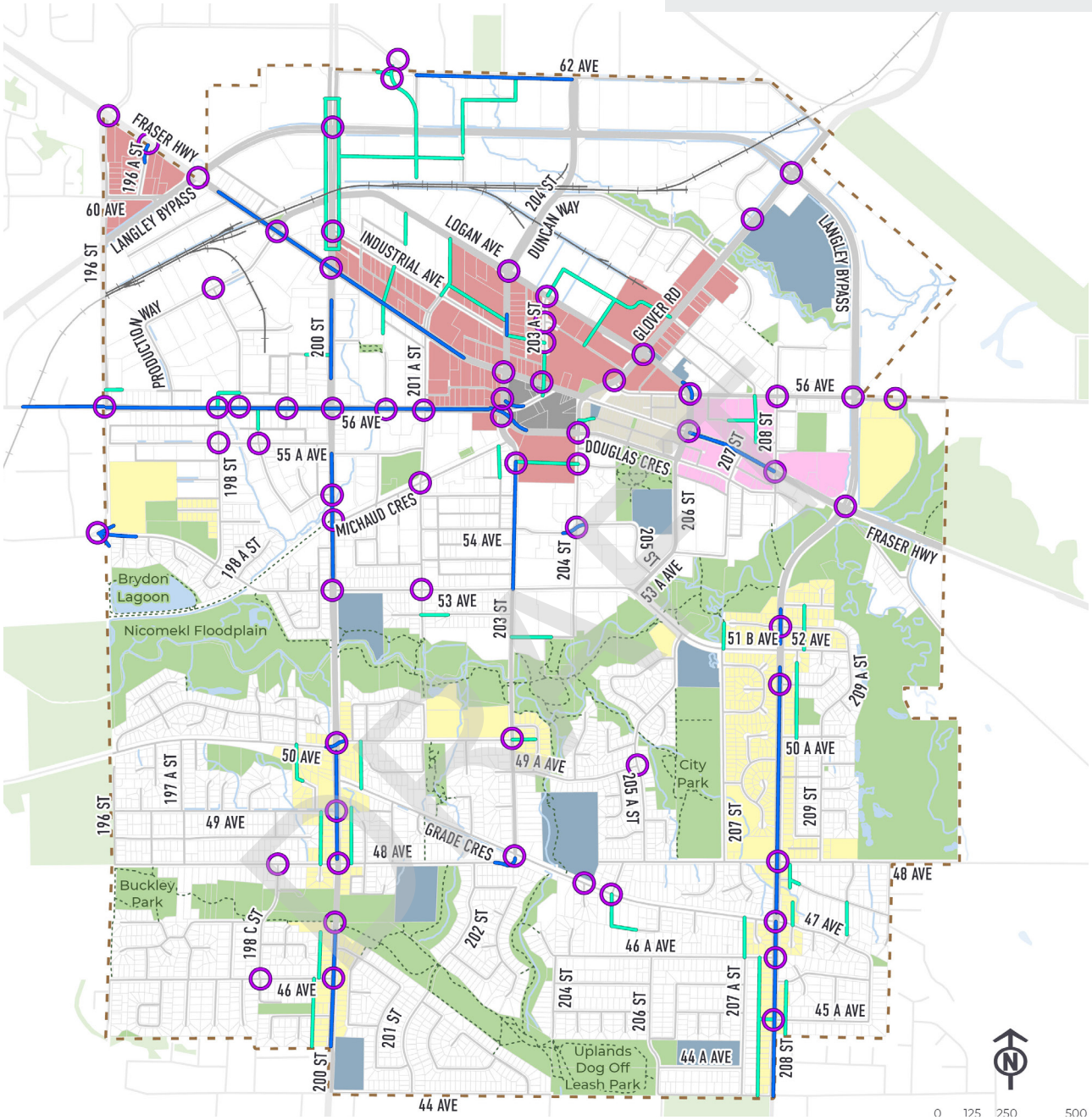
Refer to **Appendix A** for details.




- Intersection Safety & Capacity Upgrades
- Road Centre Median and Other Safety Improvements
- Street Network or Laneway Connectivity & Access Improvements
- Trail
- Railway
- School
- Parks and Open Space
- Transit-Oriented Core
- Historic Downtown Core
- Mixed Use
- Civic Centre
- Ground Oriented
- Municipal Boundary

Figure 17. Recommended Street and Intersection Improvements

## S2. Deter speeding on city streets and improve safety

**Goal Alignment**

- **Reduce related crashes and crash severity.** The City will work in collaboration with other agencies to identify locations and explore options and techniques to deter speeding. This can be done through targeted enforcement, speed management, traffic calming measures, slow streets, and conducting a review of posted speed limits. The City will work to encourage a regional approach to address safety issues. The City can look to other municipalities such as Vancouver, Victoria, Saanich, etc. that have conducted pilot studies on reduced speed limits for lower street classifications or in neighbourhoods.
- **Update the Traffic Calming Policy** to prioritize traffic calming along neighbourhood bikeways recommended in this plan.
- **Manage speeding issues along arterial streets** where traffic calming options are limited, work with the RCMP detachment, ICBC, and others to apply a multi-faceted approach. Look for opportunities to narrow vehicle lanes or remove excess capacity as an interim measure until future demands are realized.
- **Allocate staff resources to analyze existing conditions and implement measures** to identify the locations of concern based on speed and collision severity. Also, to design projects and implement measures based on thorough consultation and engagement.

## S3. Manage/Optimize parking and loading inventory and demand

**Goal Alignment**

- **Conduct a Parking Study** to develop strategies based on a review of current and future parking supply and demands and prepare for SkyTrain and growth in the City. The study will also review and identify locations for passenger loading, and pickup / drop-off zones and consider opportunities for dynamic curb-space management to accommodate new modes and services, bicycle and micromobility parking corrals, and electric vehicle (EV) charging.

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- **Ensure parking and loading options in the City are accessible.** The City will review development plans and infrastructure designs to ensure provisions are made for accessible parking in private developments and relevant public areas. EV infrastructure will also be expected in new developments or as retrofits to existing developments.

## S4. Facilitate the movement of goods and services

**Goal Alignment**

- **Update the City's Truck Route Map** to align with neighbouring communities and current best practices. The City will continue to work with other agencies to establish the Dangerous Good Route on Langley Bypass. The updated truck routes map is shown in **Figure 18**.
- **Harmonize truck permitting and regulations** in collaboration with TransLink, the Province, and neighbouring municipalities.
- **Encourage smaller and lower-emission goods movement vehicles** for local deliveries and in the downtown Langley Pedestrian Priority Area.
- **Monitor the impact of rail freight on the City's transportation network.** Work with rail authorities and other agencies to continue to monitor safety and congestion impact due to increased rail freight will has on the City's transportation network and emergency services. An early grade crossing working system needs to be installed at the fire hall.

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- Existing Truck Route
- Existing Dangerous Goods Route
- Trail
- Railway
- Industrial Area
- Parks and Open Space
- Municipal Boundary

Figure 18. Updated Truck Routes

## New Mobility Considerations

The strategies identified for new mobility focus on supporting the integration of current and future technologies and trends, ensuring the City is prepared for and understands the opportunities and impact new mobility technologies will have on the transportation network.

### Core Priorities for New Mobility

**N1.** Plan for New Technologies and Modes of Transportation

**N2.** Provide More Transportation Options

### N1. Plan for new technologies and modes of transportation

**Goal Alignment**

- **Advocate for a regional or provincial study to plan for new mobility services and devices** that can increase sustainable mode share and equity. The City will also encourage provincial/regional regulation of micromobility devices and shared micromobility.
- **Develop an EV Strategy for the City.** The strategy will help the City plan for growing demands for public charging as well as electrification of fleet and employee vehicles.
- **Review the efficacy of Intelligent Transportation Systems (ITS) to make the transportation more efficient.** The City will undertaking a comprehensive examination of the practical applications for ITS which may include the provision of real-time information to drivers, dynamic corridor signal coordination, multi-agency signal synchronization, transit signal prioritization, as well as real time traffic signal communication and engagement system.

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## N2. Provide more transportation options

**Goal Alignment**

- **Provide charging stations for electric vehicles.**
  - Ensure new electric charging infrastructure is a required minimum for new developments.
  - Continue to install and expand electric charging infrastructure at community facilities and other appropriate street locations.
- **Encourage car share organizations to consider extending service to the City of Langley** particularly in the downtown core and at the Surrey-Langley SkyTrain Station.
- **Provide shared micromobility options.** Explore opportunities with the region and private sector partners to implement a shared micromobility service (ebike and/or escooter sharing systems).

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### What are some new ways of travelling?

Micro-mobility is a category of small one-person electric vehicles, such as e-bikes, e-scooters, mopeds, or other devices.

Shared transportation systems enable users to rent a car, bike, or micro-mobility vehicle on a short-term basis. They can be point-to-point (users can pick up the vehicle or device in one location and return in another) or return-to-base (users must pick up or drop off from the same locations).

Ride-hailing systems connect passengers to drivers for hire using smart phone apps.

Connected and autonomous vehicles are a range of self-driving or partially automated vehicles that are connected to infrastructure and each other. They are not yet widely available, but are expected to change the future of transportation over the next five to fifteen years.

### Micromobility in BC

Prior to 2021, micromobility devices were unregulated under the Motor Vehicle Act (MVA), making them illegal to operate on public roadways in BC. Nonetheless, e-scooters and other forms of electric micromobility have become an increasingly common sight on streets and pathways throughout Langley, Metro Vancouver, and the rest of the province.

In response, the Province has launched an electric kick scooter pilot project[1] that allows municipalities who apply to be a part to enact bylaws to allow for use of electric kick scooters (e-scooters) on streets in their communities. The pilot program came into effect on April 5, 2021. In 2024, the pilot was extended for another four years. E-scooters are still illegal to operate in any community that is not participating in the pilot project and in any pilot community that has not yet enacted bylaws for the pilot project. Furthermore, the pilot is limited to e-scooters – other one-person electric micromobility devices were not included and remain illegal to operate on BC streets.

The MVA Electric Kick Scooter Pilot Project Regulation outlines the pilot community bylaw requirements and e-scooter rules and safety.

The Province notes that generally, the rules of cycling in BC apply to the use of e-scooters, and the pilot regulations specify that e-scooters must be operated in accordance with provincial regulation and bylaws of the pilot community. On streets with speed limits of 50km/h or less, e-scooters should use designated lanes for cycling or, where none exist, ride as near as possible to the right side of the street. Where the speed limit is greater than 50km/h, e-scooters must be ridden only in designated bicycle facilities. Sidewalk use is prohibited unless cycling is permitted there by traffic control device or bylaw. Municipalities can dictate whether e-scooters are permitted within municipal parks and lands. Although e-scooters and other forms of micromobility are not currently legally permitted, the City should plan for the possibility that these may become legal options in the future.



1 *Government of British Columbia (2021). Electric kick scooter pilot project. https://www2.gov.bc.ca/gov/content/transportation/ transportation-environment/active-transportation/policy-legislation/motor-vehicle-act-pilot-projects/scooter*

# 4. Implementation Priorities and Actions

The primary objective of the Strategic Plan is to guide policy, planning, and capital investment decisions. As a long-term plan, it also establishes priorities for various recommendations. The plan is to be implemented over the next decade and beyond as resources and service delivery permit.

The strategy therefore identifies general priorities for the recommended capital projects and groups them into high, medium, and lower priority works.

## 4.1 Infrastructure Projects

Transportation 2050 identifies infrastructure upgrade projects for walking, cycling, roads, and intersections. Recognizing it is a long-term plan and will take time to implement, a set of criteria was developed to guide the prioritization of proposed improvements. The criteria reviewed include:

- Population density
- Origins and destinations
- Gaps in the network
- Access to transit
- Access to schools
- Road safety vision
- Piggyback potential (alignment with other planned projects)
- Development potentials

This approach was used to identify the highest priority projects for implementation. Each variable contains scoreable information, and the results were combined to generate an overall score for the network.

While high, medium, and low priority infrastructure projects are identified, this does not mean that projects must be implemented in that order. If the opportunity is available, through another capital project or redevelopment, to implement a lower priority project sooner, the City will utilize that opportunity to implement a project.

The maps on the following pages highlight the implementation approach for the different networks highlighting the level of priority for each proposed project.

It is important to note that Transportation 2050 is one of several city-wide technical documents that identify priority infrastructure projects including asset management and utility servicing plans. The recommendations of this plan, and others, will be reviewed and prioritized before capital funding is allocated.

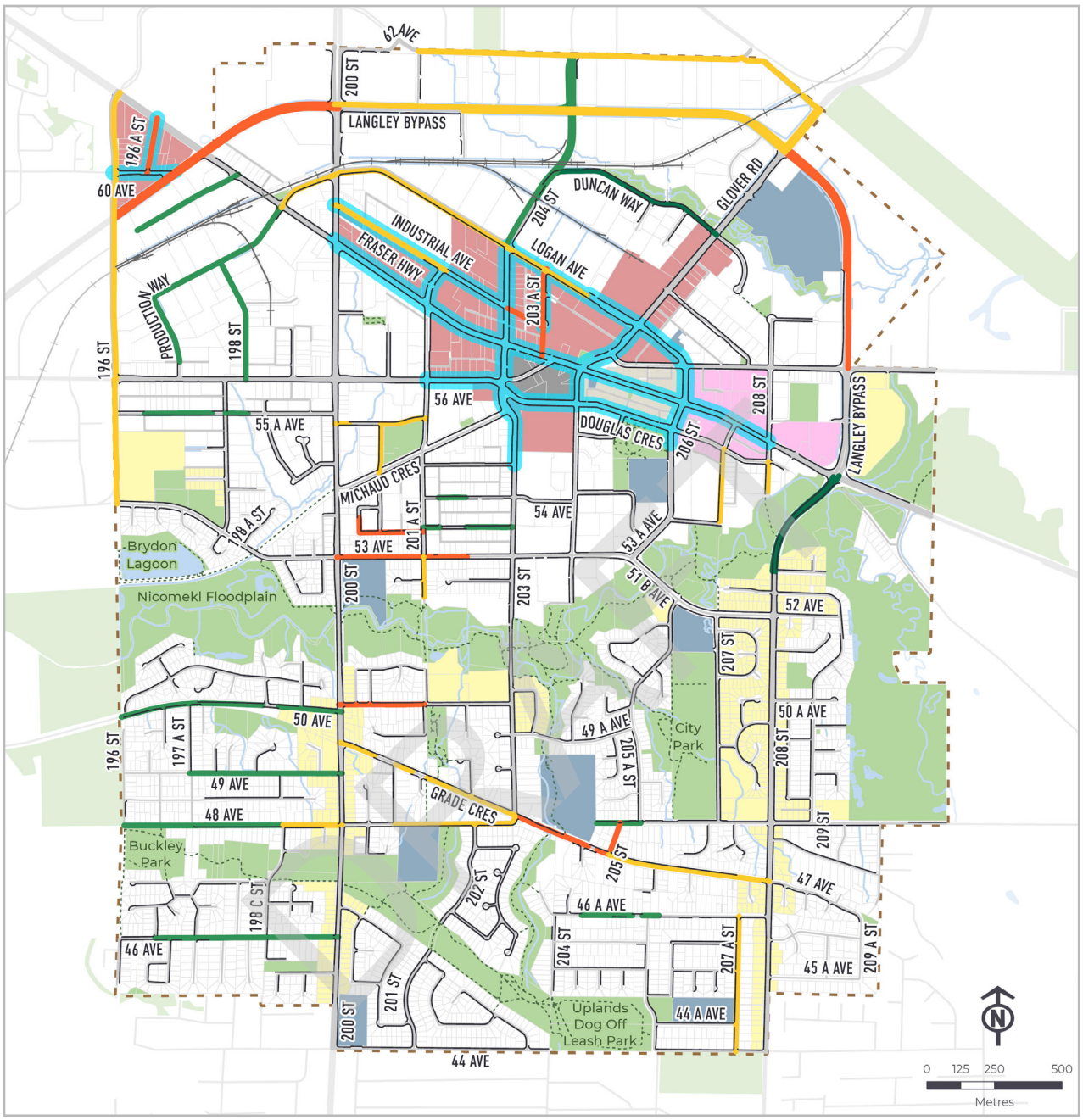


Figure 19. Walking Network Priorities

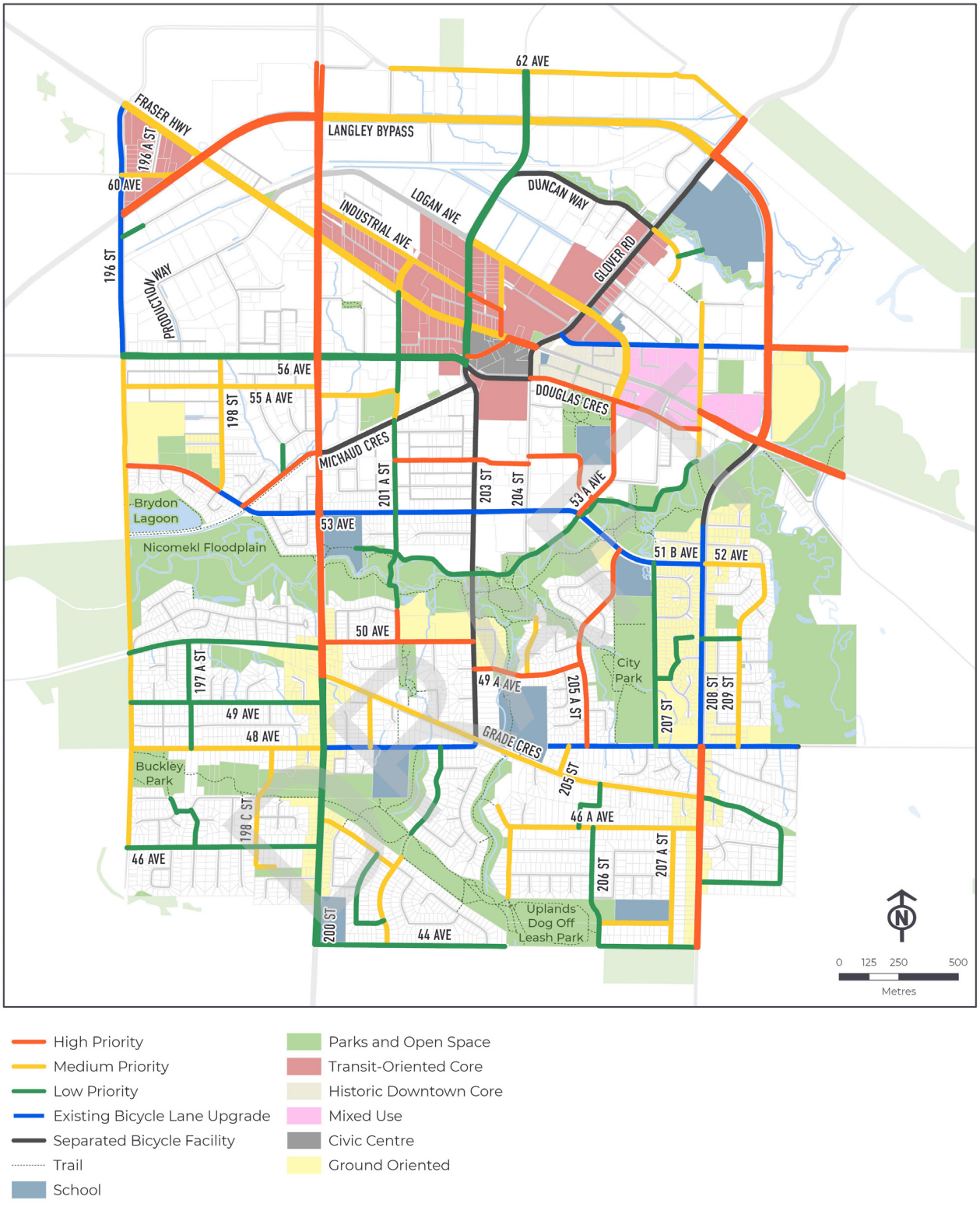


Figure 20. Cycling Network Priorities

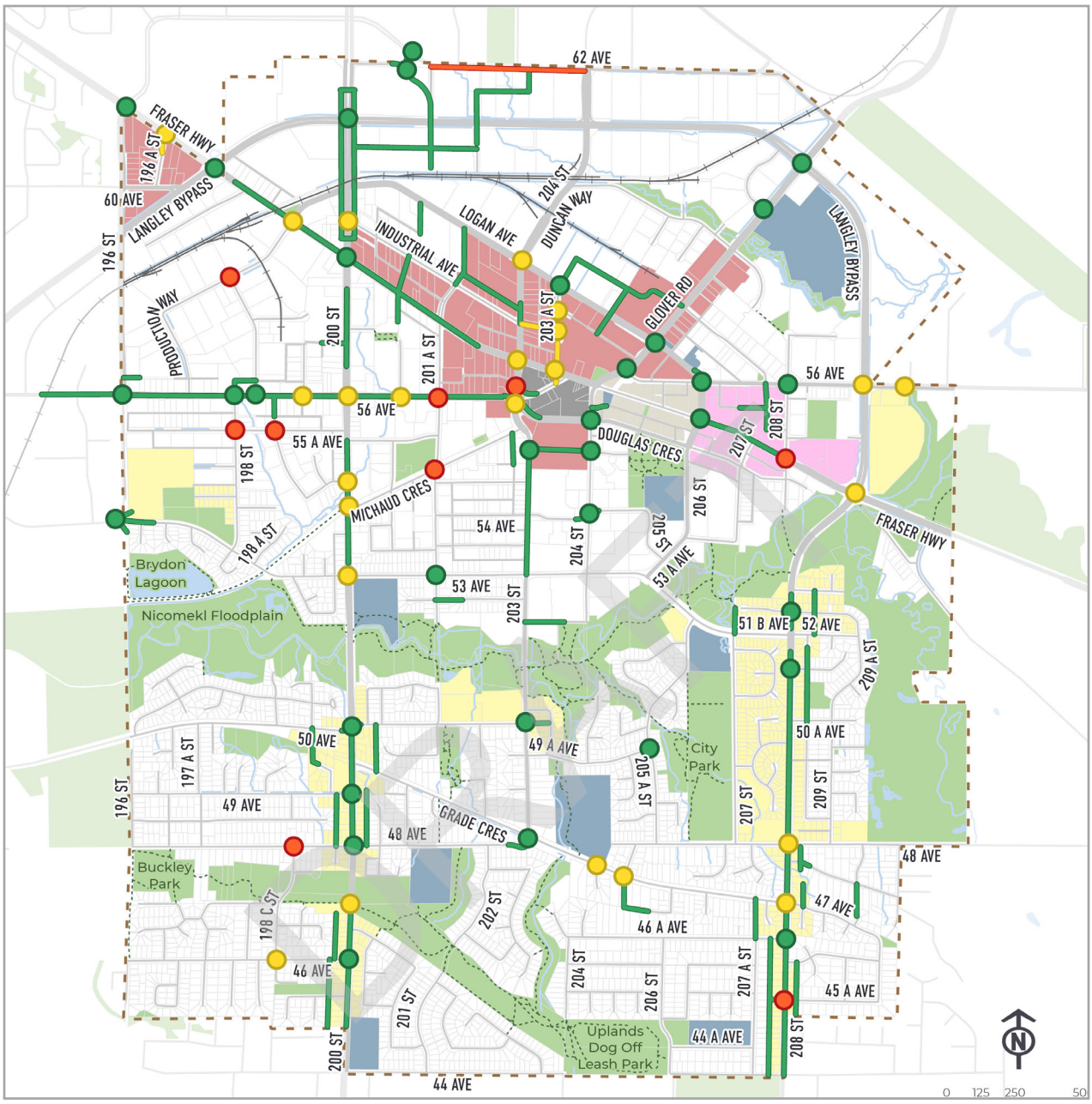


Figure 21. Streets and Intersection Priorities

## Highest Priority Infrastructure Projects

**BRT Route Implementation** (62 Avenue widening)

**Langley City Centre Station Transit and Active Transportation integration**

**Langley Bypass Intersection and Active Transportation Upgrades**

**Interim Cycling Infrastructure and Speed Management** (208 St, 56 Ave.)

**SkyTrain Multi-Use Pathway Connector**

**200 Street Protected Bicycle Lane**

**Douglas Crescent Protected Bicycle Lane**

**Crosswalk Safety Improvements** (208 St, Fraser Hwy/207 St, 48 Ave/198)

**Intersection Improvements** (Fraser/208, Fraser/Production, 56 Ave/208 St, Michaud/200 St, 55A Ave/Brydon, Michaud/201A St)

**Traffic Signal Coordination and Real-Time Communications**

## 4.2 Priority Policy and Planning Actions

The following is the list of actions, beyond implementing infrastructure projects identified earlier. These are the priority focus areas to achieve the goals and work towards the broader vision.

### Walking

- Widen and enhance sidewalks and pedestrian facilities
- Incorporate accessibility best practices when replacing aging assets
- Provide attractive plaza spaces, street trees, and enhance public realm to promote active transportation
- Improve safety and security of all residents and visitors in public spaces through measures such as safer crosswalks and lighting

### Cycling

- Provide well-connected bicycle routes that are comfortable for all users
- Conduct a bicycle parking review
- Develop a program to install secure bicycle parking

### Transit

- Advance Implementation of BRT service between Langley City and Maple Ridge.
- Work with TransLink to ensure that transit service, frequency, and routing in the City supports and encourages SkyTrain ridership.
- Enhance bus stops with amenities, sidewalks and lighting
- Implement transit priority treatments at congested intersections along more frequent transit corridors

## Streets and Goods Movement

- Implement the City's street classification with rehabilitation and developments
- Consider multimodal facilities in all street projects (new and rehabilitation) as per the DCM
- Prioritize 200 Street corridor improvements and railway grade separation
- Update the Traffic Calming Policy
- Allocate staff resources to collect data and analyze traffic conditions
- Implement recommendations from a Parking Study

## New Mobility Considerations

- Advocate for a regional or provincial study to plan for new mobility services and devices
- Develop an EV Strategy for the City
- Encourage car share organizations to consider extending service to the City of Langley

## 4.3 Investment on Resources

Implementing the Transportation Plan will require capital investments and appropriate resources. This includes adequate staffing, tools, and technology required to perform a range of tasks from planning and engineering to project delivery, ongoing management, and maintenance of the transportation system.

In addition to the City led initiatives, a growing number of projects and programs are being led by external agencies in the region and the province that also require additional City staff time and resources to ensure external planning and designs will protect the interests of the City and align with the visions and aspirations of the community.

**Ensure staff resources are available to implement the Transportation Plan.** Implementation of the Plan will not only require capital investments, but also additional staff resources to monitor, manage, maintain and perform other recommended actions. Dedicated staff members with local experience and expertise in various areas of traffic and transportation, road safety engineering, data collection, asset management, parking management, emerging signal and communication technologies will play an important role in successfully implementing the Plan.

**Invest in the equipment needed to adequately maintain facilities in all seasons.** Year-round operations and maintenance of the transportation network is imperative to ensure transportation infrastructure is safe, accessible, aesthetic, and efficient.

To ensure year-round maintenance of the transportation network, particularly active transportation infrastructure, additional equipment will be required. For example, truck-mounted plow blades can work in many applications, including neighbourhood bikeways. However, specially designed, right-sized equipment is also available to sweep and clear protected bicycle lanes and multi-use facilities. Automated license plate readers mounted on bylaw enforcement vehicles are another example of tools needed for a growing community.

It will be important to ensure new infrastructure design and annual budgets take operations and maintenance needs into consideration.

## 4.4 Implementation Strategy

To implement the Transportation Plan, a variety of implementation techniques and strategies are recommended. Based on a review of each project, and with support from community partners, the City will determine the appropriate approach to implementation. The following are some techniques to cost effectively implement the long term networks.

**Quick Build Treatments.** To provide walking and cycling facilities in Langley in the shorter term, the City may consider using a “quick-build” process using low cost, temporary materials.

The City will consider the project impact, accessibility, and if longer-term infrastructure projects (development, internal or third-party capital projects) are expected at the location when

determining whether to consider quick-build or permanent treatments. Quick build treatments have already been used to implement cycling facilities in the City. They could also be used on 56 Avenue and 208 Street to implement protected cycling infrastructure.

**Coordinate Projects with other Capital Infrastructure Projects.** The City will look for opportunities to implement the recommendations of the Transportation Plan as part of other infrastructure projects, such as sewer and water line upgrades or road repaving that are being completed by either the City or other government entities to achieve economies of scale.

**Coordinate Projects with Land Developments.** Where proposed projects front known or anticipated redevelopment sites, the City will request that identified applicable infrastructure improvements will be completed as part of a development applicant's off-site improvements, as required through the City's Subdivision and Development Servicing Bylaw.

**Collaboration.** The City will need to work with the Ministry of Transportation and Infrastructure, TransLink, Canadian Pacific, neighbouring municipalities, and others to implement improvements identified in the Plan. Through this collaboration and partnership, there may be opportunities for these organizations to cost share or fund the implementation of projects identified in this Plan.

**Pursue Funding.** There are opportunities to implement projects and actions identified through a variety of funding sources. Funding is available through the federal and provincial governments and TransLink and other agencies. In addition to currently known programs, the City will actively be attuned to new funding sources for which transportation projects would qualify.