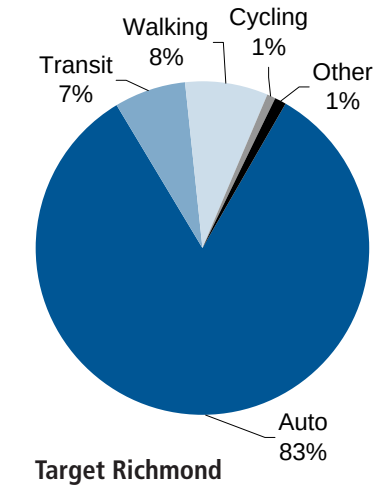
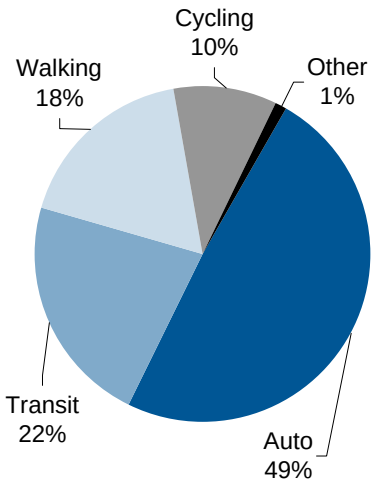
8.0 Mobility and Access

8.0 Mobility and Access

Richmond Mode Share (2008)



Target Richmond Mode Share (2041)



OVERVIEW

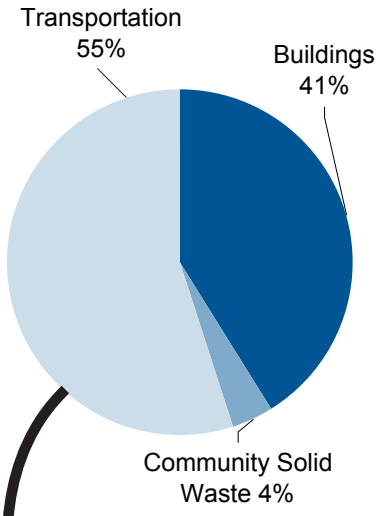
Mobility and access are vital to the life of a city. Residents, employees and visitors need to get to places to work, live and play, and access health care services and recreational, shopping and cultural activities. Businesses require efficient goods movement and emergency service providers need clear and convenient access.

While private automobiles provide a high degree of personal mobility, greater consideration of the consequences of individual and collective travel choices is needed as this preferred travel mode affects the rate of climate change, the environment, air quality, the peace and quiet of neighbourhoods, the health and safety of residents, social equity, the quality, comfort and design of urban development, and investment and maintenance costs.

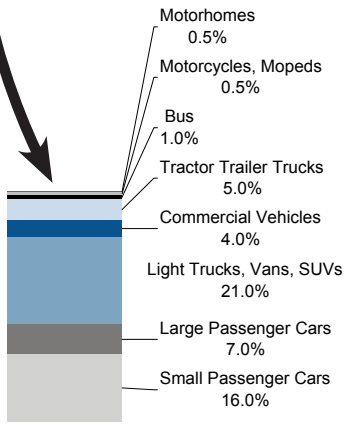
In 2008, 83% of all trips in Richmond were made by car. If everyone continues to drive at that rate as the population grows, the valued quality of life will decline due to rising traffic congestion, a deterioration in air quality and an omnipresence of cars in every neighbourhood.

Moreover, on-road motor vehicle transportation accounts for over one-half of all greenhouse gas (GHG) emissions in Richmond as of 2010. Driving cars that use fossil fuels contributes to climate change and, if left unchecked, will significantly undermine efforts to achieve the City's GHG emission reduction targets of 33% below 2007 levels by 2020 and 80% below 2007 levels by 2050 (the same targets as those of the Province and Metro Vancouver).

Richmond Community GHG Emissions by Sector (2010)



Transportation GHG Emissions by Motor Vehicle Type (2010)



To make notable progress towards these goals will require that residents' travel patterns become more sustainable to ensure that access to people, services and goods is met without producing harm to the environment or social inequity. At a minimum, the percentage of trips by transit, cycling or walking needs to triple from 17% to 51% over the next 30 years. In other words, TransLink and the City need to offer, and residents need to choose, more sustainable travel modes for one of every two trips we make. Given recent positive trends in modal shift (e.g., growing transit use since the opening of the Canada Line) that will be further reinforced by the implementation of the policies outlined in this section, accomplishing such a shift is feasible.

A key action is creating compact, walkable and bikeable neighbourhoods with mixed land uses and convenient public transit service that foster low impact movement by foot, rolling (e.g., wheelchairs and scooters), bicycle, and transit.

Richmond's objectives and policies for meeting this challenge and transitioning to a more sustainable transportation system that enhances the vibrancy, safety and health of the city for future generations are based on achieving the following goals.

Being Part of a Livable Region

- Support TransLink's Transport 2040 and Metro Vancouver's 2040 Regional Growth Strategy, and encourage a greater share of trips made by transit, multiple-occupancy vehicles, cycling, and walking.
- Support a livable city by focussing growth in the City Centre and, subject to public acceptance, neighbourhood shopping centres to better meet the daily needs of residents with closer access to shopping, jobs, housing and personal services that, in turn, will help to decrease traffic congestion, energy consumption and air emissions.
- Strive to transform auto-dependant neighbourhoods to foster walking, rolling and cycling as the preferred travel options for accessing local services.
- Enhance transit, rolling and cycling connections between neighbourhood centres and major employment areas for easy city-wide travel without a car.

Creating Everyday Transportation Choices

- Increase the priority of sustainable transportation modes (cycling, rolling, walking) while maintaining an adequate balance in road capacity for all users.
- In recognition of changing demographics (e.g., aging population), retrofit existing transportation infrastructure to meet the accessibility and comfort needs of the community.
- Improve safety measures for road users, particularly pedestrians, cyclists and those with living with disabilities, and enhance neighbourhood livability.
- Continue to implement the Child- and Youth-Friendly Land Use and Transport Planning Guidelines for British Columbia.

No. 3 Road—Before

No. 3 Road—After

Making Travel More Efficient

- Implement timely roadway improvements for goods movement to support economic activities.
- Deploy efficient and innovative transportation technologies to optimize the overall performance of the transportation system and reduce vehicle emissions and energy use.

8.1 Road Network

OVERVIEW:

Richmond's current road network has been largely designed to facilitate vehicle trips and the resulting street environments may be unappealing for many users. To become a sustainable city for people, not cars, the design of the road network needs to become more inviting for walking, rolling, cycling, and transit.

OBJECTIVE 1:

Reduce the reliance on private vehicle travel by increasing the priority of walking, rolling, cycling, and transit within the road network.

POLICIES:

a) over time, redistribute road capacity from private vehicles to transit, cycling, rolling, and walking to enhance the livability of the city;

b) re-design streets within a 400 m (1,312 ft.) radius around neighbourhood centres to better support walking, rolling, and cycling (e.g., wider and uninterrupted sidewalks, shorter street crossing distances, improved lighting, enhanced audible signals, more street benches, and signed off-street paths);

c) create shorter blocks to improve connectivity and access, particularly around neighbourhood centres;

d) re-program traffic signals to give priority to pedestrians (e.g., shorter wait time and longer crossing time) where appropriate, as well as priority for cyclists and transit at intersections along bike and bus routes;

e) ensure that new developments provide transportation facilities and programs that encourage greater use of transit, walking, rolling, cycling, and energy efficient vehicles (e.g., electric cars).

Neighbourhood Gateways
Enhanced streetscapes near neighbourhood centres with:

- sidewalks on both sides of the street;
- curb ramps at all intersections;
- benches and landscaping;
- local connecting bike routes;
- gateway features that reflect neighbourhood characteristics.

OBJECTIVE 2:

Encourage sustainable travel by enhancing the safety, comfort and accessibility of the transportation system for vulnerable road users (e.g., pedestrians, the mobility challenged, cyclists).

POLICIES:

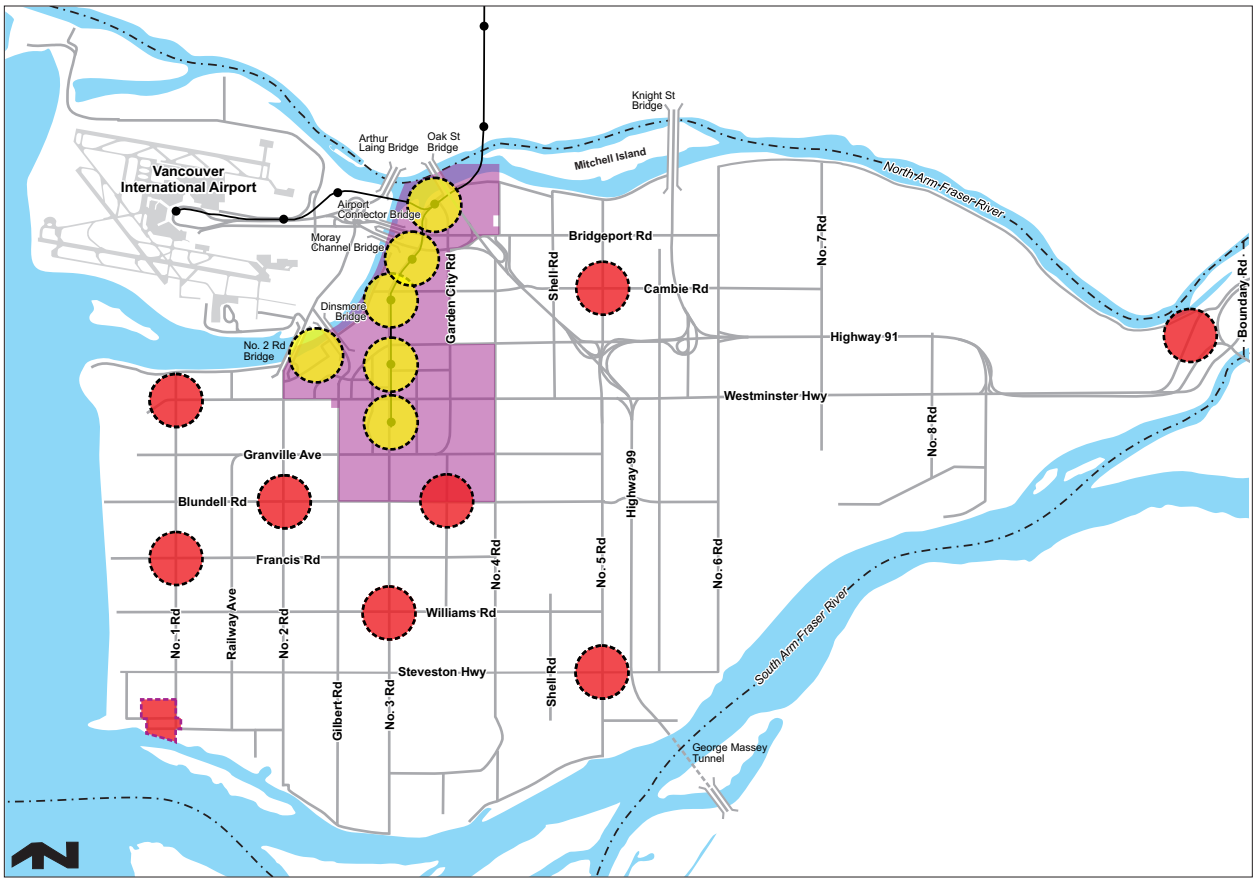
a) retrofit road and streetscape features to meet the changing mobility needs of the community to enhance accessibility, comfort and security for all ages and abilities of users (e.g., all sidewalks and pathways to have curb ramps at intersections as required, additional benches, larger font for signage, wayfinding maps);

b) install accessible pedestrian signal features (e.g., audible wayfinding messages and "walk/do not walk" tones) at all special crosswalks (i.e., those with pedestrian-activated overhead flashing amber lights) and signalized intersections;

c) implement traffic calming measures (e.g., speed humps, traffic circles) where necessary to mitigate speeding and cut-through traffic to enhance neighbourhood livability;

d) implement pedestrian-friendly traffic control measures (e.g., lower speed limits, no right-turns allowed on red) in areas with high pedestrian volumes.

Priority Areas for Distinctive Street Design and Pedestrian/Rolling/Cycling Improvements Map



OBJECTIVE 3:

Optimize the existing road network to improve circulation and goods movement and reduce the need for added road capacity.

POLICIES:

a) implement road improvements identified in the City Centre Transportation Plan to reduce congestion and improve circulation in the city core;

b) use a hierarchy of local to major roads that directs through traffic to major roads, allows local circulation in areas of intense land use activity and minimizes traffic intrusion into residential neighbourhoods;

c) require shared access and lanes parallel to major roads to discourage individual driveways that impede through traffic flow and create safety hazards for transit, cyclists and pedestrians;

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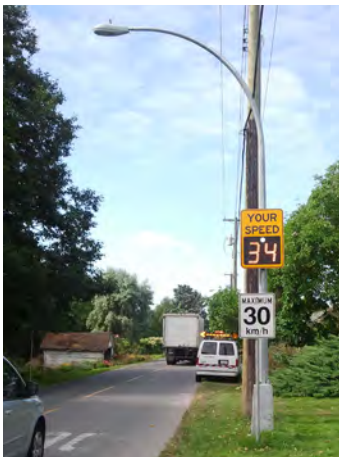
d) support the implementation of improvements along Highway 99, including an upgraded interchange at Steveston Highway, to enhance local circulation and connectivity, increase safety and improve goods movement;

e) implement timely road improvements for goods movement, particularly in commercial and industrial areas, to support and promote economic activities;

f) implement new and proven technological measures (such as traffic signal preemption) to continually improve access and minimize response times for emergency services;

g) limit the expansion of travel lane capacity for single-occupant private vehicles at all regional and provincial bridges/highways and give priority to transit, trucks and high-occupancy vehicles.



Implementation

Road and streetscape improvements will be undertaken through:

- development (e.g., redevelopment of neighbourhood centres);
- the City's annual Capital Program; and/or
- initiatives of senior governments (e.g., external grants, improvements to the Highway 99 corridor).

Projects carried out by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- crash history and traffic volumes/speeds on the roadway;
- enhances road safety for all users;
- provides a key connection for goods and transit;
- sufficient right-of-way available (i.e., no property acquisition required).

Road and streetscape improvements will be funded through the following mechanisms:

- development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.

Road Classification Map

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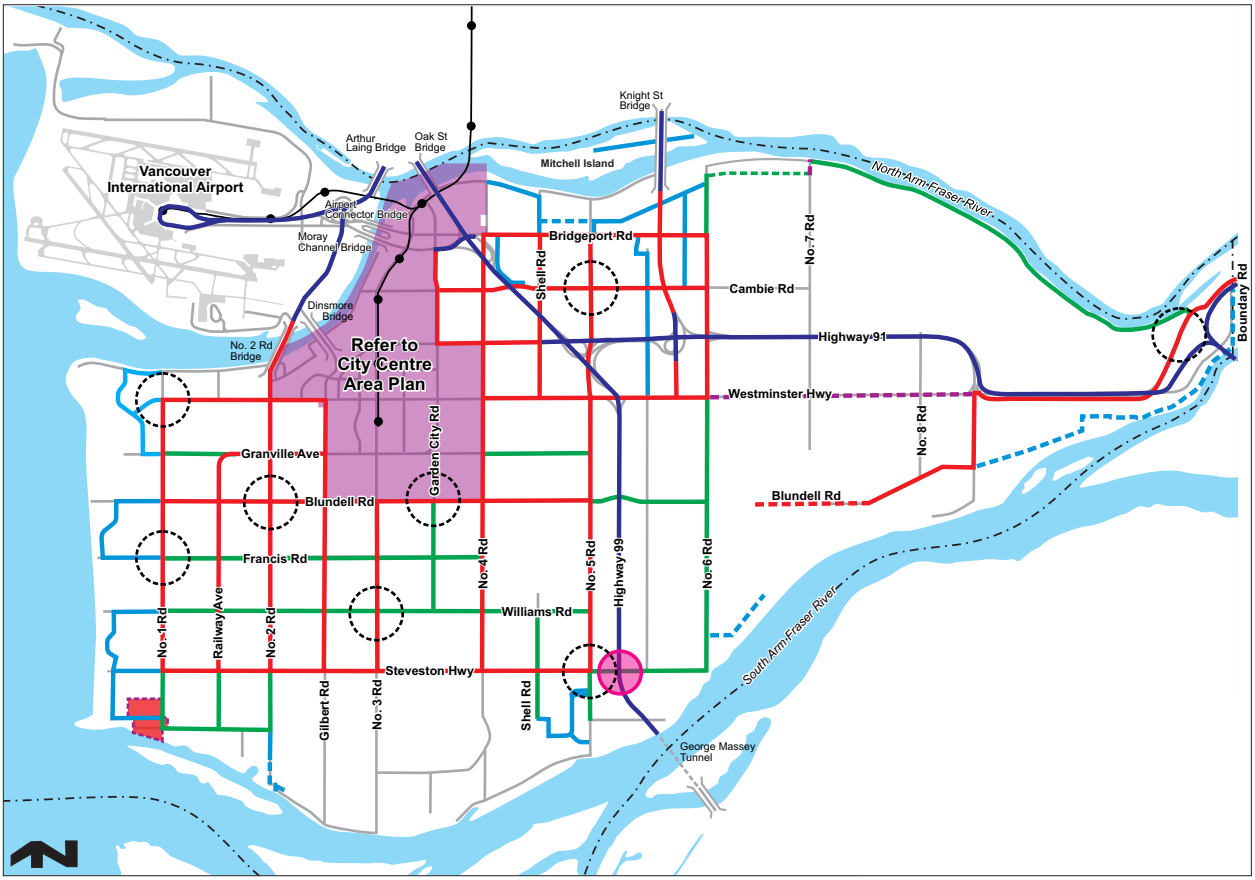

Canada Line
City Centre Boundary
Future Neighbourhood Centre
(subject to further planning and community consultation)
Steveston Village

Provincial/Federal/Regional Highways
Major Arterial
Proposed Major Arterial
Minor Arterial
Proposed Minor Arterial
Collector
Proposed Collector
Agricultural
Proposed Upgraded Interchange

See Section 7.1 (Existing Status of Road Improvements in the ALR Map) for more detail on agricultural road network.

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OBJECTIVE 4:

Encourage opportunities to secure lane development along arterial roads through new development.

POLICIES:

a) Densification along major arterial roads should minimize traffic disruption by eliminating driveways along arterial roads.

b) Densification along minor arterial roads should result in no net increase in the number of driveways to maintain existing traffic flow.

c) The Lane Network Map identifies areas where lane establishment and/or extension is encouraged.

d) Developers are encouraged to connect to an established lane network. Where a city block has been identified for lane development but has limited opportunity for the existing lane to be extended to a local road, a connecting lane (i.e., temporary connection to arterial road) may be considered.

e) The location of the connecting lane will be determined at the time of a development application based on:

- the overall access needed for the entire block;
- location of the existing driveways; and
- type of traffic movements appropriate for the block.

Lane Network Map

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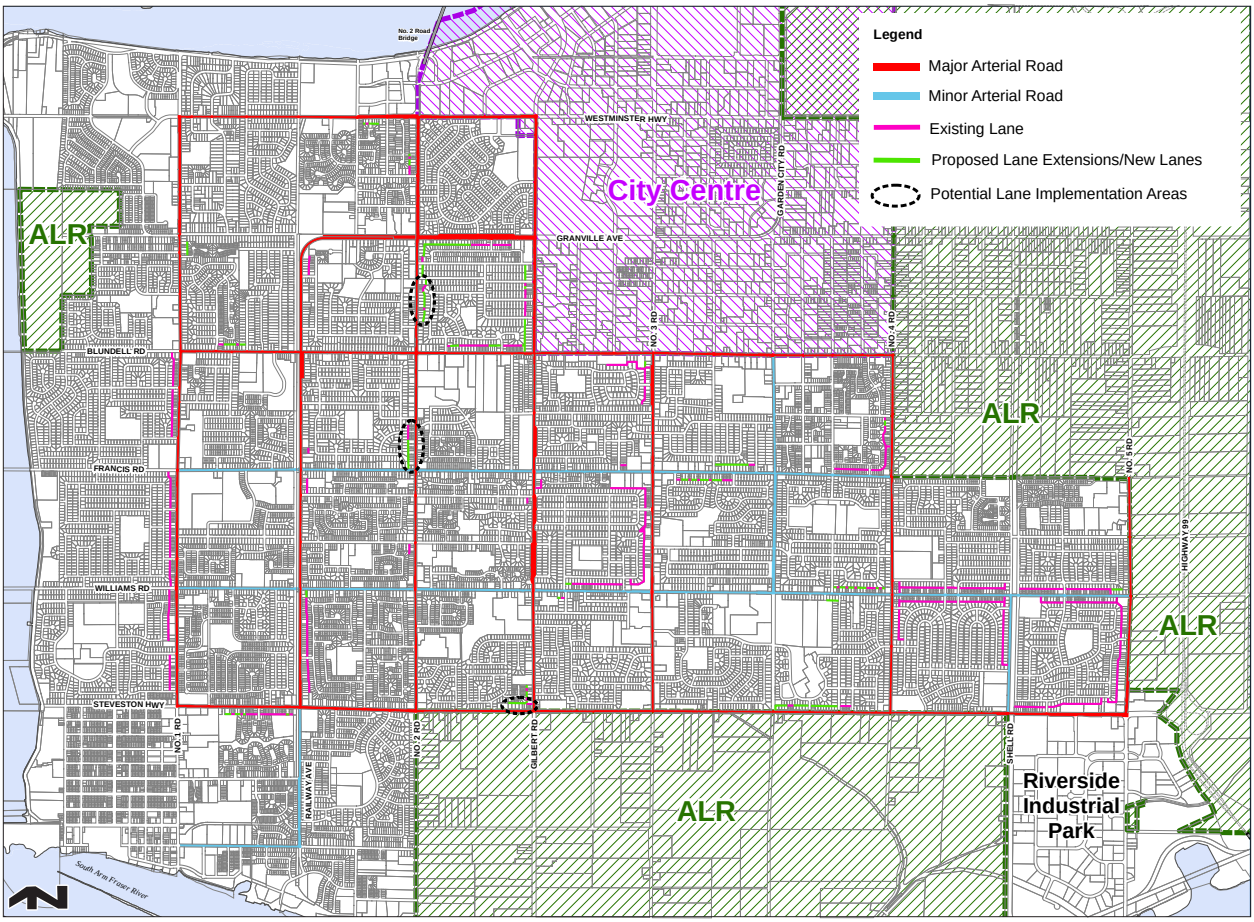
2026/02/19



8.2 Transit

Frequent Transit Network
Work with TransLink to establish a Frequent Transit Network with service:

- every 15 minutes;
- 13-15 hours per day;
- 7 days per week.

OVERVIEW:

The Canada Line rapid transit system is a planned key element in transforming Richmond's City Centre from auto- to transit-oriented, as it offers a convenient, frequent, reliable, and accessible travel choice. Beyond the City Centre, transit service needs to be enhanced to better allow all trips to be made using a refined hierarchy of services (e.g., more frequent regional and local bus routes, neighbourhood community shuttles) tailored to meet the mobility needs of the community.

OBJECTIVE 1:

Make transit the preferred travel choice of Richmond's transportation system.

POLICIES:

a) work with TransLink to establish a hierarchy of transit services:

- a Frequent Transit Network (enhanced with transit priority measures along selected roadway sections) that directly connects the City Centre, major employment areas, neighbourhood centres, and other major destinations outside Richmond (e.g., town centres, University of British Columbia, Tsawwassen Ferry Terminal);
- more convenient buses that better serve other key local destinations and activity centres (e.g., community centres, schools, parks);
- community shuttles that better serve local neighbourhoods and lower density areas;

b) in collaboration with TransLink, improve transit service through:

- developing successive Richmond Area Transit Plans that identify planned short-term and long-term transit service improvements (both bus and rapid transit) for both existing routes (e.g., increased frequency, longer hours of operation, more capacity) and future services (e.g., new rapid transit and bus routes);

- enhancing transit coverage by introducing new routes along roadways not yet served by transit, particularly in east-west and north-south directions that do not necessarily travel through the City Centre;
- developing centralized transit exchanges in the City Centre, Steveston Village and elsewhere to maximize passenger convenience for transfers and minimize vehicle circulation;
- increasing HandyDART service for people who are unable to use public transit without assistance (e.g., longer and more flexible hours of operation, more capacity);
- exploring the potential of water-based public transit services.

Transit Amenities
Provide better amenities at bus stops:
- more shelters and benches;
- landing pads for full accessibility;
- better connected sidewalks and crosswalks;
- transit information at high passenger locations.

OBJECTIVE 2:

Enhance the appeal of transit service with supporting amenities.

POLICIES:

a) for each neighbourhood shopping centre, establish weather-protected transit plazas with convenient pedestrian, rolling and bike access, wayfinding, and connections to bus stops.

b) improve transit accessibility and amenities by providing:

- landing pads to accommodate rolling (e.g., wheelchair and scooter access) including improved accessible taxi loading and unloading places;
- better connected sidewalks, marked crosswalks and pedestrian lighting;
- attractive, recognizable and comfortable shelters, benches and litter/recycling receptacles;
- weather protection;
- transit information (e.g., route maps) including real-time information at high passenger volume locations;

c) encourage retail services to locate within Canada Line stations, exchanges and neighbourhood shopping centre areas for improved passenger convenience, as well as added security;

d) implement transit priority measures (e.g., queue jumper lanes, transit-only signal phase) where warranted;

e) encourage the use of transit through developer-provided transit passes or other incentives for residents and employees in new developments;

f) seek opportunities to integrate car-share and bike-share programs with transit facilities to support a car-free lifestyle.

Implementation

TransLink is responsible for the provision of public transit service and the City will work with TransLink to facilitate service improvements. Transit amenity improvements will be undertaken through development and the City's annual Capital Program.

Projects carried out by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- demonstrated community demand (e.g., upgrade of bus stop to become accessible);
- transit service frequency and/or passenger volumes;
- sufficient right-of-way available (i.e., no property acquisition required).

Transit amenity improvements will be funded through the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.

Transit Network Map

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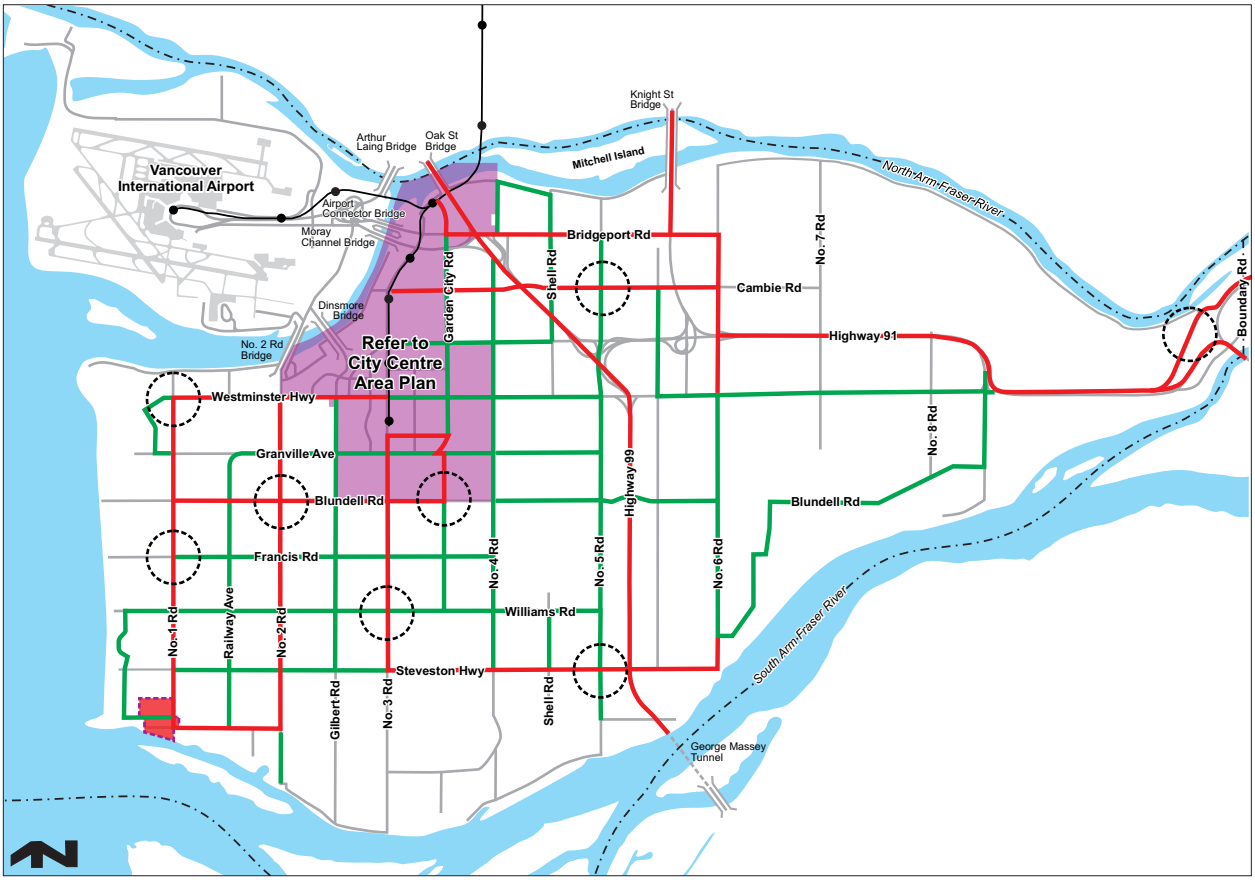


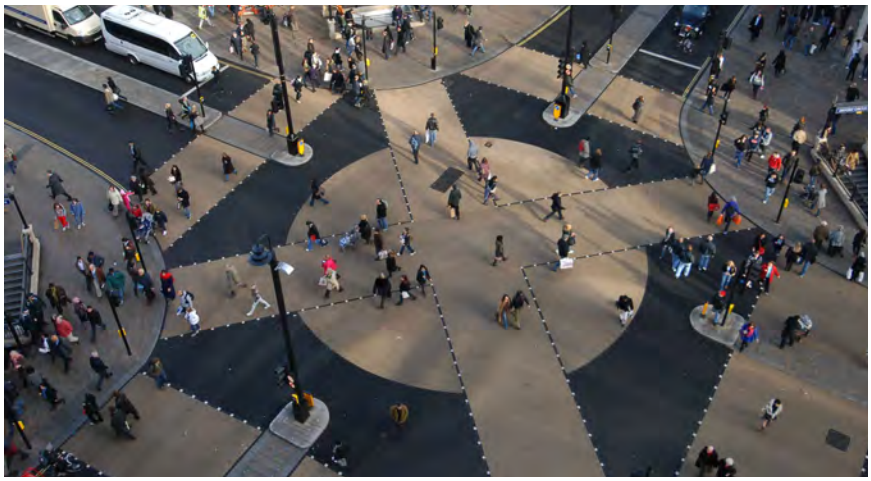
- Canada Line
- City Centre Boundary
- Future Neighbourhood Centre (subject to further planning and community consultation)
- Steveston Village
- Frequent Transit Route (key transit corridors with higher levels of all day demand in both directions)
- Local Transit Route (transit corridors with varying levels of demand throughout the day in each direction)

Note: the transit network is a long-term concept that will be refined in collaboration with TransLink through successive Richmond Area Transit Plan updates.

FACT

Shifting from private motorized transport to walking, cycling and public transit is associated with reduced cardiovascular and respiratory disease from air pollution, less traffic injury, and less noise-related stress. In addition, significant health benefits are expected from increased physical activity, which can prevent some cancers, Type 2 diabetes, heart disease, and obesity-related risks.

American Public Health Association, The Hidden Health Costs of Transportation, February 10, 2010. 15 Mar 2012.



8.3 Walking

OVERVIEW:

Walking should be an experience that is enjoyed not merely endured. The walkability of a community is a key indicator of its health, safety and inclusiveness, and the quality of its public realm. To encourage more walking, whether for transportation, a stroll or sightseeing, barriers that limit walking need to be reduced and the pedestrian environment must be safe, appealing and accessible.

A Culture of Walking

Improve the walking environment with features such as:

- gathering and resting areas including more benches;
- landscaped boulevards and trees;
- continuous weather protection (e.g., awnings) along commercial frontages;
- wayfinding and public art.

OBJECTIVE 1:

Foster a culture where people choose to walk for transportation and for health.

POLICIES:

a) create a high quality and appealing streetscape by providing:

- gathering and resting areas along streets, at bus shelters and within neighbourhood shopping centres where pedestrians are encouraged to linger and feel comfortable;
- street furniture including more benches both along the street and in areas with higher volumes of pedestrians (e.g., City Centre, neighbourhood centres);
- landscaped boulevards, trees and curbside parking where appropriate as a buffer from vehicle traffic;
- pedestrian lighting to improve safety, visibility and minimize the potential for crime;
- street-facing businesses oriented for pedestrian access;
- continuous weather protection;
- pedestrian-scale wayfinding and directional signage;
- public art that animates the environment;

b) encourage "walk to school" programs to increase community health and safety, and to reduce school-related vehicle trips.

OBJECTIVE 2:

Expand and enhance the network for walking and rolling (scooters, skates and other personal low-powered travel modes).

POLICIES:

a) provide direct walking routes to popular local destinations such as schools, neighbourhood centres, transit stops, and recreation areas;

b) where no side streets exist, provide safe opportunities for crossing at mid-block locations;

c) improve the connectivity of the pedestrian and rolling network (e.g., sidewalks, neighbourhood links, greenways, trails) by placing a high priority on filling in missing gaps (e.g., discontinuous sidewalks);

d) create new connecting pathways and links within neighbourhoods as development opportunities occur;

e) in higher volume pedestrian areas or as a traffic calming measure, extend sidewalks across streets as raised crosswalks;

f) provide appropriate measures of protection from vehicle traffic, particularly at intersections, such as:

- curb extensions to decrease crossing distance and increase visibility;
- traffic calming (speed humps, raised crosswalks, median refuges);
- special pavement markings and textures;
- priority via an advance walk phase before the green traffic signal for vehicles;
- restrict vehicles from turning right on a red light;

g) maximize the duration of the walking and rolling phase for pedestrians at all signalized intersections;

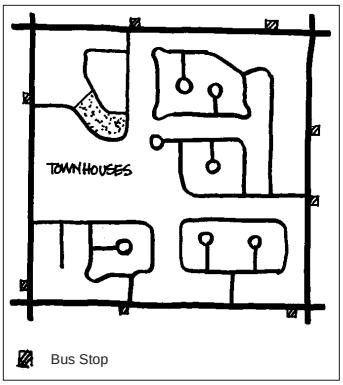
h) minimize the waiting time at traffic signals by giving immediate priority to those wishing to cross the street;

i) provide a barrier-free walking and rolling environment that is accessible for users of all abilities including:

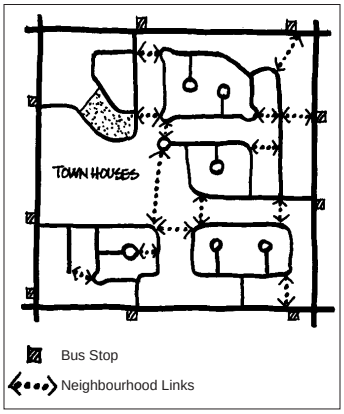
Neighbourhood Links

Establish a network of neighbourhood links that provide walking connections to:

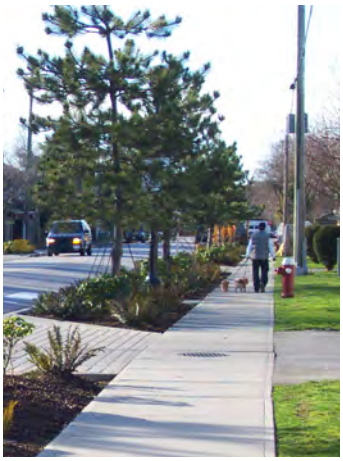
- local destinations (schools, parks, transit stops, neighbourhood centres);
- city-wide greenways.



Typical Subdivision with Limited Pedestrian Access



Enhanced Subdivision with Neighbourhood Links



- well-maintained and smooth walking surfaces that have an adequate width free of obstructions;
- curb ramps at all intersections;
- accessible pedestrian signal features at all signalized intersections and special crosswalks (crosswalks with pedestrian-activated overhead flashing amber lights);
- in high pedestrian areas, continuous detectable warning surfaces at curb ramps and street edges to delineate the pedestrian area from the street.

OBJECTIVE 3:

Expand and improve walking and rolling connections to Neighbourhood Centres.

POLICIES:

a) Within a 400 m (1,312 ft.) radius around each neighbourhood centre, enhance the pedestrian and rolling environment by providing:

- curb ramps at all intersections and in each direction of travel;
- sidewalks on both sides of the street that are continuous across driveways;
- a minimum sidewalk width of 1.5 m (4.92 ft.) and preferably 2.0 m (6.56 ft.);
- shorter street crossings via curb extensions and/or narrower roadways (e.g., remove right-turn lanes);
- pedestrian-scale lighting and wayfinding;
- resting areas with benches and other streetscape features and amenities such as trees, litter and recycling receptacles, drinking fountains, banners, planters and other landscaping and public art.

Implementation
Pedestrian and streetscape improvements will be undertaken as part of redevelopment and the City's annual capital program.

Projects undertaken by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- provides direct access to local destinations such as schools, parks, neighbourhood centres, and transit stops;
- location coincides with proposed neighbourhood links identified in Section 3.5 (Specific Richmond Neighbourhood Maps);
- completes a gap in pedestrian facilities to create a continuous link;
- degree of neighbourhood support;
- crash history and traffic volumes/speeds on the roadway;
- sufficient right-of-way available (i.e., no property acquisition required).

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.

8.4 Cycling

OVERVIEW:

Richmond's flat topography makes cycling a practical and enjoyable means of travel that also provides significant health and environmental benefits. As nearly one-half of all trips within Richmond are 5 km (3.1 mi.) or less in length—which an average cyclist can ride in only 20 minutes—cycling is a fast, convenient and fun way to get around. Increasing the number of trips by bike requires an improved cycling network that is safe and continuous, secure bike parking, seamless integration with transit, and supportive strategies that seek to promote cycling as well as educate both cyclists and motorists.

Examples of major street bike routes:

Painted

Protected

Off-street

OBJECTIVE 1:

Encourage more bike trips by providing a safe and cohesive cycling network.

POLICIES:

a) implement an expanded bike route network with designated facilities spaced at least every 800 m (2,625 ft.) that connect to major destinations within Richmond and to the rest of the region;

b) for bike routes that use streets, match the route type to the road classification whereby:

- selected arterial roads and collectors with higher traffic volumes and speeds have "major street bike routes" that comprise, either on-street bike lanes with physical separation from motor vehicles where possible, or off-street bikeways parallel to the roadway;
- local roads with lower traffic volumes and speeds have "neighbourhood bike routes" where cyclists and drivers share the roadway with no delineation of separate cycling facilities;

c) continue to update the existing major street bike network to:

- identify and prioritize missing routes, gaps and deficiencies;
- where feasible, upgrade key segments by providing a physical separation between cyclists and motorists;

d) expand the major street bike route network by:

- establishing new off-street bikeways as part of new developments including the re-aligned River Road via former CP Rail corridor (Hollybridge Way to Capstan Way), Capstan Way (River Road to Garden City Road) and Sexsmith Road-Brown Road-Cooney Road;
- establishing on-street bike routes, with physical separation where feasible, by reallocating road space (e.g., reducing travel or parking lanes);

e) establish a grid of neighbourhood bike routes that:

- use local streets and connecting off-street pathways;
- where feasible, are spaced approximately every 800 m (2,625 ft.) between every major road both north-south and east-west;
- connect directly or through branch routes to local destinations such as schools, neighbourhood centres and recreation areas;
- integrate with major street bike routes for connections to other city and regional destinations;
- have distinctive, visible and recognizable wayfinding that guides cyclists and identifies nearby attractions;
- where necessary, have traffic calming measures to moderate vehicle speeds and volumes;
- have enhanced crossings at arterial roads (e.g., pedestrian signal with bicycle detection);

Major Street Bike Network
Complete missing links in the major street bike route network including:

- new north-south route between Railway Avenue and Garden City Road;
- new east-west route between Williams Road and Granville Avenue;
- completion of Shell Road north of Highway 99.

Neighbourhood Bike Routes
Establish a City-wide network of neighbourhood bike routes that:

- use local streets and off-street pathways;
- are spaced between each north-south and east-west arterial road;
- connect to local destinations;
- integrate with major street bike routes and greenways;
- have distinctive wayfinding and enhanced crossings at arterial roads.

f) require secure and sufficient short-term and long-term bike parking at all developments and consider covered and secure facilities in areas with high demand (e.g., libraries, recreation facilities, transit stations);

g) encourage the provision of end-of-trip facilities (e.g., lockers, showers, changing rooms) in major developments;

h) work with TransLink to ensure cyclists have full access to all transit services;

i) support the implementation of a public bike-share system as part of a regional program that integrates with transit service.

OBJECTIVE 2:

Support skills training programs for cyclists, motorists and other road users (e.g., the mobility challenged).

POLICIES:

a) encourage the inclusion of cycling skills training and testing in elementary and secondary school curricula;

b) support programs offering cycling skills and traffic safety training and education for adults;

c) encourage the inclusion of education material that emphasizes the rights and responsibilities of motorists, cyclists and the mobility challenged in driver training, testing and safety education programs.

Cycling Network Map

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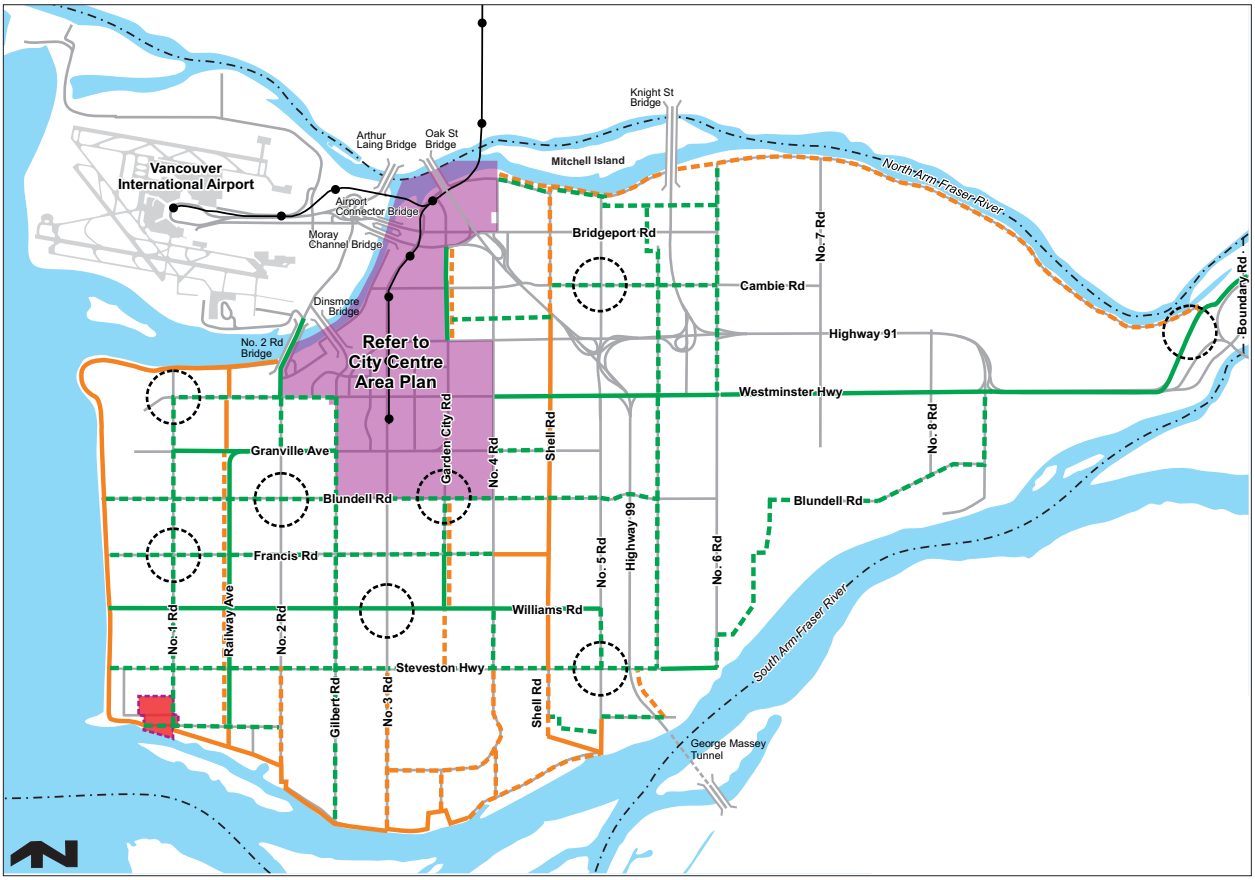

- Canada Line
- City Centre Boundary
- Future Neighbourhood Centre (subject to further planning and community consultation)
- Steveston Village
- Existing Major Street Bike Route
- Planned Major Street Route
- Existing Major Greenway
- Planned Major Greenway

See Section 3.5 (Specific Richmond Neighbourhoods) for more detail on planned cycling and rolling routes, including Neighbourhood Links.

OBJECTIVE 3:

Support legislation that enhances the safety of cyclists and other vulnerable road users.

POLICIES:

a) support legislative amendments to better protect cyclists and other vulnerable road users including:
   - increased legal protection;
   - a better definition and support of rights and responsibilities;
   - a better definition and regulation of motorized and non-motorized road users;
   - more effective regulation of vehicle design;

b) consider the implementation of 30 km/h speed limits on certain bike routes (e.g., neighbourhood bike routes on local roads);

c) delineate designated off-leash dog areas from adjacent greenways and trails used by cyclists.

OBJECTIVE 4:

Create a culture where cycling is seen as a normal, convenient and desirable travel option.

POLICIES:

a) undertake and support community events that encourage and celebrate cycling;

b) continue consultation with local stakeholders to identify and develop cycling facilities and programs;

c) support and participate in cycling incentive campaigns targeted to workplaces, households and schools;

d) support amendments to legislation to provide financial incentives for cycling as a travel mode (e.g., tax exemptions for bicycles and related safety equipment, free employee vehicle parking designated as a taxable benefit).

Implementation

Cycling infrastructure improvements will be undertaken as part of redevelopment and the City's annual capital program.

Projects undertaken by the City will be evaluated and prioritized based on the following criteria:

- within a 400 m (1,312 ft.) radius of a neighbourhood centre;
- provides direct access to local destinations such as schools, parks, neighbourhood centres, and transit stops;
- location coincides with proposed neighbourhood links identified in Section 3.5 (Specific Richmond Neighbourhoods);
- completes a gap in the cycling network to create a continuous link;
- crash history and traffic volumes/speeds on the roadway;
- sufficient right-of-way available.

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments;
- other future new revenue sources.

8.5 Transportation Capacity and Demand Management

Car-Sharing
Support and facilitate car-sharing services through:

- targeting the location of car-share parking spaces to where demand exists;
- supporting the provision of off-street car-share parking spaces in new developments;
- providing reserved on-street parking spaces.

OVERVIEW:

As the shift to a more sustainable transportation system occurs, motor vehicles will not disappear, but their use will become more strategic and targeted to the type and purpose of the trip. For private travel, driving will be considered as an option. The optimization of our existing transportation system and management of travel demand are important strategies to encourage and support the transition to a reduced reliance on cars.

OBJECTIVE 1:

Manage travel demand at its source to reduce private vehicle trips.

POLICIES:

a) support a shift to a more equitable user-pay system (e.g., region-wide road pricing, increased fuel taxes, distance-based or variable vehicle insurance rates) that reflects the true environmental, economic and social costs of driving.

b) support employer-based trip reduction programs such as:

- telecommuting, compressed work weeks, staggered shifts, and flexible work hours;
- free or discounted transit passes and incentives for cycling and walking;
- provide a ride home on an occasional basis for commuters who typically use transit, walk or bike;
- ride-sharing using company or privately-owned vehicles with preferred parking spaces;
- a reward system equivalent to the subsidized benefit of free workplace parking given in lieu of providing parking;
- the provision of secure bike parking with end-of-trip facilities;

- the reimbursement of business travel expenses for modes other than motor vehicles;

c) support the reduction of school-related vehicle trips and congestion by encouraging walk, bike and rolling to school programs;

d) in consultation with car-share companies, facilitate car-sharing as a convenient and cost-efficient alternative to private vehicle ownership through:

- targeting the location of car-share parking spaces to where demand exists with priority given to locations in close proximity to a Canada Line station, along a Frequent Transit Network route and future neighbourhood centres;
- designating on-street parking spaces for car-share vehicles;
- requiring the provision of off-street car-share parking spaces in new developments where demand exists as a tool to reduce private auto travel;

e) support revised tax policies that encourage a greater use of sustainable travel modes.

OBJECTIVE 2:

Use existing parking capacity more efficiently and as a tool to reduce private vehicle use.

POLICIES:

a) permit the provision of optional rather than mandatory parking spaces for residential developments where practical;

b) pursue mechanisms to allow developers' funding contributions towards alternative transportation modes (transit, cycling, walking) in lieu of providing vehicle parking;

c) permit reduced parking requirements for new developments located near major transit corridors and for mixed-use developments sharing parking, for example, for multiple family residential developments:

- in the City Centre, 30% reduction and up to a further 10% reduction with provision of transportation demand management measures for locations within 400 m (1,312 ft.) of the Canada Line;
- at neighbourhood centres outside the City Centre, up to 10% reduction with provision of transportation demand management measures;

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d) in concert with changing population demographics, increase the percentage of disabled parking spaces both on-street and in new developments;

e) support the use of pay parking to reduce automobile use and encourage transit, cycling and walking;

f) where pay parking is in effect, establish parking rates that are equal to or exceed transit fares and vary across times and priority locations.

OBJECTIVE 3:

Optimize the performance of the transportation system.

POLICIES:

a) expand the use of video detection at intersections to improve traffic flow and provide real-time monitoring;

b) support new vehicle technologies that reduce non-renewable energy use and air emissions (e.g., electric cars and scooters);

c) work towards providing on-line and wireless pre-trip and en route traveller information such as traffic conditions and parking locations with current capacity available.

Implementation

Transportation demand management (TDM) and capacity optimization measures will be undertaken as part of development and the City's annual capital and operating programs.

TDM projects undertaken by the City will be targeted to locations that generate a large number of vehicle trips and have adequate levels of pedestrian and cycling infrastructure as well as transit service to support a shift to alternate travel modes (e.g., in the City Centre, within a 400 m or 1,312 ft. radius of a neighbourhood centre, major employment centres).

Measures to optimize transportation capacity will be directed to key corridors such as river crossings and Richmond's portion of TransLink's Major Road Network.

Projects will be funded by the following mechanisms:

- payment of development cost charges (DCC);
- as part of required works and services for new developments;
- voluntary developer contributions;
- general City revenues;
- grants and/or cost-share funding from senior governments.

Electric Vehicles

Facilitate a transition to electric vehicles by:

- requiring new residential developments to provide charging equipment for a minimum of 20% of the parking spaces;
- supporting a network of publicly available charging stations.

OBJECTIVE 4:

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Support the adoption of plug-in electric vehicles and other vehicle technologies that can emit zero greenhouse gas and air contaminant emissions.

POLICIES:

a) support the use of plug-in electric vehicles, including bicycles and mobility scooters, through the provision of electric vehicle charging infrastructure in new residential, commercial and mixed use developments;

b) support renovations of existing buildings to facilitate the integration of electric vehicle charging infrastructure;

c) support the ongoing development of publicly accessible electric vehicle charging infrastructure networks, including expanding the City-owned network of public electric vehicle charging stations.