City Centre Transportation Plan Update

Creating a Transportation Vision

December 2007

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Contents

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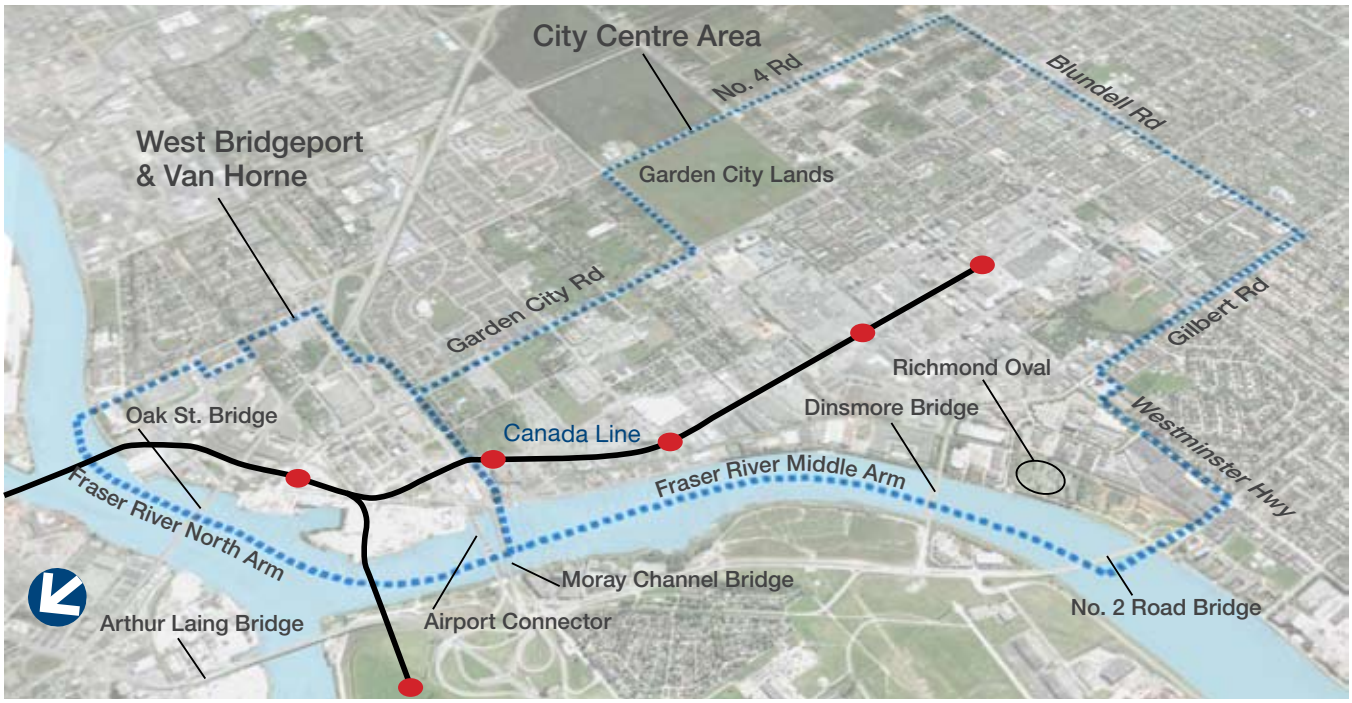
1.0 Introduction

Richmond's existing City Centre Area Plan (CCAP) was adopted in 1995 and its supporting City Centre Transportation Plan (CCTP) was adopted in 1997. In light of population growth and increasing development since that time as well as the anticipated opening of the Canada Line through Richmond's downtown, an update of the CCAP was initiated in 2006 to:

- identify a vision for the ultimate development of the downtown
- prepare a framework for development in support of the vision
- prepare a strategy for the facilitation and financing of the vision's phased implementation.



Long-Term Growth

Over the next 100 years, the City Centre's population is forecast to triple from 40,000 to 120,000 people and its employment to more than double from 30,000 to 73,000 jobs. Within the first 25 years, the population in this area is projected to reach 90,000. Guided by the goals and objectives of the CCAP Update, this growth will be managed by developing a set of "urban transit villages" based on the principles of transit-oriented development (TOD), where all residents can live, work, shop, learn, and play in a pedestrian-friendly environment; one where the automobile is seen as an option, not a necessity. The commissioning of the Canada Line rapid transit service in November 2009 through the core of Richmond's City Centre is a critical element enabling this strengthened integration of land use and transportation strategies.

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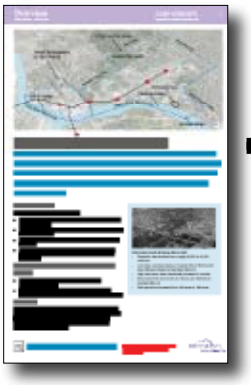
City Centre Plans

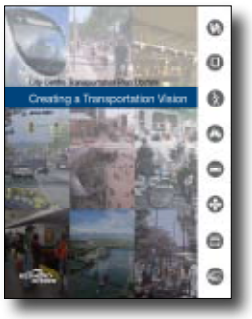
An update to the CCTP is a necessary complement to the CCAP Update to ensure that the City Centre's transportation system supports the planned growth, improves mobility and enhances the liveability of the downtown. The CCTP Update builds upon the key objectives of the 1997 CCTP to foster a more balanced transportation system that emphasizes transit, cycling and walking as the preferred modes that will accommodate future travel demand.

Phase 1 of the two-phase CCTP Update is the articulation of a Vision that describes the key features of the future transportation system in the City Centre. Recognizing the close interaction between the City Centre and the Vancouver International Airport (YVR), this Vision is consistent with the transportation components of YVR's proposed 20-Year Master Plan and reflects the collaborative planning between the City and the Airport Authority to achieve the common goal of a dynamic transportation system that supports the long-term prosperity of both jurisdictions. Phase 2 of the CCTP Update is the development of an implementation strategy that identifies the requirements, priority and potential timing of transportation improvement projects that build towards the Vision. Together, the updated CCAP and CCTP provide the framework that will guide the City's response to emerging urban issues through the 21st Century in a sustainable manner.

City Centre Area Plan



City Centre Transportation Plan



TRANSIT-ORIENTED DEVELOPMENT

fosters a lifestyle change where residents can live, work, shop, and play without the need of a car

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Vision

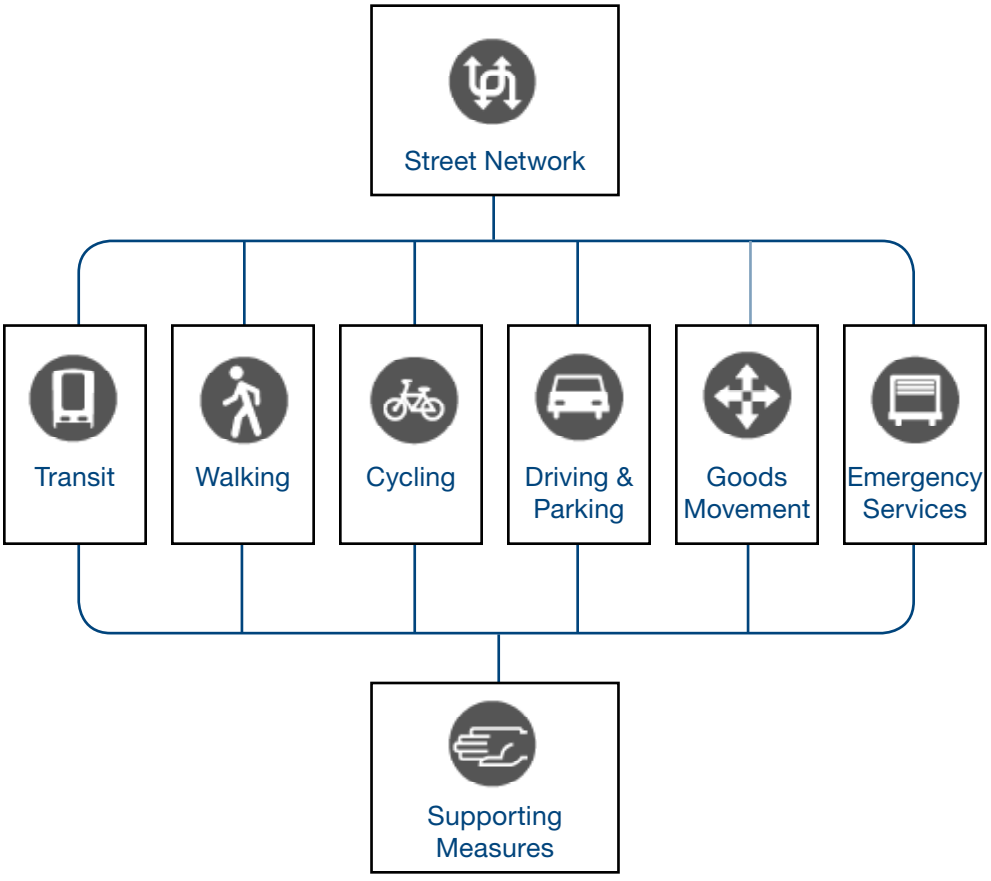
The Transportation Vision for the City Centre should support the goals and objectives of the CCAP for Richmond's downtown area and help shape the nature of travel choices being made in the future. The transportation system improvements will support a change in lifestyle where one can live, work, shop, and play in a sustainable urban environment. This Vision can be summed up as:

Sustainable mobility for a liveable, appealing and viable downtown.

This Vision statement is a synthesis of the goals and objectives of each of the components that comprise the overall transportation system:

- the underlying street network
- the six groups of transportation users
- the supporting elements and policies that help increase the efficiency of each travel mode and manage travel demand

Transportation System



Goals

To achieve this Vision, the City Centre Transportation Plan shares the same Smart Growth goals as the CCAP but with a transportation-specific focus. These goals are supported by a number of objectives for each element of the transportation system intended to guide the development, prioritization and implementation of transportation system improvements in the City Centre.

Smart Community

Meet the mobility needs of a diverse community with an accessible, continuous and integrated transportation system while minimizing the need to travel far for daily services

Build Green

Improve, optimize and promote travel modes that reduce greenhouse gas emissions, encourage active, healthy living and allow more responsible and sustainable use of valuable urban space

Build Economic Vitality

Build upon the convenience of the Canada Line and an enhanced City Centre transportation system to maximize the accessibility of businesses and ensure the efficient movement of goods and services

Build a Legacy

Enhance the quality, convenience and safety of the transportation system while mitigating the negative impacts of traffic to create a sustainable and liveable downtown for future generations

Key Success Indicators

Achieving the goals of the updated Transportation Vision will require pursuing specific complementary objectives for different users of the transportation system. The following key success indicators describe how each transportation component in our future downtown will contribute to the overall Vision.

Street Network

A redefined street network balances the needs of all road users and a completed street grid creates shorter blocks that increase accessibility to destinations and support City Centre Area Plan land use objectives

Transit

A convenient and complete transit network enables transit to become the preferred travel choice for medium to long distance trips within the City Centre and to local and regional destinations beyond Richmond

Walking

The creation of a culture of walking allows people to move in comfort, safety and dignity along shorter blocks that are pedestrian-oriented and accessible

Cycling

A safe, continuous and convenient network of bike routes that serve cyclists of all ages and abilities encourages more people to cycle more often

Driving & Parking

Driving is considered an option, not a routine choice and parking is better managed to minimize its footprint on the urban environment

Goods Movement & Emergency Services

Goods movement is efficiently accommodated and special traffic management systems minimize the response times of emergency service providers

Supporting Measures

Policies and programs are in place that make the transportation system smarter, manage travel demand and encourage a shift to more sustainable travel modes

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2.0 Street Network

A redefined street network balances the needs of all road users – pedestrians, cyclists, transit, and drivers – and creates shorter blocks that increase accessibility to destinations.

Current Challenges

- Large block sizes inhibit proposed land use densification and development
- Few continuous major thoroughfares across the City Centre
- Many existing developments are auto-oriented, featuring large surface parking lots and multiple access driveways
- Streets designed primarily to accommodate vehicular movements
- Unappealing streetscape and incomplete sidewalk and cycling networks form a hostile environment for pedestrians and cyclists

Key Directions

- Tighter street grid and streetscape enhancements to support higher density land uses and provide more direct access for pedestrians, cyclists and transit
- Hierarchy of streets that signify desired functions and character and support travel mode choices
- Simple cross-street pattern to provide alternative continuous corridors across the City Centre as well as local circulation and access
- Improved transit, pedestrian and cycling environments to help offset reliance on private automobiles and reduce the demand for increased road capacity

Street Network Hierarchy

While the primary function of all City Centre streets is to provide mobility and access, the framework identifies a hierarchy of streets that will each have distinct roles and characters to suit the varying priorities of road users.

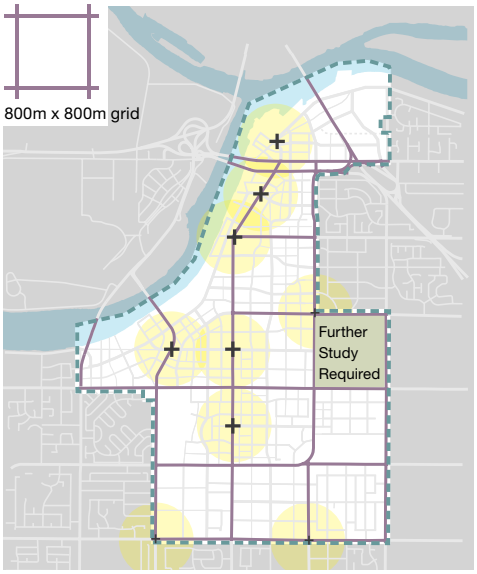
Major routes follow Richmond's existing grid and provide important cross-city and cross-downtown corridors.

Garden City Lands

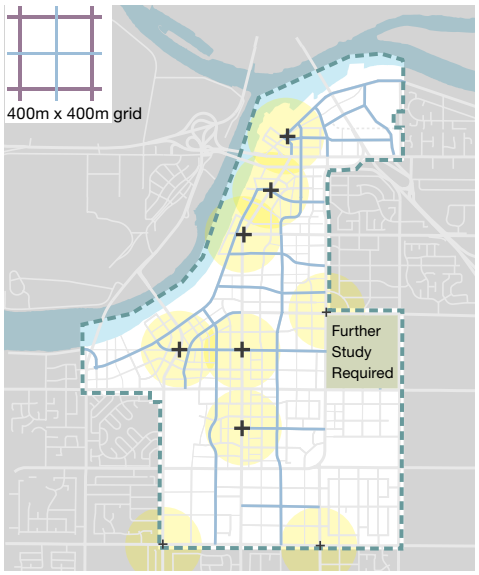
Major Open Space

Proposed Major Village Centre

Proposed Minor Village Centre

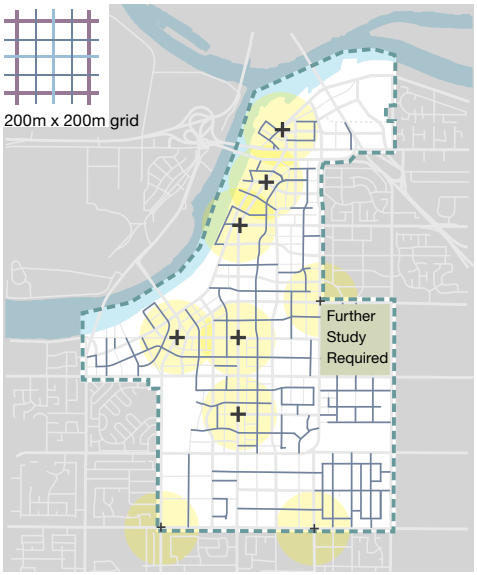


Major Thoroughfares
Streets following Richmond's existing 800 m grid provide important city and downtown through-routes for transit, bikes, and cars and prominent, attractive "addresses" for new urban development.



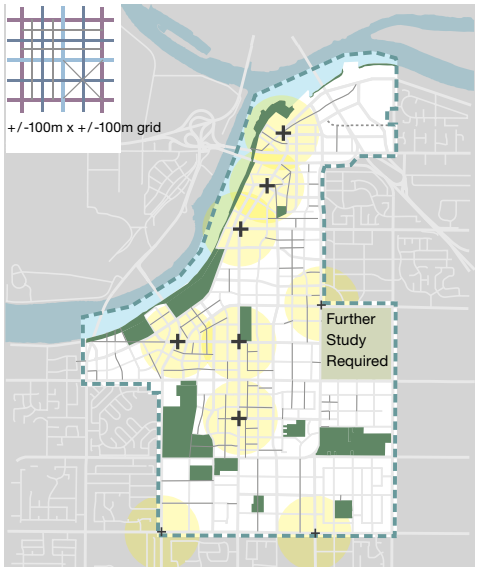
Major Streets
Secondary streets, many of which already exist, are spaced at +/-400 m (5 min. walk) intervals and provide properties with both high visibility and attractive, pedestrian-friendly settings.

Minor routes break up Richmond's super-blocks and provide the fine-grain network necessary to support a pedestrian-oriented pattern of higher density urban development.



Minor Streets

Local streets, spaced at convenient +/-200 m (2½ min. walk) intervals, place an emphasis on pedestrian comfort that makes them attractive as a residential, business, shopping, or recreation setting.



Lanes
Urban blocks are subdivided with services lanes and mews (including, in some instances, indoor pedestrian routes through shopping centres) providing access for loading, parking, and servicing and convenient mid-block, pedestrian and bike routes.

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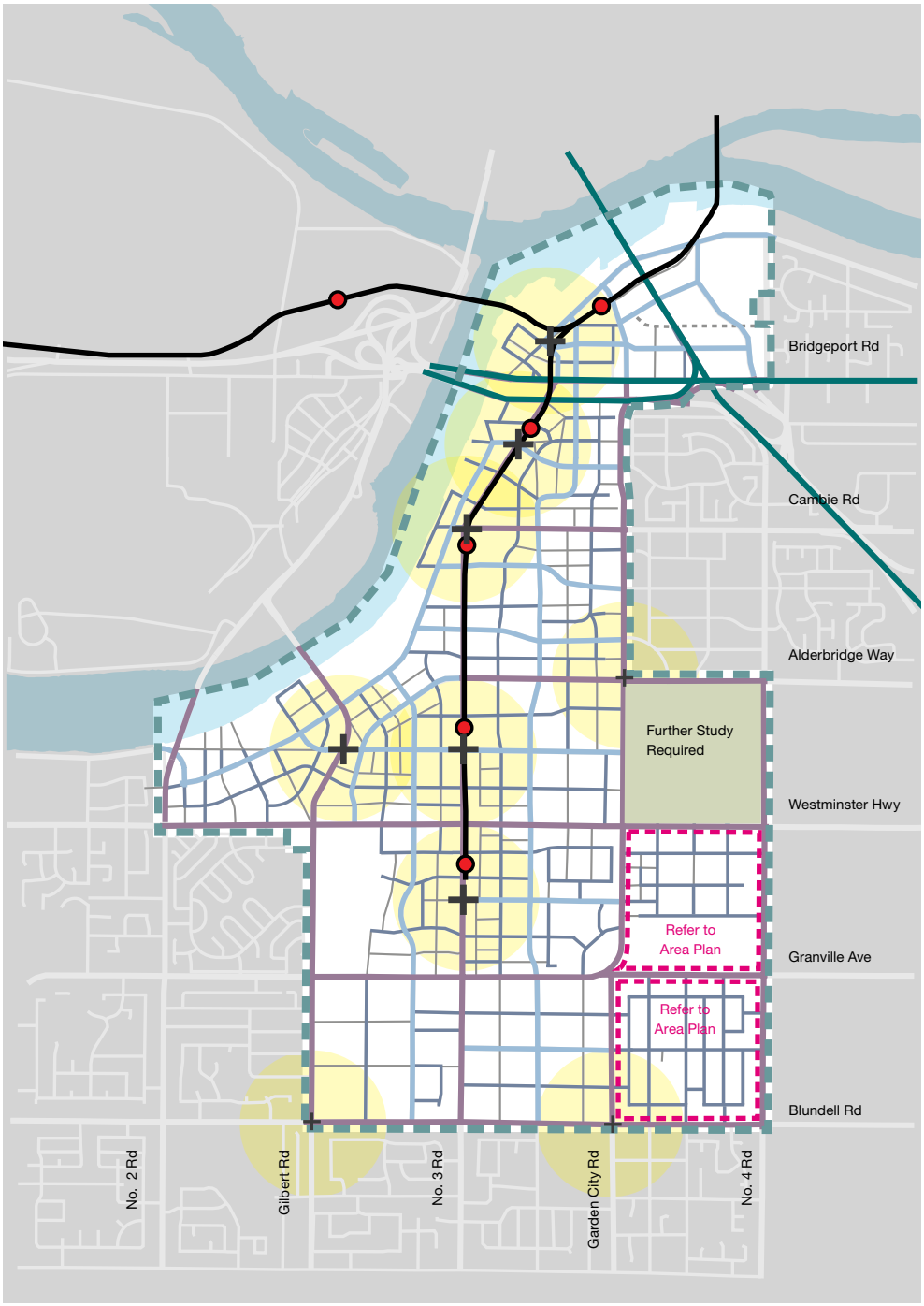
Street Network

The CCTP Vision favours walking, cycling and transit as the preferred travel modes that will best manage and balance the demands for mobility and access in the City Centre's emerging urban environment.



- City Centre Boundary
- Garden City Lands
- Provincial Highway
- Canada Line
- Proposed Major Village Centre
- Proposed Minor Village Centre
- Major Thoroughfares
- Major Streets
- Minor Streets
- Lanes
- Trails

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Street Type Features

Major Thoroughfares

Purpose: A walkable, moderate to high speed (50 - 60 km/hr) arterial situated in an urban environment and primarily intended to accommodate city-wide and City Centre traffic traveling longer distances.

A prominent "address", especially attractive to larger-scale mixed-use and commercial developments (e.g., office buildings, hotels, etc) desiring strong visual recognition.

Size: A long corridor with a minimum of 4 travel lanes, plus left-turn lanes and a landscaped centre median.

Location: Set in a grid pattern with streets spaced roughly 800 m apart (e.g., a 10 minute walk).

Parking: In some cases, on-street parking may be provided with a lay by

Pedestrians: Special measures provided to help minimize traffic impacts (e.g., noise, etc) and create a comfortable, attractive pedestrian environment (e.g., "greenways" landscaping, etc).

Bicycles: On-street bike lanes and, in some cases, off-street bike paths.

Transit: A high ridership transit corridor.

Trucks: A primary goods movement and emergency response route.

Driveways: Designed to restrict direct vehicle access to fronting properties.

Major Streets

Purpose: A walkable, moderate speed (50 km/hr or less) collector primarily intended to link the City Centre's Urban Villages and accommodate local traffic.

An important "front door" location for commercial and residential uses desiring both high visibility and a strongly pedestrian-oriented environment.

Size: A long corridor with 2-4 travel lanes plus left-turn lanes.

Location: Set in a grid pattern with streets spaced roughly 400 m apart (e.g., a 5 minute walk).

Parking: In some cases, on-street parking may be provided (e.g., at off-peak hours).

Pedestrians: A primary pedestrian route enhanced with special landscape features and furnishings.

Bicycles: On-street bike lanes preferred, but enhanced outside lanes accommodating shared bike/vehicle use may be provided in some cases.

Transit: A local transit corridor attracting higher ridership.

Trucks: A secondary goods movement and emergency response route.

Driveways: In some cases, limited direct vehicle access to fronting properties may be provided in the form of multi-property shared driveways.

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Minor Streets

Purpose: A walkable, low speed (50 km/hr or less) route primarily intended to serve fronting properties and provide for vehicle, bicycle, and pedestrian circulation within each of the City Centre's villages.

A local street attractive to commercial and residential uses desiring a comfortable, pedestrian-oriented, urban environment.

Size: A corridor of varying length with 2 travel lanes or 4 lanes in special circumstances.

Location: Set in a grid pattern with streets spaced roughly 200 m apart (e.g., a 2½ minute walk).

Parking: On-street parking typical

Pedestrians: Pedestrian-oriented streetscape design predominates encouraging lower vehicle travel speeds and, in some cases, situations where vehicles, pedestrians, and bicycles enjoy "equal" priority.

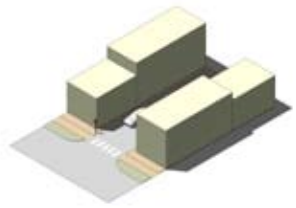
Bicycles: Enhanced outside lanes accommodating shared bike/vehicle use encouraged and, in some cases, mixed vehicle/bike traffic.

Transit: A possible local transit corridor

Trucks: Local goods movement and emergency response.

Driveways: May provide direct vehicle access to fronting properties where impacts on the pedestrian environment can be minimized.

Service Lanes & Mews



Purpose: A mid-block route, the purpose of which is to support fronting properties in the form of a:

- Service Lane: Primarily intended for vehicle access for loading, parking, and servicing purposes.
- Mews: Primarily intended as a multi-modal route accommodating a mid-block bike/pedestrian linkage (e.g., to a transit node or other major/minor destination) with limited or restricted vehicle movement.

Size: A short corridor (e.g., 5 blocks or less), 6 m to 9 m wide, and designed to allow 2 vehicles to pass.

Location: Situated to subdivide larger city blocks in one or two directions to create a grid pattern with corridors set at 100 m to 200 m intervals (e.g., 1¼ minute walk).

Parking: Limited to places for short-term stopping and, in some cases, vehicle loading.

Pedestrians:

- Service Lane: Provides access to fronting properties with mixed pedestrian/vehicle/bike traffic, but, in some cases, may include sidewalks along one or both sides of the roadway.
- Mews: Provides a pedestrian route and limited or restricted vehicle movement.parent

Bicycles:

- Service Lane: Provides access to fronting properties with mixed pedestrian/vehicle/bike traffic.
- Mews: In some cases may provide a bike route and limited or restricted vehicle movement.

Transit: Not applicable

Trucks: Primary location of goods loading/delivery for fronting properties.

Driveways: As required

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Key Street Improvements

New and improved streets create a tighter street grid that supports higher density land uses and provides more direct access for pedestrians, cyclists and transit service.

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Key Street Improvement Features

CPR Corridor
- new four-lane road with bicycle lanes and centre median
- enhances access to north Richmond for through traffic
- forms western leg of North Loop Road and enhances access to businesses
- will allow conversion of some sections of River Road to become waterfront park

Lansdowne Road Extension
- westward extension from Minoru Boulevard to Hollybridge Way
- creates critical link between Richmond Oval, No. 3 Road and the Garden City lands
- pedestrian and cycling enhancements to establish the entire length as a major urban greenway

Ackroyd Road Extension
- westward extension from No. 3 Road to Minoru Boulevard
- will align with Elmbridge Way north of Minoru Boulevard
- creates improved local access and circulation

No. 3 Road Extension & Streetscape
- realigned and extended at north end to terminate at the river's edge
- creation of waterfront plaza at terminus
- streetscape enhancement along the length of No. 3 Road through the downtown area

New North-South Corridors:
Buswell Street - Hazelbridge Way
Cooney Road- Brown Road-Sexsmith Road
- new connector sections allow creation of one continuous road
- enhances cross-town travel for all road users

New East-West Streets
- new streets extended westward from No. 3 Road to river's edge on Middle Arm
- significantly opens up access to the waterfront
- improves local access to area businesses

Russ Baker Way HOV / HPV / Transit Lane
- creation of continuous high occupancy vehicle/high priority vehicle/transit lane from south end of No. 2 Road Bridge to south end of Arthur Laing Bridge
- significantly enhances transit and airport-related operations
- encourages transit use and carpooling by giving priority to these more sustainable travel modes

North & South Loop Roads
- loop roads help local traffic access destinations in the City Centre
- North Loop Road: CPR corridor, Capstan Way, Hazelbridge Way, Leslie Road
- South Loop Road: Minoru Boulevard, Lansdowne Road, Cooney Road, Granville Avenue
- South Loop Road is complete
- north and east legs of North Loop Road are complete plus portion of the south leg

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3.0 Transit

A convenient and well-integrated transit network enables transit to become the preferred travel choice for medium to long distance trips within the City Centre and to local and regional destinations.

Current Challenges

- Traditional reliance on private automobiles for travel
- Incomplete network coverage does not serve or connect all parts of Richmond with the City Centre
- Relatively infrequent service on some routes, particularly outside of peak hours
- Transfer(s) required due to lack of direct service between some origins and destinations
- Lack of comfort and appeal at some bus stops

Key Directions

- The Canada Line establishes a strong transit presence in the City Centre
- Make transit the preferred travel choice for medium to long distance trips to help reduce greenhouse gas emissions and the traffic burden on City Centre streets
- Complement transit with higher density, mixed use developments around transit stations and transit villages that enable a car-free lifestyle
- Complete the street network to allow greater access to transit services
- Provide frequent and convenient connections between Canada Line stations, transit villages and key activity centres in the City Centre and to local and regional destinations
- Provide users with certainty on bus arrival times
- Create an attractive transit environment for passengers

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Transit Network Hierarchy

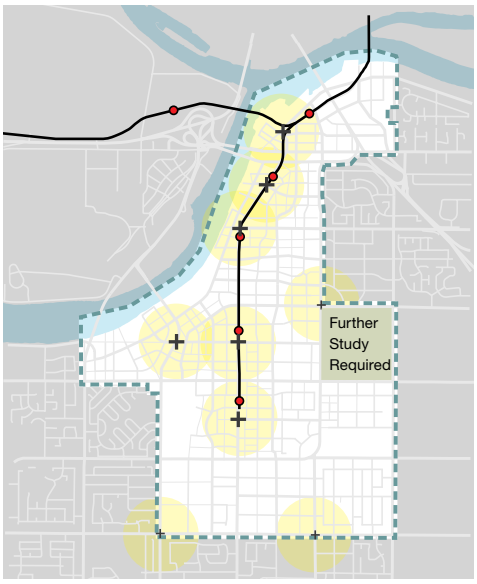
The proposed network comprises an integrated hierarchy of transit services to connect the City Centre to the rest of Richmond and the Greater Vancouver area.

Rapid transit and regional bus routes connect the City Centre to major destinations across the Greater Vancouver area.

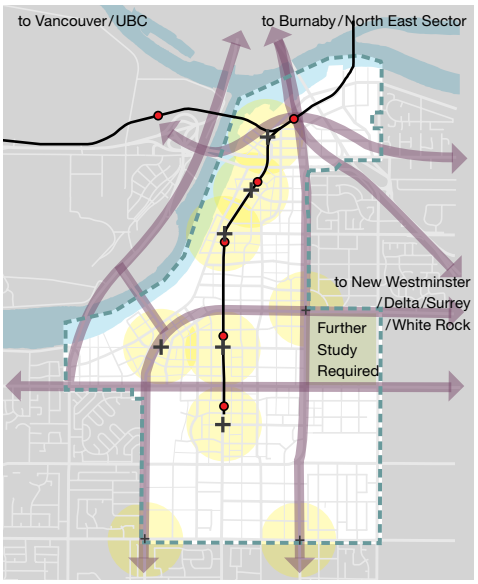
Garden City Lands

Proposed Major Village Centre

Proposed Minor Village Centre

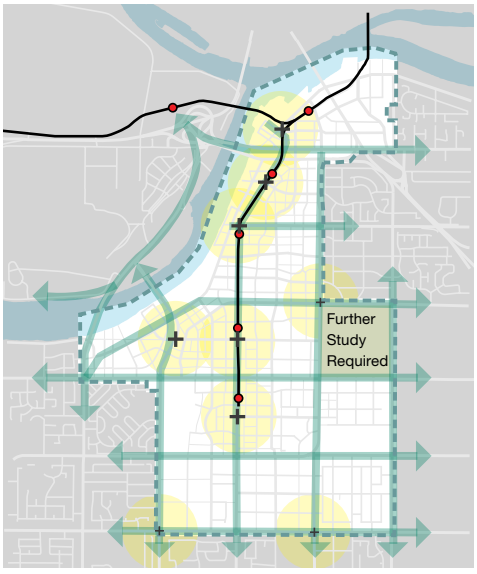


Canada Line
Rail rapid transit connecting five stations in the City Centre with Vancouver and the International Airport. Service would be frequent and high-speed.

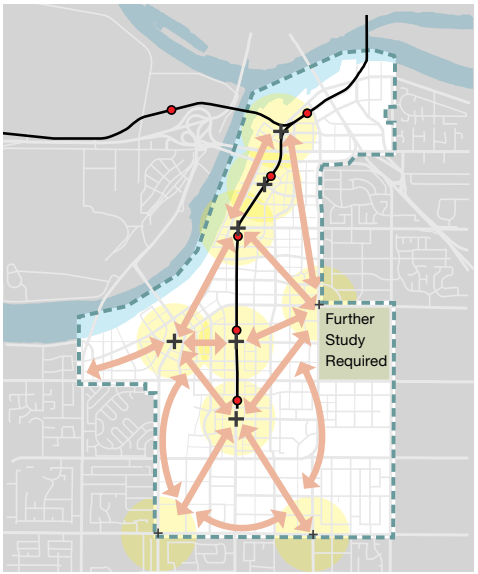


Regional Bus Connections
Higher-speed limited stop bus routes would connect other parts of the Lower Mainland to the City Centre area and the Canada Line.

Local bus routes provide circulation within the City Centre and connections to the rest of Richmond.



Local Bus Service
Local buses would serve the grid network of major thoroughfares and major streets, connecting the City Centre with the rest of Richmond.



Community Shuttles
Shuttles would connect activity centres, transit villages and the Central Business District to Canada Line stations and bus transit terminals.

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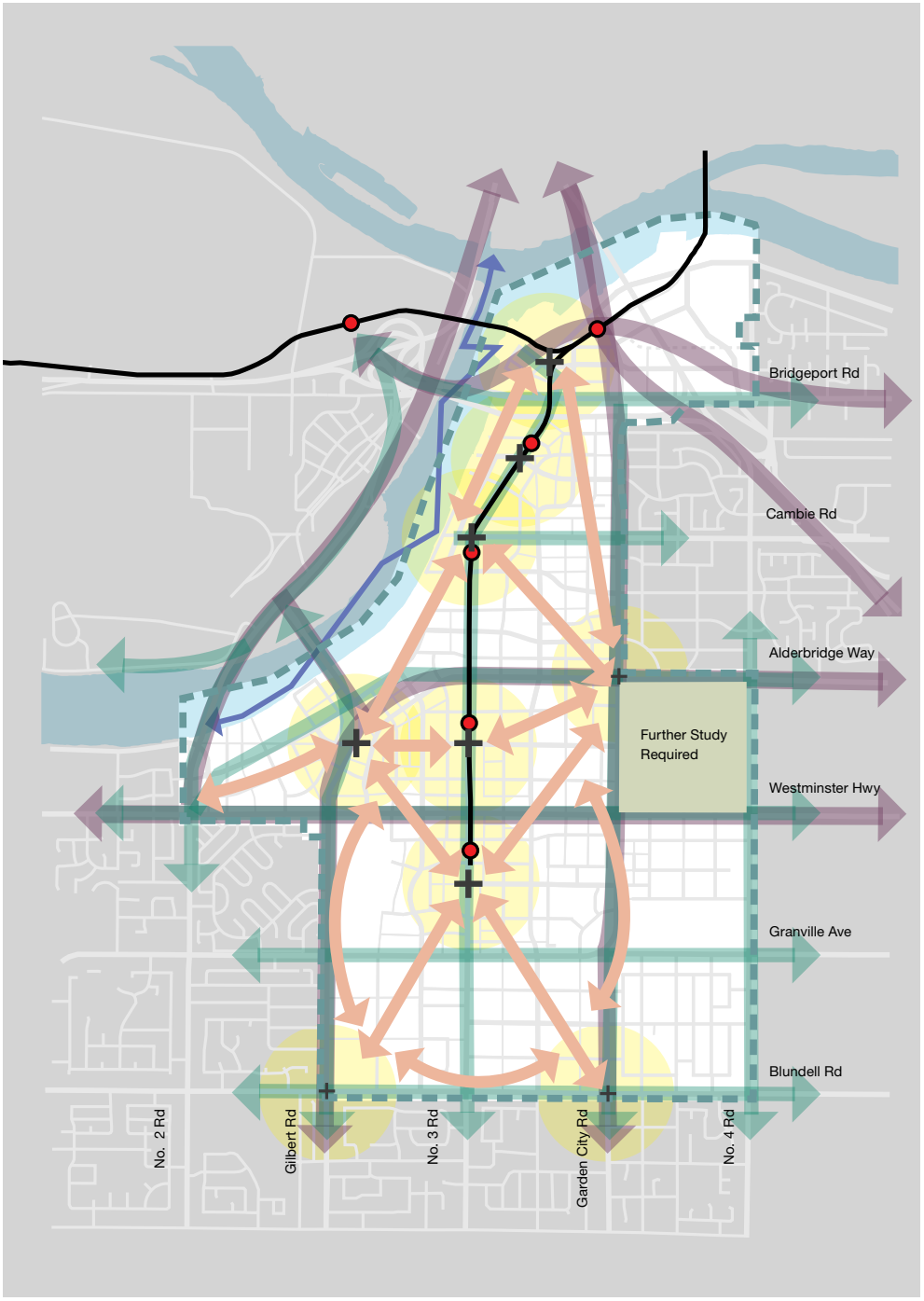
Transit Network

The Canada Line forms the backbone of transit service in the City Centre, supplemented by regional and local bus services to connect riders to the rest of Richmond and beyond.



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Transit Network Features

Canada Line Rapid Transit

- Fast, frequent, reliable service starting in November 2009
- Connects the City Centre with Vancouver and Vancouver International Airport
- Four stations initially at Bridgeport (River Road) and along No. 3 Road at Aberdeen (Cambie Road), Lansdowne, and Richmond-Brighouse (Saba Road)
- Future station at Capstan
- Opportunity for multi-modal integration with buses, cycling, walking and selected parking and drop-off/pick-up locations
- Each station to be focal point of a transit village with higher density, mixed use development

Regional Bus Connections

- High frequency and higher capacity articulated buses
- Extend coverage of Canada Line with regional bus service to other parts of Greater Vancouver
- Serve regional centres such as UBC, New Westminster, Burnaby, and Surrey
- Initially, most regional buses will terminate at Bridgeport Station
- As the City Centre grows, expanded and new direct connections will be available at Richmond-Brighouse Station and the proposed Central Business District (located between Lansdowne and Aberdeen Stations)

Local Bus Services

- Direct service to Canada Line stations (no transfers required) from rest of Richmond
- Local services oriented to terminate or pass through Richmond-Brighouse Station and to a lesser extent at Bridgeport Station
- Increased number and frequency of services as the City Centre grows to meet demand and nurture transit trip-making habits
- Expand coverage as street grid is completed to improve accessibility
- Most destinations reachable directly or with only one transfer en route

Community Shuttles

- Small, neighbourhood-friendly buses offering more frequent stops and sometimes operating on minor streets
- Routes anchored by transit villages and connecting destinations between local services

Accessible Transit

- Specially equipped vehicles designed to carry passengers with physical or cognitive disabilities who are unable to use public transit without assistance
- Seamless integrated regional door-to-door transit system with central reservation service

Transit Stations & Terminals

- Comprised of the Canada Line stations and the two off-street bus terminals located at Bridgeport and Richmond-Brighouse Stations
- High-quality design with adjacent retail services at some or all transit stations
- Convenient pedestrian access, wayfinding and connections to on-street bus stops
- Bike racks and lockers at all stations
- Park and ride at Bridgeport Station
- Pick-up/drop-off areas at all stations

Transit Villages

- Mixed-use developments where residents can live, work, shop, learn, and play in a pedestrian-friendly environment – without the need of a car
- Based around Canada Line stations plus other neighbourhood centres
- Residents within 5 to 10 minute walk of quick, efficient transit service
- Where neighbours will meet to take transit

Bus Stops

- Attractive, recognizable, comfortable, and weather-protected shelters with service information
- Generally located every 250 to 400 metres, depending on the location of activity centres, intersections and Canada Line stations

Transit Quality Initiatives

- Arrival time information at transit stations and major bus stops
- Transit information centre at transit stations
- End-of-trip facilities for operators and passengers at transit stations
- Discounted or subsidized fares for certain transit trips such as short hops within the City Centre
- Transit passes offered to residents and employees in new developments
- Transit priority measures implemented where feasible in congested areas to improve transit service

Other Transit Modes

- Water taxi/passenger ferry connections along the waterfront connecting to riverfront destinations, such as New Westminster and Marpole
- Work with TransLink to implement required water transit services
- Future streetcar or at-grade light rail system linking the Canada Line to other destinations in Richmond such as Steveston and other parts of the region south of the Fraser River
- Identified in Waterfront Master Plan

4.0 Walking

The creation of a culture of walking allows people to move in comfort, safety and dignity along shorter blocks that are pedestrian-oriented and accessible.

Current Challenges

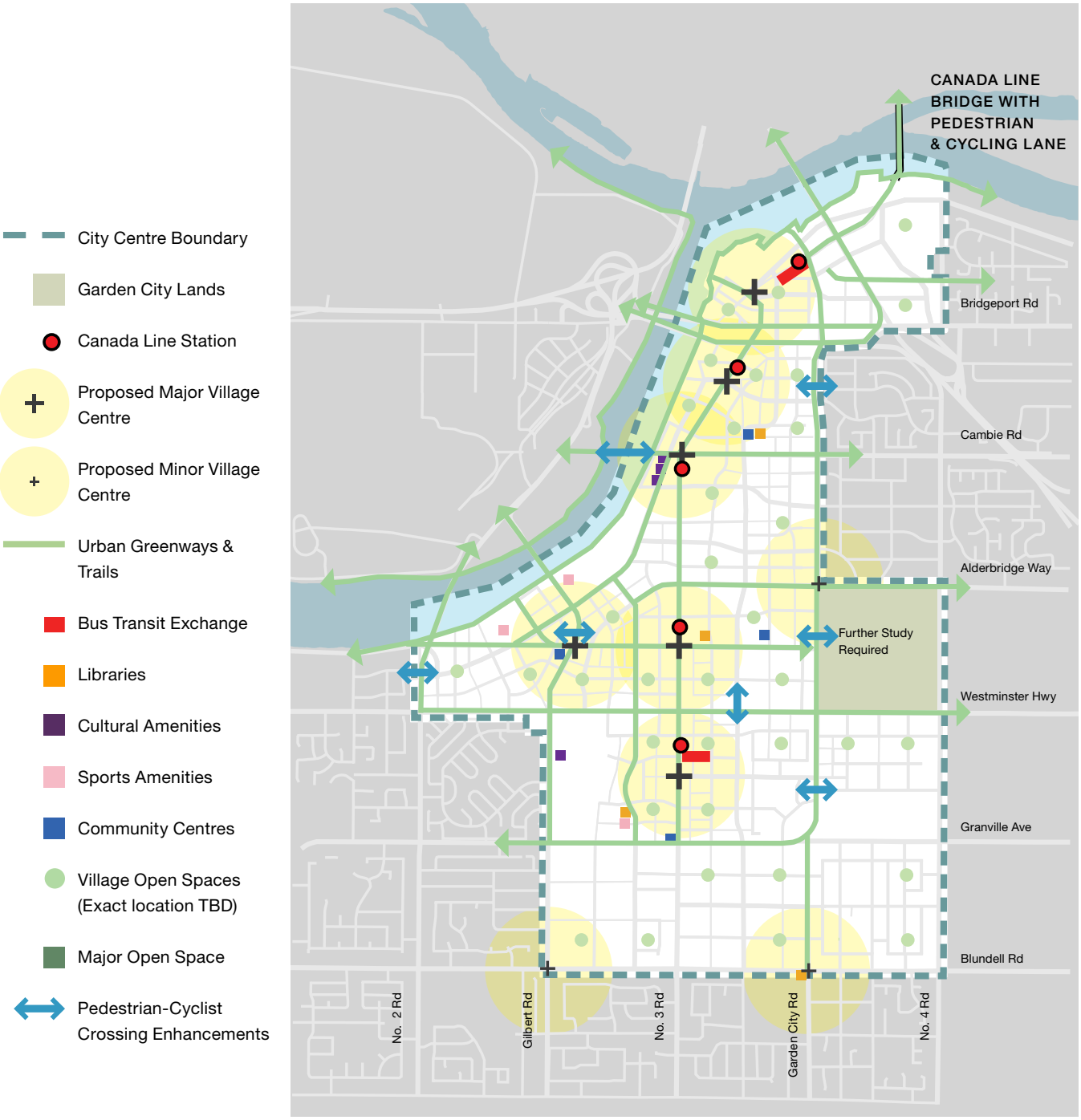
- Unappealing pedestrian environment and incomplete sidewalk network
- Long city block sizes inhibit pedestrian access to destinations
- Large setbacks of developments from the sidewalk force pedestrians to cross surface parking lots

Key Directions

- A walkable downtown that encourages and facilitates social interaction, local economic vitality, personal health, and community safety with negligible environmental impacts
- Shorter city blocks and new pedestrian mews as the street network matures
- Appealing and animated pedestrian streetscapes with resting plazas and gathering places
- Increased interesting street-facing building fronts that have continuous weather protection
- A wayfinding system to direct pedestrians to key amenities, transit stations and bus stops
- Pedestrians favoured in traffic control at intersections
- Universal accessible design that allows all pedestrians to travel independently

Key Walking Corridors

A city's walkability is one of the most important measures of the quality of its public realm, and of its health and vitality.



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Walking Environment Features

Street Network

- Every street is walkable
- All streets will have sidewalks, preferably 2.5 m wide
- Narrower street crossings
- Shorter city blocks
- Conveniently timed pedestrian signals
- Street trees, boulevards and pedestrian lighting
- Increased curbside parking to act as a buffer from traffic

Streetscape

- Creative, fun, welcoming, and pleasant environment for pedestrians
- Landscaping, artwork, interesting street furniture
- Ground level businesses oriented to pedestrian access from the sidewalk
- Continuous store awnings to provide weather protection
- Open spaces, gathering places and resting areas

Transit Villages & Connections

- Transit schedules and route information available at transit stations and bus stops
- Transit stops conveniently located and easily recognizable
- Sufficient space at transit stops for waiting passengers and other pedestrians
- Covered walkways provided between transit locations and village centres
- Transit villages incorporate pedestrian facilities linked with transit
- Transit villages provide one-stop shopping

Urban Greenways & Trails

- Enhanced streetscape features along urban greenways and within pedestrian precincts around transit villages
- Improved dyke trail along the Middle Arm
- Separate pedestrian and bike lane on Canada Line bridge over North Arm of Fraser River
- Proposed pedestrian/cycling bridge from west end of Cambie Road to Sea Island

Accessibility

- Enhanced use of universal accessible design features such as accessible signals and tactile wayfinding
- Lighting on trail networks where feasible
- Priority given to pedestrian access and safety through parking lots

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5.0 Cycling

A safe, continuous and convenient network of bike routes that serve cyclists of all ages and abilities encourages more people to cycle more often.

Current Challenges

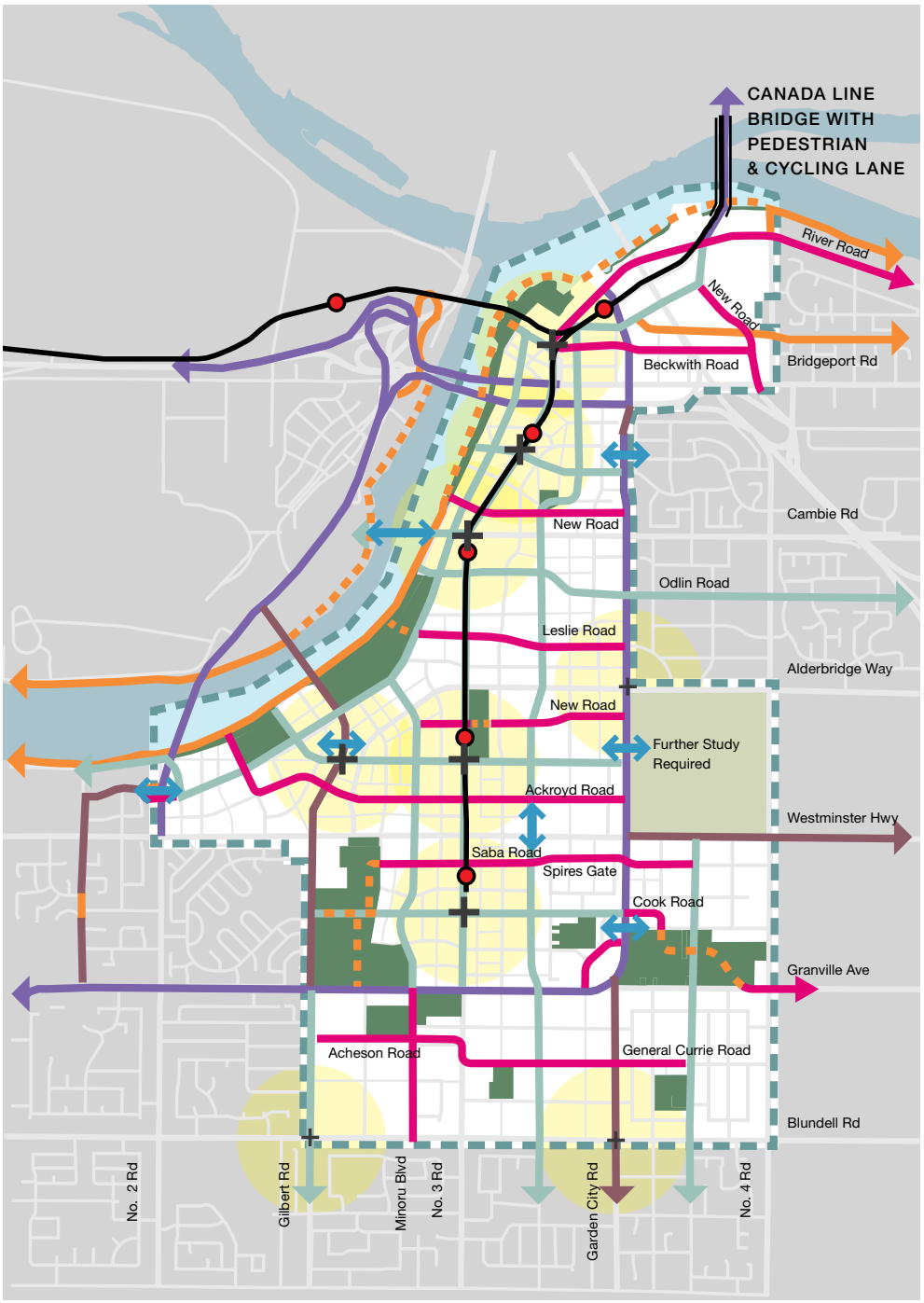
- Lack of continuous north-south and east-west routes across the City Centre
- Establishing functional cycling facilities on existing streets that connect destinations
- Providing safe facilities through barriers such as interchanges with Highway 99, bridges and high traffic volume intersections
- Providing connections to, and integration with, transit services
- Minimizing conflicts between different users of the streets within a dense urban environment

Key Directions

- Facilitate cycling so that it is faster and easier to cycle than to drive
- Every street will accommodate bikes, but some streets are enhanced with designated cycling facilities
- Form of cycling facility matched to street type (e.g., bike lanes on major thoroughfares, shared lanes on minor streets)
- Physical separation of cycling facilities from vehicle traffic on major thoroughfares and major streets, where feasible
- Local cycling connections to Canada Line stations and transit villages
- Secure end-of-trip facilities at all transit stations and transit villages

Cycling Network

Cycling will be actively encouraged as a legitimate and viable transportation choice by safely integrating cyclists within the transportation system.



- City Centre Boundary
- Garden City Lands
- Canada Line
- Proposed Major Village Centre
- Proposed Minor Village Centre
- Trails (Existing)
- Bike Lanes (Existing)
- Designated Routes (Existing)
- Proposed Key Routes
- Major Open Space
- Proposed Bicycle-Friendly Routes
- Proposed Off-Street Multi-Use Paths
- Pedestrian-Cyclist Crossing Enhancements

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Cycling Network Features

Accommodation on Street Network

- All streets accommodate bikes and selected streets are enhanced with specific facilities
- Match cycling facility with street type
- Minimize potential conflicts and safely accommodate multiple road users such as transit service and cycling on the same street

Designated Cycling Routes

- New continuous north-south and east-west routes across the City Centre
- Designated routes feature signage, pavement markings and bicycle-friendly traffic signals
- Cycling routes physically separated from vehicle traffic on major thoroughfares and major streets where feasible

Trails & Bridges

- Integration of on-street network with off-street trails and pathways
- Off-street trail/cycling path system linking key City Centre destinations (eg. community facilities, schools)
- Improved dyke trail along the Middle Arm
- Separate pedestrian/bike lane on Canada Line bridge over North Arm of Fraser River
- Proposed pedestrian/cycling bridge from west end of Cambie Road to Sea Island

End-of-Trip Facilities

- Secure end-of-trip facilities at civic sites, parks, transit villages and other activity centres
- Bylaw requirement for all new developments to provide short-term and long-term bicycle parking

Integration with Transit

- Bicycle accommodation on Canada Line and all buses
- Bicycle accessible transit stations and bus stops
- Bike racks and bike lockers at all transit stations and terminals

Promotion & Education

- Safe cycling courses for children and adults
- Area-wide events to promote cycling for commuting, shopping and recreation
- Education and enforcement programs to encourage sharing the road

6.0 Driving & Parking

Driving is considered an option, not a routine choice and parking is better managed to minimize its footprint on the urban environment.

Current Challenges

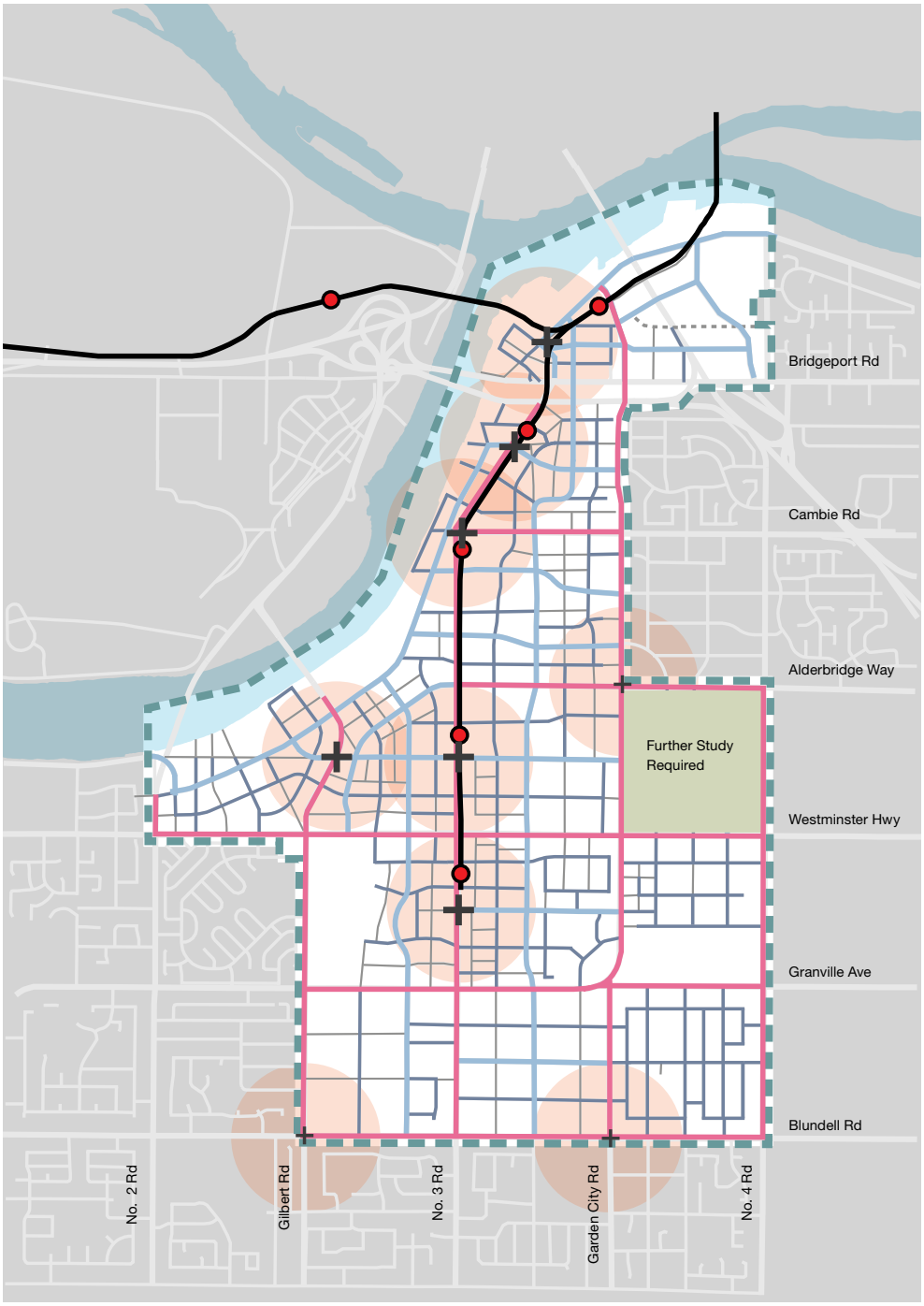
- Reversing our current lifestyle of traditional reliance on private vehicles for travel
- Broadening our concept of "freedom to travel" to include other modes besides private vehicles
- Few major thoroughfares that form continuous paths across the City Centre, which concentrates vehicle travel on a limited number of streets
- Alternative travel modes such as transit and cycling are not competitive with driving in terms of travel time, availability of services and facilities, and convenience
- Private parking lot management discourages shared use

Key Directions

- Shift a greater share of travel demand into transit, walking and cycling to reduce greenhouse gas emissions and traffic impacts
- Encourage options to private vehicle ownership such as car-sharing and home delivery
- Increase the capacity of the road network without significant road widening
- Tighter transportation network grid to minimize unnecessary circulation
- Meet parking demand for parking more efficiently and with less impact on urban land
- Balance reduced parking strategies (as an incentive to lower auto usage) with accessible, short-term parking in designated areas that support businesses
- Promote the concept that having a parking space is not necessarily a part of home ownership
- Encourage business to allow customers to park at one location while shopping at multiple nearby establishments

Parking Plan

Public and private parking will be a combination of on-site and precinct parking with curbside facilities in selected areas.



City Centre Boundary

Garden City Lands

Canada Line Station

Proposed Major Village Centre

Proposed Minor Village Centre

ON-STREET PARKING

Limited locations with parking lay-by

Potential off-peak

24-hour

Reduced on-site parking requirements for new developments

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Driving & Parking Features

Future Street Network

- Hierarchy of streets that signify their functions and meet growing travel demand
- Complete missing east-west and north-south links in street network
- Shorter city blocks with more side streets
- Major and minor streets provide local access and reduce local traffic on major thoroughfares
- Minor streets and lanes provide parking, driveway access and loading zones

Driving Environment

- Operational enhancements such as traffic signal timing optimization
- Real-time traffic and parking information signs in key locations
- Encouragement of “car-free” incentives and supporting services, such as taxis and home delivery of goods
- Limited widening of streets except to accommodate other travel modes

On-Street Parking

- In mews and some lanes for short-term
- Full-time curbside parking on minor streets
- Possible on some major streets and thoroughfares during off-peak periods or with the provision of lay-bys
- Commercial areas regulated via parking meters with time limits to encourage turnover of supply
- Areas adjacent to transit stations and terminals may allow short-term loading for passenger pick-up and drop-off but no long-term parking

Off-Street Parking

- Public parking sites operated by the City with an on-site/remote payment metering program
- Parking lots accessed from lanes (preferred), and minor and major streets (when necessary) but not from major thoroughfares
- Multiple developments may share common parking lots or garages
- Reduced parking stall dimensions and more small car parking spaces
- Reserved parking spaces for car-share programs
- Parking facilities designed to Crime Prevention Through Environmental Design (CPTED) guidelines

Parking Supply & Management

- Reduced parking supply requirements
- Maximum rather than minimum number of parking spaces
- Shared district-wide public and private parking with prominent directional signage
- Parking spaces optional rather than mandatory for residential units
- Encourage use of other travel modes such as providing car-share vehicles and transit passes in lieu of parking spaces

7.0 Goods Movement & Emergency Services

Goods movement is efficiently accommodated and special traffic management systems minimize the response times of emergency service providers.

Current Challenges

- Maintaining convenient and timely access for goods movement and emergency services as the City Centre grows
- Reducing potential conflicts with other road users including pedestrians, cyclists and transit

Key Directions

- Major thoroughfares operate as primary goods movement corridors with no direct driveway access to smaller properties
- Delivery and loading activities primarily occur in service lanes to minimize impact on traffic flow and potential on-street parking
- On-street loading zones consolidated as much as possible
- Common parking and loading areas shared by several businesses
- Major thoroughfares include signal pre-emption for emergency service access
- Future emergency service facilities sited to minimize response times
- Future street network creates more opportunities for alternative forms of police patrol, such as on foot or bike
- General traffic growth is managed to maintain efficient and timely movement of goods and emergency services

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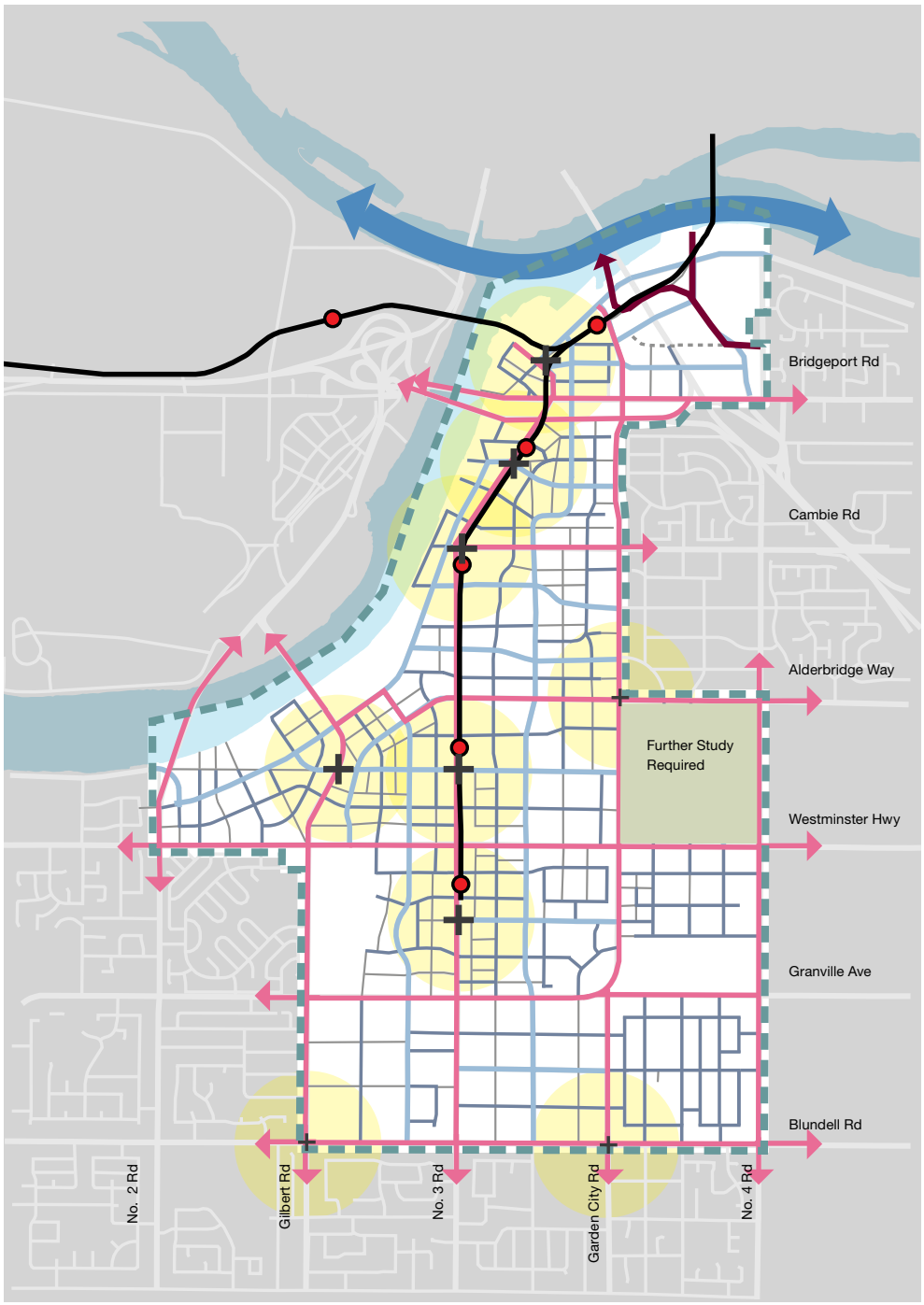
Goods Movement & Loading

Road, rail and marine good movement networks are complemented by on-site loading facilities as well as curb-side loading zones for local pickups and deliveries.



City Centre Boundary

Garden City Lands

Canada Line

Proposed Major Village Centre

Proposed Minor Village Centre

Potential Marine Route

Rail Network

Primary Goods Movement Corridors

STREET LOADING

Potential off-peak

Limited on-street

Primarly in Lanes & Minor Streets

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Goods Movement & Emergency Services Features

Goods Movement Corridors

- Major thoroughfares and streets act as primary goods movement corridors
- Minor streets and lanes provide access for local deliveries and loading
- Existing rail corridors serving Bridgeport industrial area may continue
- Potential for short-sea shipping route along North Arm of the Fraser River

Loading Locations

- Off-street loading docks within parking garages or lots for areas of high truck activity
- Service lanes and mews will be the preferred street locations
- On minor streets adjacent to areas where on-street parking is permitted
- On some major streets in off-peak periods but never on major thoroughfares
- Construction loading zones provided to facilitate pick up and drop off of construction materials and minimize traffic disruption

Emergency Services

- Priority given to emergency service access
- Major thoroughfares include signal pre-emption
- Parking regulations to ensure lanes and mews are kept accessible
- Consider response time requirements for emergency services when identifying priority routes

Planning & Policy

- Liaison with Provincial Emergency Program (PEP) to designate and protect local disaster response routes as part of regional network
- Site future emergency service facilities to minimize response times
- On-going liaison with stakeholders (e.g., trucking industry) to enhance goods movement

8.0 Supporting Measures

Policies and programs are in place that make the transportation system smarter, manage travel demand and encourage a shift to sustainable travel modes.

Current Challenges

- Full benefits of potential measures requires co-ordinated approach among all levels of government and stakeholders
- Some technology-based measures are still in the development stage
- Existing lifestyles and policies (e.g., fixed work hours, few tax incentives for transit use) impede implementation

Key Directions

- Greater use of Transportation Demand Management (TDM) measures, which are strategies that change travel behaviour (how, when and where people travel) in order to increase transportation system efficiency
- Greater use of Intelligent Transportation Systems (ITS) strategies, which is the use of information technologies (GPS, telecommunications, the Internet) to improve transportation performance and efficiency
- Work with local, regional, provincial, and federal agencies to collaboratively implement initiatives that are outside the direct control of the City

Potential Supporting Measures

Incentives to Use Other Modes & Reduce Driving

Key Measures

- Car-share and car co-op programs that reduce private vehicle ownership & use
- High Occupancy Vehicle (HOV) lanes that give priority to transit and rideshare vehicles over other traffic
- Ride matching services to enable carpooling
- Taxi service improvements
- Work with schools and the Way to Go! Program to establish “Walking School Buses”
- Enhance pedestrian and streetscape environment to remove barriers to walking
- Community and employer transit pass programs
- Encourage creation of Transportation Management Associations, which are private, non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall or industrial park

Additional Measures

- Equitable transit fare structure and more convenient fare payment such as electronic “smart” cards
- Bike-share program of network of distributed bikes available for nominal or free use
- Integration of multiple travel modes into single, convenient, operating and payment system (typically using “smart” cards) to improve transportation options
- Home delivery of goods and services
- Marketing and education programs to promote other travel modes

Workplace TDM Measures

Key Measures

- Guaranteed ride home on an occasional basis for commuters who typically use alternative travel modes
- Free or discounted transit passes
- Provision of secure bike parking with showers and lockers
- Ridesharing using company or privately owned vehicles with preferred parking
- Cash out amount equivalent to subsidized benefit of free workplace parking given in lieu of providing parking

Additional Measures

- Alternative workplace schedules such as flexible work hours, compressed work week and staggered shifts
- Telecommuting and tele- or videoconferencing
- Company shuttle between transit station and workplace
- Reimbursement of business travel expenses for modes other than vehicles

Parking & Land Use Management

Key Measures

- Park and ride lots at transit stations and terminals
- Reduced and maximum parking bylaw requirements
- Charge users directly for parking
- Free or discounted parking rates for rideshare vehicles
- Encourage shared parking
- Smart Growth and transit-oriented development with mixed uses (residential, commercial, business) to create liveable and complete communities

Additional Measures

- Variable parking rates that are higher for peak locations and times
- Parking rates that are equal to or exceed transit fares
- Manage and price the most convenient parking spaces to favour priority users
- Minimize discounts for long-term parking passes
- Encourage businesses to price parking

Policy Measures

Key Measures

- Universal accessible design to ensure barrier-free access to transportation for all users
- Revise tax policies to encourage sustainable travel modes
- Increased fuel taxes
- Distance-based or variable vehicle insurance rates
- Tax exemption for employer-provided transit benefits

Additional Measures

- Region-wide road pricing (e.g., tolls, congestion charge)
- Allow strategic congestion of roadways to encourage mode shift
- Mandatory region-wide bylaws that require employers and developers to reduce vehicle trips to specific locations
- Location-efficient mortgages, where banks provide more favourable terms to borrowers who choose to live where they do not need a vehicle

ITS Strategies

Key Measures

- On-line and wireless pre-trip and en route traveller information such as traffic conditions and parking locations with current capacity available
- Traffic signal co-ordination
- Transit priority at intersections
- Participation in regional transportation management centre

Additional Measures

- Use of telecommunications as a substitute for physical travel (e.g., telecommuting, distance-learning, on-line shopping)

If you have any questions about the City Centre Transportation Vision, please contact:

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www.richmond.ca