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# Community In Motion

VICTORIA'S URBAN TRANSPORTATION SHOWCASE PROPOSAL





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DETAILED PROPOSAL SUBMITTED TO TRANSPORT CANADA,  
ENVIRONMENTAL AFFAIRS,

BY THE CITY OF VICTORIA

IN PARTNERSHIP WITH NEIGHBOURING MUNICIPALITIES AND  
COMMUNITY ORGANIZATIONS.

MAY, 2003

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# C o n t e n t

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# Section One

## EXECUTIVE SUMMARY





Victoria’s Urban Transportation Showcase partners propose a range of strategies for transit, walking and cycling that will shift travel choice, reduce emissions, and improve efficiency on key corridors identified in the regional growth strategy.

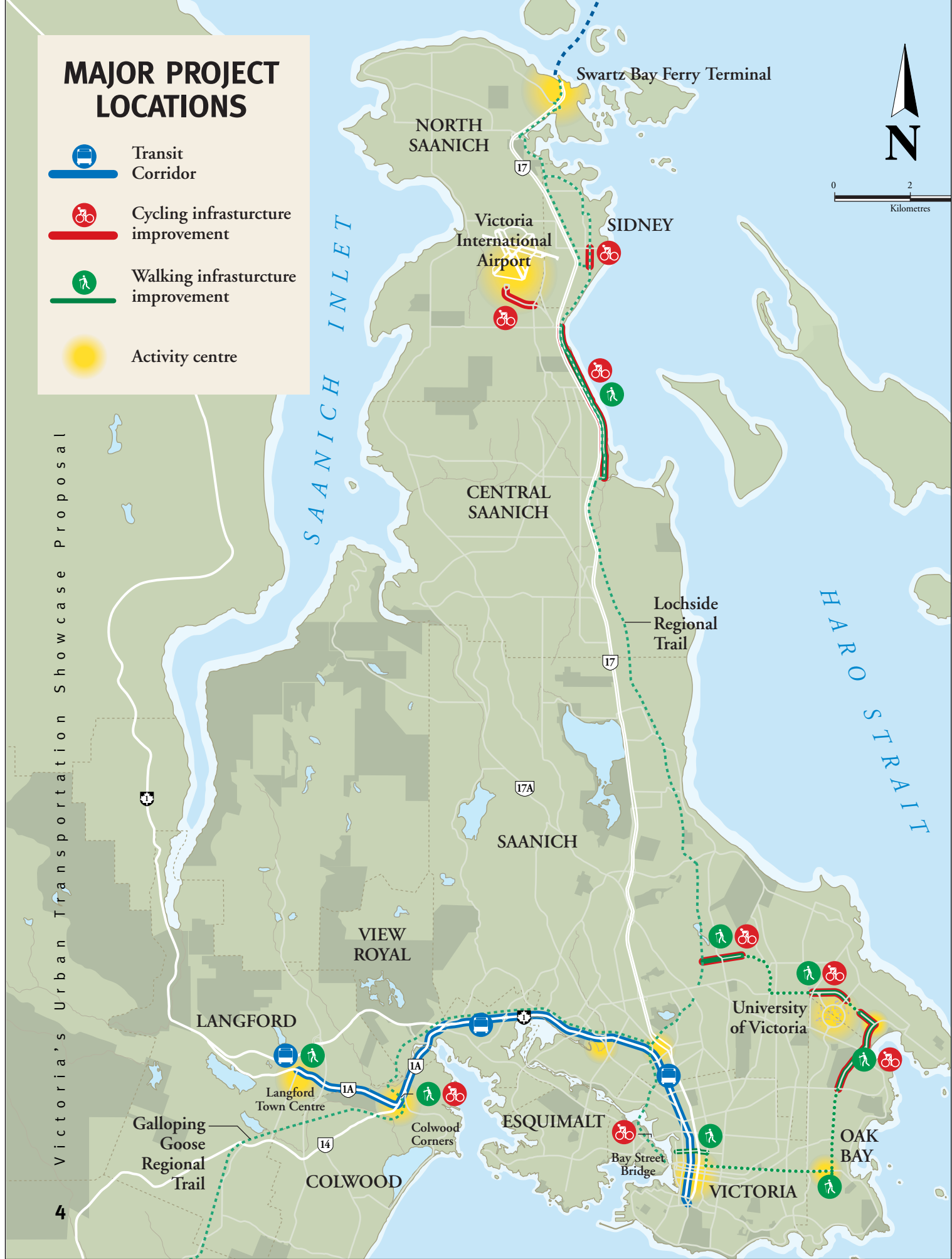
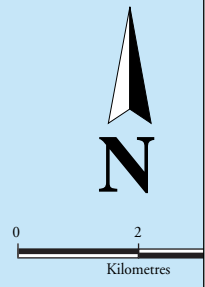
This proposal reflects aspirations to improve personal mobility through a wide range of choices that reduce automobile reliance. Broadening choice entails modifying existing transport systems, altering ingrained attitudes, and changing public behaviour. The plan presented here meets Transport Canada objectives to build on existing initiatives that improve local conditions, demonstrate feasible, cost-effective approaches to change, and offer greenhouse-gas reduction tools that are transferable to other communities.

Victoria’s Showcase proposal utilizes strategies and applications built on five underlying factors:

- Integrating transportation network improvements into a sustainable land-use planning framework favouring compact growth and employment centres served by multi-modal transport corridors,
- Building local initiatives into a compelling program of tangible improvements, developing enthusiasm for sustainable choices, and promoting new partnerships,
- Exploring innovative synergies among active modes of transportation by reinforcing transit’s compatibility with walking and cycling,
- Incorporating public education, outreach and social marketing initiatives into infrastructure programs to optimize the behaviour change potential of Showcase measures,
- Factoring measurement, demonstration and replication into the design and delivery of every aspect of the Showcase program.

# MAJOR PROJECT LOCATIONS

-  Transit Corridor
-  Cycling infrastructure improvement
-  Walking infrastructure improvement
-  Activity centre



Victoria's Urban Transportation Showcase Proposal





# Section Two

## SHOWCASE OVERVIEW

Greater Victoria is a metropolitan area comprising 350,000 people in 13 municipalities located on the southern tip of Vancouver Island. Built around a compact harbour supporting many transportation links, Victoria is the provincial capital and a centre for government, the military, education, services, tourism, and a robust technology sector. Through the Capital Regional District (CRD), a regional growth strategy (RGS) is pending. A regional transportation plan addresses strategies for trucking, transit, cycling, and demand management. The RGS identifies a walkable downtown core and eight pedestrian-friendly town centres as focal points for future population growth. Supporting this is high-quality transit service, improved cycling and walking routes, and demand management programs at major employment centres. Population is predicted to reach 450,000 over the twenty-five-year planning horizon (2026) of the RGS.

Over the past decade, efforts have intensified to connect parks and open spaces into networks by building trails and greenways, coordinating public land management, and adding parkland to regional greenbelts. This is exemplified by the award-winning 70 km Galloping Goose/Lochside Regional Trail—which includes the first completed section of the Trans Canada Trail—with a ‘downtown connector’ carries thousands of non-auto commuters to and from work, school, and services every day.

Overall, Greater Victoria combines decentralized local government with a strong pattern of regional cooperation working to support provincial growth management objectives. This pattern extends through voluntary agreements with public agencies like BC Transit, the Victoria Airport Authority, and major public institutions like Camosun College and the University of Victoria.

### **The objectives of Victoria’s Urban Transportation Showcase are to:**

- position walking, cycling and transit as viable, personally rewarding, cost-effective, and environmentally positive transportation choices,
- trigger rising regional use of active options by removing barriers, expanding connectivity, adding capacity, and exploring new synergies,
- demonstrate the potential of infrastructure improvement coupled with public outreach and education to leverage greenhouse gas reduction,
- build public support for a regional land-use vision that favours compact growth served by multi-modal transportation corridors,



- distill knowledge acquired through Showcase into templates, workshops, web-tools, manuals and other presentation packages for transfer to other communities.

## Showcase Governance

While the delivery of physical infrastructure will rely heavily on municipalities, the CRD, the Victoria Regional Transit Commission and provincial agencies, the promotional campaigns and new Transportation Demand Management (TDM) measures will support working partnerships with local advocacy groups, independent practitioners, the Vancouver Island Health Authority, and major employers like Vancouver Island Technology Park and the University of Victoria. Showcase projects will be managed by a steering committee of senior partners including the City of Victoria, other area municipalities and BC Transit.

## KEY SHOWCASE ELEMENTS

Greater Victoria's Showcase proposal dovetails with the regional growth strategy by building upon infrastructure, and integrating modes, that facilitate alternative travel choices. Key elements encompass new synergies among transit use, cycling and walking, anchored by public education and outreach programs designed to model physically active transport as viable and personally rewarding.

The Showcase transit initiatives will initiate development of a Bus Rapid Transit (BRT) system linking downtown Victoria to Langford town centre by incorporating transit-priority measures such as queue jumpers and improved stops into the Trans Canada Highway corridor. Because this area is experiencing significant growth and already sustains the highest transit use in the region, developing rapid bus service is a key transportation objective. Transit improvements will take the system to the next stage of development, providing travel time advantages.

Showcase will demonstrate the positive impact of removing barriers to walking and cycling as primary transportation. Measures within Showcase will explore synergies between walking, cycling and transit by improving pedestrian and cycling access to transport facilities. This will be accomplished by instituting improved stop and shelter designs, better pedestrian links, and secure bicycle storage at transit hubs, park and ride facilities, and transfer points. Cycling-specific improvements will address regional travel by establishing continuous, marked, upgraded routes that provide neighbourhood-to-destination connectivity. Synergies between cycling and walking will be explored in the form of new mixed-use trail connectors, linking major institutions, suburbs and developing areas to the regional trail network. Walking improvements will focus on creating safer access routes to schools and on increasing pedestrian access and visibility in village-core settings, including improved sidewalk environments, crossing points, and curb extensions.

## GREENHOUSE GAS REDUCTION

The Showcase will introduce an innovative approach to reducing greenhouse gases through integrated strategies that:

- improve service levels and appeal for the three active transportation options (transit, cycling, walking)
- build new synergies between active options through supportive improvements to supplementary transit and mixed-use trail infrastructure,
- explore innovative option-marketing and promotion based on the positive benefits of alternative modes,
- treat walking and cycling as separate travel choices while exploring their individual synergies with transit as the ‘enabling’ partner,
- market the personal advantages of integrating enjoyable physical activity into patterns of daily life,
- develop ‘packaging concepts’ that integrate promotion with specific capital improvements, marshal employer- and peer-approval for green travel options, and provide skill development and other social supports for public behaviour change,
- place promotional messaging on a more positive footing by shifting emphasis from societal to individual benefits, and from ‘awareness raising’ to ‘choice triggering.’

## LOCAL LAND USE AND TRANSPORTATION PLANNING

This Showcase proposal dovetails with the CRD’s growth strategy by recognizing that reduced greenhouse gas emissions are the outcome of a multi-modal transportation system. A companion transportation plan—the TravelChoices strategy—is being formulated to further land-use plan objectives. Planning parameters for TravelChoices prioritize raising the share of travel by transit, cycling and walking, which already show high rates of participation regionally. The RGS mandates walkable town centres connected to downtown and each other by high-quality transit corridors and improved cycling and walking routes. This strategy reflects a philosophy that blends policies of urban containment and infill development with more efficient, multi-modal use of existing transport corridors. The overall objective is to accommodate projected population growth within a compact urban footprint that protects natural amenities and quality of life for future generations.

TravelChoices is developing strategies for the active modes to increase their capacity and attractiveness through enhanced levels of service. Achieving this involves upgrading and



supplementing existing infrastructure so that safety, efficiency, and appeal increase. The challenging ‘next step’ in this process is to buttress the land-use direction by implementing key elements of the transportation plan.

## **PUBLIC OUTREACH AND EDUCATION**

The Showcase legacy, beyond improved physical infrastructure, will emphasize the behavior changing effects of public education and outreach. The showcase will introduce and test new, transferable models for event-based, mode-specific behaviour change. It will also develop a toolbox of concepts and best practices for advocates, practitioners, and workplace coordinators to support active options within major-employer TDM programs. As well, it will introduce the School Pass (S-Pass), an initiative to educate young people on the benefits of transit use. Other outreach and education components will include:

- event-based regional promotions for cycling and walking in partnership with transit, major employers, non-profits and schools,
- workplace-based TDM measures that improve destination access, support innovative training for workplace coordinators, and leverage new outcomes from typical parking cost/benefit redistribution plans,
- measures that reposition walking, cycling and their connection to transit in the public mind as mainstream activities,
- measures to evaluate attitude change, mode shift potential, and future impacts of all strategies against participation and greenhouse gas emissions baseline data.



# Section Three

## DETAILED PROJECT DESCRIPTIONS

*Note: The showcase proposal is committed to developing synergies between transit use and non-motorized modes of travel. For purposes of clarity, however, it presents the proposed projects by individual mode.*

**Victoria Regional Transit (VRT)** is a dynamic system carrying 80,000 passengers on a typical weekday and operating over a 600-square-kilometre service area. Its fleet comprises 205 vehicles, including 26 Dennis Trident double-deck buses—the first in North America. By continually improving service arrangements, VRT has increased its share of peak hour travel to more than 60% in a decade, from 6% in 1992 to 9.8% in 2001. Today transit carries 21% of all peak-hour trips to and from downtown Victoria. VRT cultivates innovation in service delivery and marketing, actively pursuing ridership growth through fare-incentive, passenger-amenity and other programs. Since introducing U-Pass at the University of Victoria in 1999, transit use by students has doubled to 60% and now accounts for 17% of all trips to campus. VRT has also pioneered Youth Pass (26,000 trips per month) and Pro Pass, a major-employer program consistent with region-wide TDM.

In keeping with the region's growth strategy, which proposes transit-supportive development at growth nodes and posits ambitious targets for ridership, VRT has analyzed options for system improvements and prioritized these to leverage land-use objectives. This defines an implementation strategy based on developing bus rapid transit on the primary transportation corridor linking downtown Victoria to the major growth centre of Langford. Detailed assessments support selection of this corridor for high-capacity service based on key determinants:

- Highest current transit-corridor vehicle-use in region
- Increasing peak-hour congestion to/from downtown
- 30% of regional population/35% of regional employment on corridor
- Rapid population/jobs growth in Colwood and Langford
- Prime opportunity to create a platform for rapid bus service

VRT's Showcase program will establish supportive conditions for introducing bus rapid transit on the principal axis of regional growth, reinforcing transit's presence and improving its service appeal relative to private automobile use. Showcase objectives to model congestion relief, energy conservation, expanded mobility choice and pollution reduction are all met by the Victoria BRT proposal, which involves an integrated set of actions to incrementally retrofit the Douglas Street-Trans Canada Highway corridor with:



- transit-priority measures, such as queue-jumpers and signal pre-emption, at key locations to improve service and time-competitiveness,
- upgraded transit stop, exchange and hub environments that achieve high design standards and create attractive, secure, functional spaces for users of all ages,
- real-time information display and other devices to bolster user-friendliness and convenience as rapid bus attributes,
- inter-modal supports including improved pedestrian connections, secure bicycle storage at exchanges and park-and-ride lots, and bicycle racks on buses,
- an expanded fleet of low-floor, low-emission, quiet running, double-decker buses to provide visual identity and launch a distinctive rapid transit system.

The transit component also pursues inter-modal objectives consistent with RGS commitment to walkable, bicycle-friendly, transit-supportive urban nodes. A key element of future success is establishing a strong presence at the Langford system terminus, to give physical shape to the region's resolve to channel growth to centres served by high-quality transit.

The transit component of Showcase will catalyze public esteem for VRT's introduction of bus rapid transit. Novel use of stylish but cost-effective double-deck buses to anchor rapid bus service, coupled with architectural-quality design of supplementary infrastructure, can serve to capture the public's imagination. By consciously exploiting attributes associated with more expensive rail-based rapid transit systems, Victoria's Showcase will demonstrate the viability of introducing efficient bus rapid transit in a community of under 500,000 people.

## 1. VICTORIA REGIONAL TRANSIT SHOWCASE ELEMENTS

‘Bus rapid transit’ describes a high quality, premium service operating on exclusive rights-of-way or with priority on general traffic streets. Bridging the gap between common express bus service and costly rail-based transit, Bus Rapid Transit (BRT) generally includes special vehicles, identity, stations and amenities. Traffic management and right-of-way improvements provide faster, more convenient service, and station infrastructure is more substantial than typical bus stops.

### A. Victoria - Langford Bus Rapid Transit

#### *Description of Route*

The Victoria–Langford BRT line will operate through downtown Victoria and along the Douglas Street/Highway 1 corridor to Langford. The route passes through five of the region’s identified growth centers: Downtown Victoria, North Douglas, Tillicum, Colwood, and Langford. Currently more than 30% of the region’s population and 35% of its employment is located within 500 meters of this corridor, a level expected to increase as development concentrates around these identified centers. The BRT route also connects with several other major corridors and, through transfers, the benefits of BRT service will have regional scope. In particular, seamless transfers to direct services to the University of Victoria and CFB Esquimalt (the two largest non-downtown travel generators in the region) are major benefits to the system. In conjunction with the Showcase, but not included as part of its costs, service frequency will be increased and in suburban areas reconfigured to channel passengers onto the premium quality service.

### B. Roadway/traffic management components

#### *1. Queue Jumpers*

Douglas Street/Highway 1 serves as the primary transit corridor in the region. Increasing population growth and economic activity are placing great strain on the transportation facilities located within this corridor. Achieving greater priority for transit on this busy corridor entails a series of physical improvements both outbound and inbound, targeted at major congestion points. By providing preferential treatment to transit vehicles at these bottlenecks, service will be enhanced without extensive road reconstruction. This strategy increases the competitive position of transit and attracts ridership from the less efficient modes of travel.

Transit priority measures are also fiscally efficient. Where standard roadway upgrades involve widening for general-purpose travel to reduce congestion, transit priority entails a series of small-scale projects to retrofit an existing road with queue jumpers. These allow transit vehicles an exclusive means to bypass the congestion through strategic road widening, signal gates and other traffic control technologies.



## 2. Improved Signalization

On the Douglas Street corridor, recent studies show that more than 28% of all transit travel time is spent waiting at red lights in congested areas. Physical improvements here will be supplemented by both passive and active signal-control strategies to reduce delay. Passive management schemes will produce signalization plans oriented to 'people flow' rather than vehicular flow on the corridor. This will measurably increase the priority given to transit patrons and is expected to reduce the overall delay experienced by all modes traveling on the corridor.

Passive plans will be supplemented by real-time transit-priority control to allow green-time extension to transit vehicles as they approach signals on the corridor. Using optical or GPS technology, transit vehicles will be identified as they approach signals and the green phase extended or red phase truncated to reduce transit delay. Together these transit-priority strategies will markedly improve travel-time and service appeal to current and prospective transit users.

## 3. Stations and Station Amenities

The Victoria-Langford BRT route includes 12 stations along its 19 km route, anchored by existing terminals in downtown Victoria and central Langford. Victoria's transit ridership benefits from the concentration of transit service on Douglas Street in the core. In suburban areas, it is strategically important to raise awareness of improved transit access and to provide facilities supportive of synergies between transit use and other modes. To address capacity limits at the existing terminal and the need for added park-and-ride at the BRT line's western terminus, planning processes will identify locations for permanent transit facilities. These will include multi-modal transfer points for drop-offs and links to local buses, secure bicycle storage, pedestrian networks and park-and-ride service. The location of an interurban rail station (the E&N Railway) in Langford offers a unique potential for added synergy between various transportation modes.

Experience shows the success of BRT services derives in part from the permanence and convenience BRT stations offer passengers relative to conditions generally found at bus stops. To capture this effect, each BRT station will be designed to provide:

- covered waiting area for passengers,
- accessible to passengers with disabilities including level boarding platforms,
- capability for introducing precision docking,
- connections to regional cycle and walk networks,
- bicycle lockers and racks to encourage inter-modal trips,
- passenger information including real-time bus arrival information.



The existing transit layover in Victoria will be used for the new BRT service, with amenity improvements and a designated area for BRT vehicles. Service in Langford will commence using the existing terminal and transfer point. As the transit system expands to support Langford’s central area development, a new multi-modal transfer point will provide a focus for the system and demonstrate to future patrons the benefits of transit access features. This facility will provide:

- a transit focal point for local services, facilitating transfers between BRT service, local buses and other regional routes,
- sufficient parking to address the current shortfall of 200-300 spaces in the western communities,
- bicycle storage for bike-and-ride, to extend the transit catchment area beyond a 10-minute walk distance,
- information regarding transit services and routes,
- security and other elements of a pedestrian-oriented centre,
- storage for transit vehicle recovery and facilities for driver relief.

In Langford, Showcase initiatives will include planning, community outreach and design activities to develop transit routing and terminal facilities coordinated with local land use and development activities. These initiatives will engage the community in developing plans for a permanent, visible and central transit facility offering convenient access on foot, by bicycle or by car.

#### *4. Description of Vehicles*

The people-moving technology chosen to anchor BRT service will provide a showcase for both vehicle use and engine type. BRT service will operate using low-floor, fully accessible, double-deck buses. No other BRT project in North America is using such vehicles. The buses provide seating for up to 90 passengers and two wheelchairs in a quiet and comfortable environment. Evaluations have found the double-deck bus has several advantages over articulated buses:

- higher passenger carrying capacity (120 versus 108) with seating for the majority of the customers,
- lower operating and maintenance costs because double-deck buses do not have an articulating joint to maintain and its fuel economy is 20-35% better;
- less expensive to purchase than articulated buses.



New double-deck buses will be equipped with hybrid diesel-electric engines. The Showcase proposal includes the marginal costs of adding hybrid technology to buses being purchased by BC Transit for BRT. This technology offers 25% to 30% better fuel economy and quieter operations, significantly reducing community impacts and greenhouse gas emissions. Benefits of hybrid diesel-electric buses include:

Reduced exhaust emissions

Hybrid systems help the environment by reducing carbon monoxide and dioxide, hydrocarbons and NOx emissions. There is also a 80% to 90% estimated reduction in particulate matter ejected from the exhaust pipe. As well, improved fuel economy reduces greenhouse gas emissions.

Increased fuel economy

The combination of diesel and electric drives allows energy to be conserved during braking. Regenerative braking saves a large portion of the energy usually dissipated during braking and uses it to accelerate, allowing for the use of lighter, smaller, and more-efficient diesel engines. Hybrid technology can increase fuel economy up to 25% or more over stand-alone diesel-powered vehicles. For example, a hybrid transit bus traveling 70,000 km in one year will burn 35,000 to 40,000 litres of fuel as compared to a standard diesel vehicle which will burn 56,000 litres of fuel—a savings of up to 20,000 litres per year.

Enhanced performance

Electric motors offer their highest torque at low speeds giving buses fitted with hybrid drives greater acceleration than those fitted with standard diesel drives. With the use of smaller diesel engines and the electric motor sharing the load, the amount of noise emitted by a hybrid bus is significantly lower than a standard diesel. Hybrid drives also offer a smooth ride due to lack of shifting transmission and reduced brake wear due to regenerative braking.

Infrastructure

Hybrid technology does not require additional infrastructure costs. Unlike CNG technology, hybrid buses are fuelled in the same way as a standard diesel bus, eliminating expensive fuelling stations.

**5. Passenger Information**

With Transport Canada's assistance, Victoria Regional Transit has excelled in providing automated telephone information to its passengers using Ontira Communication's BusLine technology, now twenty years old. The Showcase provides an opportunity to upgrade this technology to next-generation capabilities, providing real-time bus arrival information to message signs at BRT stations, BC Transit's website, telephone callers, information kiosks at major locations and wireless devices.



Implementation of information technology will be accomplished in partnership with Ontira Communications, a BC company with a history of success in Canadian, US and international markets.

### C. Identity and Public Education

BRT success derives from both higher quality service and the enhanced market positioning that accompanies it. The marketing of BRT as a distinctive new service will aid in attracting additional ridership. The Showcase proposal includes funding for visual identity and marketing to establish BRT as a fast, convenient, high-quality mode of travel along the corridor. Awareness and identity components of the Showcase include bus colour scheme, stop identity and a custom marketing campaign.

#### Benefits

Overall, the BRT proposal offers major benefits to the region. It supports the regional growth strategy by providing the attractive transportation linkages needed to encourage compact, sustainable community growth. By providing premium-quality service, it increases transit ridership and lessens growth in automobile reliance. It is well established that reducing auto trips and increasing transit travel generates lower public health and environmental costs while also reducing the personal costs of travel. One valuation of these benefits, conducted for BC Transit, estimated that converting a single round-trip auto commute to transit saves society \$10-\$20 in social costs.

Bus rapid transit is expected to reduce drive-alone car trips by 627,000 per year and the number of auto kilometers traveled by 4.2 million. The social cost savings achieved from this conversion range between \$3 - \$6 million per year. BRT service will significantly reduce the quantity of greenhouse gases and other pollutants discharged regionally. One estimate of greenhouse gas savings indicates about 1 million kg reduction due to the BRT component.

#### Monitoring and Assessment

Victoria is uniquely able to monitor the effects of Showcase programs on travel habits in the region. BC Transit's vehicles are equipped with automated passenger counting that provides statistically reliable data on passenger boarding, alighting and kilometers traveled. BC Transit also monitors travel choice throughout the region with monthly surveys. These data collection exercises coupled with transportation systems data provide a very complete and detailed database for assessing change.



## 2. NON-MOTORIZED INFRASTRUCTURE IMPROVEMENTS

Building on the strengths of Victoria's evolving network of walking and cycling infrastructure, Showcase projects will improve corridor and destination access by retrofitting key locations with sidewalks, trails and on-road bikelanes. Trail infrastructure will be designed to support multi-modal commuting as well as recreational use. Cycle and walk incidence will be measured by means of before-and-after manual counts, with selected measurement of the impacts of promotion on specific corridors.

All projects include a demonstration element and will be publicized through innovative public outreach strategies. Enhanced marketing and promotion will bring each of these new opportunities to public attention. Approval of the Showcase cycle and walk component will jumpstart the upgrading of the regional commuter cycling network, reinforce the importance of the RGS walkable centre concept, and create buy-in for the idea of an ongoing annual regional fund to cost-share cycling network improvements.

Specific infrastructure improvements include:

- Retrofitting arterial roads with bikelanes to increase cycle-network continuity and encourage bicycle travel to destinations,
- Retrofitting urban spaces as walkable environments with pedestrian amenities and better connections to transit,
- Addressing access, continuity, destination and safety issues with new trail connectors at problem locations,
- Linking infrastructure rollouts to marketing strategies aimed at increasing participation.

The Showcase approach involves engineering new opportunities into environments currently designed to encourage car travel. Unlike the transit improvements that concentrate on a single major transportation corridor, cycling and walking projects are distributed throughout the region. (see map)

- **Downtown Victoria** is the region's urban core and its largest traffic generator. Victoria is improving non-automobile access by concentrating growth, reinforcing transit service and supplying high-quality mixed-use trails and greenways, wider sidewalks, curb extensions, upgraded crosswalks, and cycling improvements on major access roads.
- **University of Victoria**, the region's second biggest traffic generator, has implemented U-Pass and is actively engaged in diversifying travel patterns to campus by providing a walkable, bicycle-friendly campus with end-of-trip facilities.

- **Saanich**, the region’s largest suburban municipality, is committed to diversifying transportation choice by restraining road expansions and providing mixed-use trails, boulevard sidewalks, greenways, and bikelaned major roads.
- **Langford**, the major western growth node, accommodates cycling and walking on new and rebuilt arterial roads, on local trail networks, and by creating a walkable, cycle-friendly core.
- **Peninsula communities** are gateways for commuter, off-island and tourist traffic, connected by transit and the Lochside Trail network to ferries, the airport, and employment/service clusters.

This Showcase recognizes that developing walkable centres and precincts, along with improved cycling and transit access, will encourage non-motorized travel choice. Specific projects have been chosen for consistency with the regional strategy, synergies with other modes, potential to improve access to services and jobs, and potential to demonstrate improved conditions. All projects relate to corridors that support destination-access for commuters as well as increasing utility and recreational opportunities for local and regional users.

#### A. City of Victoria Bay Street Bridge Cycle Project

Like many communities across the country, cycling continuity in Victoria is hampered by the lack of safe crossings on narrow, auto-dense bridges connecting key residential and commercial centers. This Showcase project will illustrate how this barrier can be addressed by cantilevering the existing Bay Street Bridge deck to add 1.5-metre bikelanes.

Bay Street, a major access corridor along the north edge of downtown, connects the harbour, infill neighbourhoods and inner-ring suburbs to shops, services, amenities and the city core. Bay Street is also a designated commuter-cycling route with direct links to the Galloping Goose ‘downtown connector’, which runs under the bridge. Project outcomes include bikelane continuity, destination access, improved level of service, and reduced bicycle stress level. A collateral project involves the recently approved Railyards, a major mixed-use infill development at a brownfield site that will upgrade a leg of the downtown connector as well as providing a cycle-friendly mainstreet for the new development. This highly visible barrier-removal project will send a strong signal that conditions for travel by bike are improving.

#### B. City of Victoria Multiplex Walk Project

Chatham Street and Caledonia Avenue is a three-block corridor connecting the city’s new multipurpose complex to the northern edge of the downtown core. Building design is



actively courting a LEED rating and transportation provision is an important factor. This corridor is part of Victoria's Greenway Network, a system of streets, lanes and other public routes that provide alternate ways to move through the city and expand opportunities for recreational travel. Proposed street improvements will enhance pedestrian and cycling spaces, and create a visible, useful link between one of the region's major destinations and the city's primary transit corridor.

### C. Saanich Connector Cycle/Walk Project

This project will connect suburban neighborhoods in Saanich and the university to the the regional commuter trail network by building a three-metre-wide, mixed-use trail along a currently impassable road allowance. This project will dramatically expand trail access, sponsor new patterns of trail use, and provide a tangible symbol of potential connectivity from trail development.

A collateral Saanich project will retrofit adjacent portions of a major road with a shoulder trail and bikelanes, and provide a safe intersection for the new connector trail. Creation of the connector involves naturalizing a stream channel that currently serves as a farm ditch, relocating utility poles, introducing safe crossing points and providing a compacted-aggregate running surface that supports commuter use. A Local Connector route between the university and the trailhead will be also be designated and signed as part of this project.

### D. Lochside Trail Connector & Airport Gateway Project

Lochside Trail is the principal walk/cycle corridor connecting peninsula communities like Sidney to Swartz Bay ferry terminal, Victoria International Airport and downtown Victoria. With improved connectivity the Lochside Trail will attract use levels similar to the Galloping Goose network, to which it connects. As a patchwork of converted rail-trail segments and stretches of busy local roads, Lochside Trail is being incrementally upgraded and retrofitted to accommodate walking and cycling. This project will capture the benefits of trail connectivity for peninsula communities by addressing key network gaps that currently inhibit use and affect access to services, jobs, and ferry and airport gateways. It will also support increased recreational touring by residents and visitors.

### E. Colwood and Langford Cycle and Pedestrian Overpass

The western communities of Colwood and Langford are identified as major growth centers facing traffic congestion challenges on the main connecting corridors. This cycle/walk project addresses a significant barrier to regional connectivity by developing a grade-separated overpass for the Galloping Goose Trail at Highway 1A. Grade separation has been successfully applied at major highway crossings along the Galloping Goose, with marked improvements to safety and service for the full spectrum of users. This project will build

on recent upgrades to bridges and trail surfaces along the Goose that support convenient commuter travel in westshore communities and to downtown Victoria. An important co-benefit is the creation of a physical gateway to the City of Colwood, introducing an element of beautification into an auto-centric highway strip.

#### F. University of Victoria Cycle and Walk Project

With the highest level of bicycle use per capita in the region, the university is already well supplied with trip-end facilities at campus destinations. However, none of the principal access routes to the university is bicycle-friendly and none of the cycle/walk routes is signed for continuity.

This project involves rebuilding an arterial road bisecting the campus as a multi-modal corridor with landscaped medians, left turn slots, 1.5-metre bike lanes, and high-visibility crosswalks. This project would complete boulevard-walking improvements undertaken in partnership by Saanich and the university. It would signal a clear intent to better accommodate cycling as a transportation choice and provide a powerful stimulus to additional retrofitting projects on other routes accessing or bordering the university.

#### G. The Walkable Village

Across Canada, the potential exists to remake small residential/commercial centres into “walkable villages” where residents can meet and shop in pleasant, auto-reduced environments. This project offers strategies to recast two such centers within residential settings that typify the auto-focussed design characteristic of many Canadian communities. The project plans to transform these pedestrian-unfriendly environments into walkable villages by upgrading infrastructure and improving walking and cycling access.

The community of Cadboro Bay is located within walking distance of the University of Victoria, with a combined population of approximately 24,000 (including resident and day students) and bordering neighborhoods of 7,000 residents in two municipalities. Concept planning for improvements has already commenced with the local community association, businesses and municipal governments, and there is an emerging consensus supportive of transforming the auto-centric strip into a pleasing pedestrian environment.

Project components include lane-narrowing, angle-parking removal, pedestrian bulbs, textured crosswalks, boulevard sidewalk on one side, introduction of outdoor social spaces, and a paved walkway bisecting the commercial block and connecting businesses on both sides. The pedestrian treatments are bolstered with improved landscaping and better integration of transit.

In addition to improvements within the centre, the proposal offers strategies to improve and encourage village access through:



- Installing or improving existing sidewalk access to the village,
- Installing curb cuts that enable family, senior, and disabled access,
- Trimming shrubbery that impinges on sidewalk access,
- Installing crosswalks for network continuity
- Calming traffic by placing four-way stops at the village edge
- Encouraging cycling by striping bikelanes along access routes and installing strategically placed bike racks.

Oak Bay, a community of 17,000 with an aging population, is plagued by traffic congestion in its main commercial centre, Oak Bay Village. Through Showcase, the village walking environment will be reshaped by widening existing sidewalks, installing curb cuts and calming traffic. Both the Cadboro Bay Village and Oak Bay Village projects will be proclaimed with sustained promotional campaigns encouraging residents to “walk to the village.” These projects will provide replicable examples of how relatively low-cost infrastructure improvements, combined with novel public outreach, can reduce auto-dependent behavior and create more livable communities.



### 3. PUBLIC OUTREACH AND EDUCATION

Victoria has learned much about the power of public outreach and education to change behaviour. Through innovative promotional campaigns, the city has significantly increased commuter cycling, particularly on the 70-kilometre Galloping Goose/Lochside trail network linking country and suburbs to downtown. In addition to designing maps, targeting media attention and hosting special events like Bike to Work Week, grand community celebrations were held as each leg of the trail was completed. More than five thousand people were on hand to celebrate the official opening of ‘The Goose’, which has become the region’s most successful non-motorized commuter and recreation corridor. Showcase plans to apply this experience in outreach and promotion to effectively raise the profile of walking, cycling and transit use as viable transportation choices.

Through Showcase, an education and outreach program will serve to introduce the benefits of active transportation and transit improvements and invite new users to explore their potential. Principles and strategies for event-based promotion, developed by Victoria’s highly successful Bike To Work Week, will be adapted to walking and transit promotion at regional, municipal, major employer, school and village-centre scales. Additional initiatives include:

- Developing templates for public outreach using an event-based promotional framework that incorporates positive role modeling, peer approval, and employer and community endorsement,
- Demonstrating the potential to capture significant ‘earned’ media by means of well-managed event-based promotion, and to use media attention to reposition walking and transit use as activities of choice,
- Launching and establishing a weeklong Victoria Walks! campaign as a vibrant annual fall event that demonstrates the potential to effectively promote walking to work and school,
- Incorporating new promotional components into Bike To Work Week that expand employer participation and effectively co-market transit as the enabling mechanism for active transportation,
- Instigating a transit School Pass program,
- Developing web-based materials and conference presentations
- Exploring personal fitness and employee wellness potentials as motivators of behaviour change for walking and transit use, based on their potential to integrate activity into daily life by converting already committed travel-to-work time,



- Instigating new ‘social’ infrastructure that increase opportunities to acquire safe traffic-cycling skills, or the confidence required to engage in fitness walking, as triggers and supports for behaviour change,
- Developing baseline and follow-up measurements of demand impacts on relevant corridors and at key worksites/schools for cycling, walking, and transit use to gauge impacts,
- Designing all program components to be replicable in other communities at varying geographic scales.

Linked marketing strategies will ‘model’ travel choice viability and, using innovative yet simple measuring techniques like destination modal splits and manual corridor counts, establish the potential for change. Specific Showcase outreach projects include:

#### A. Transit School Pass (S-Pass)

The greatest long-term benefit from changed travel behavior will come from influencing young people to adopt more environmentally friendly habits today. The positive payoff to society for early behaviour change continues throughout each individual’s lifetime. The university U-Pass, now in its third year, has substantially increased transit ridership. Translating this idea down to younger individuals in high school (grades 9 to 12) has the potential to influence behavior in the critical period prior to earning a driver’s license.

Through Showcase, we propose a pilot project in conjunction with school districts to study and measure the impact of S-Pass. Five-hundred students in Greater Victoria will participate in a three-year pilot project to measure before-and-after transit use, attitudes toward transit and travel alternatives, observed impacts on driver licence acquisition, and attitudes toward driving.

The S-Pass will be a digital-imaged, magnetically-encoded card for processing through transit’s electronic fare boxes. The recorded data from the fare box will provide precise statistics on use, route, and time of day. This is a similar practice to the 25,000 personalized adult bus passes now in use in Victoria.

This pilot will help address the serious neighborhood traffic safety situation at schools, while educating students about a transportation alternative that reduces congestion and greenhouse gas emissions.

#### B. Bike To Work Week Enhancements

This Showcase proposal partners with the Bike To Work Society (BTWS), a registered non-profit society dedicated to expanding commuter cycling as a travel choice. Its principal focus is attracting people to commuter cycling by means of an annual Bike To Work

Week (BTWW), a highly visible public event with mass participation. Since 1997, the BTWS has designed an innovative promotional campaign using a team-based commuter challenge, organized in the workplace and supported by skill development opportunities, to stimulate participation.

As BTWW has grown, the Society has repositioned commuter cycling in the public mind as a positive, mainstream activity. Similarly, it is the first to reconfigure cycling promotion around the benefits of personal fitness, stress reduction and wellness, and to incorporate employer endorsement as a critical component. In 2002, BTWW attracted 304 teams with over 3500 registered riders (including 500 first-time participants.) Federal, provincial and local governments, institutions, and private businesses provide funding for Victoria's BTWW in the form of employer sponsorships. Victoria's Showcase proposal includes a public outreach program to expand the activities of BTWW with three initiatives that will be designed for national application.

### *1. Cycling Traffic Skills Courses*

The BTWW Society has pioneered North America's first on-road traffic-cycling skills course, delivered by certified instructors to more than 450 new commuters since 2000. This is the only known day-long program designed to reinforce behaviour change by addressing the primacy of traffic fears. The 1998 National Survey on Active Transportation shows that fear of traffic is the principal inhibitor of choosing to cycle to work. While improved infrastructure significantly mitigates this fear, individual confidence and safety are also increased by developing traffic cycling skills. Skill development involving hands-on training effects a positive shift in confidence and markedly increases the likelihood of continued cycling. This Showcase initiative proposes doubling the spaces in the society's Traffic Cycling Skills Course to 200 participants annually, refining the teaching and training modules, expanding the catchment of teachers through annual instructor training sessions, and integrating a research component to substantiate effectiveness.

### *2. Employer Outreach*

BTWW Victoria has evolved as an employer-sponsored initiative that catalyses new involvement in commuter cycling. Enhanced partnerships with major employers represent an opportunity for new program development that can result in both higher BTWW participation and greater incidence of continuing to cycle. Personal fitness, stress reduction, and a positive mental outlook are intrinsic attributes of commuter cycling that the BTWS finds can motivate action by employers and employees. This type of positive fitness messaging (linked to skill development courses) can be effectively integrated into corporate wellness programs. The Society sees opportunity to enhance its partnerships with sponsoring employers and facilitate higher conversion rates at specific worksites.

Through Showcase, the BTWS will launch a major-employer outreach initiative to:



- extend the partnership approach to under-represented sectors,
- conscript wellness programs as worksite animators for BTWW,
- provide a new training opportunity for workplace cycling coordinators.

### *3. Share the Victoria Bike To Work Week Model*

By introducing techniques that motivate people to try cycling to work, BTWW Victoria demonstrates that promotional campaigns can be effective in raising the number of people cycling to work regionally. Since 1996, the Victoria region's rate of commuter cycling has increased by 25%, rising from 4.9% of peak-hour commutes to 6.1% in 2001. The Society's success in design and delivery of BTWW and other programs has sparked interest in formalizing the Victoria approach into a template for transfer to other communities. This proposal includes developing a training workshop for BTWW organizers and piloting it at ProWalk-ProBike, an international conference to be held in Victoria in September 2004. Building on the conference pilot, it will also develop a 'BTWW Roadshow' by educating a team of trainers to present the components of the Victoria model and to adapt them creatively to other communities across Canada. For support and outreach, it will construct a website template to showcase BTWW program elements and serve as a clearinghouse for campaign development Canada-wide.

A partnership with Showcase will be an important asset in gaining federal government support for this direction, not least because Transport Canada places such strong emphasis on initiatives that can be duplicated elsewhere.

### C. The Cycling Toolbox

The Cycling Toolbox will be designed to assist planners, advocates and public officials to address issues that determine cycling's viability as a form of transportation. The toolbox consists of two workshops suitable for seminars, workshops and conferences, and two manuals that can be designed for website or hard copy.

#### *1. Trail Design and Development Workshop*

Well-designed urban multi-use trails can be significant travel generators in many communities. This workshop focuses on the nuts-and-bolts of mixed-use trail design, construction and management, based on experience gained in developing the Galloping Goose/Lochside Trail network as commuter and recreational corridors. This workshop will address planning and engineering issues as well as the challenges advocates face in gaining political and community support for trail initiatives. The lens for examination is the potential to establish new connectivity and destination access using mixed-use trails that integrate greenspace and accommodate a wide range of uses. This workshop is aimed at the nexus of community advocates and trained professionals who can put trail development on the public agenda.

Without focused training on how to address issues associated with trail development, the professional community often underestimates latent community demand and views trail use as primarily recreational. In fact without specialized training, professionals often design trail systems to avoid the road network rather than to increase overall connectivity. Neighbourhood residents also often resist trail proposals, seeing them as threats rather than the opportunities they become once built. Summarizing lessons drawn from a multi-year process of converting derelict rail corridors into a major commuter trail, this workshop will address issues ranging from trail width and surfacing options to design of bridge decks and grade separations, road crossings, and sign plans. Trail management issues, including user etiquette in a mixed-use universe, will be canvassed. The workshop will also illustrate how mixed-use trails can achieve a range of co-benefits beyond increased cycling and walking, including linking parks and openspaces into greenway networks, accelerating ecosystem rehabilitation and naturescaping, and promoting human understanding of local history and natural systems.

## *2. Neighbourhood Connectivity, Destination Access, and Urban Redevelopment Workshop*

Urban trails become vibrant by connecting people to places and nature, and by creating new means of access to work, school and services. The linking of neighbourhoods to trails by means of tie-ins, feeder trails and boulevard sidewalks is as important as ensuring that trails are designed to serve commuter as well as recreational use.

This workshop will focus on how to improve trail access from local streets, schools, and parks by means of local trail connectors. Examples of innovative and successful tie-ins using unbuilt road rights of way, park strips and other public lands will be examined. It will also address the importance of achieving connectivity to services, parks, schools, universities, recreation centres, and places of work. The potential to integrate trails as marketable assets into new office, commercial and residential development, and to retrofit existing campus-style and office-park complexes with trail connectors, will be evaluated in relation to travel demand management programs. The product will be practitioner-quality training in a community-responsive framework.

## *3. Bike Lane Manual*

Well-designed bikelanes have a demonstrable impact on the incidence of commuter cycling, but this type of infrastructure is often neglected by planners and engineers. This manual will offer strategies for introducing safe, continuous bikelanes and other bicycle facilities by examining critical design and placement issues. Options for retrofitting existing roads with bikelanes will be outlined, including parking space conversion, lane removal, lane narrowing, and width additions. The manual will also summarize 'best practices' for integrating policies of routine accommodation into official community plans, including how bicycle advisory committees work, how retrofitting projects are planned, designed, costed and approved, and how zoning bylaws and development permit guidelines can mandate end-of-trip facilities and cycle-friendly infrastructure at new developments. Examples of good and bad designs will be presented to illustrate key arguments

and guide users towards greater understanding. This manual is intended as an accessible guide for advocates, not as a substitute for technical design standards.

#### 4. *Bicycle Parking Manual*

Safe bicycle parking is a key factor in encouraging bicycle use. Too often, planners, architects, and facility managers choose racks without understanding the complexities of rack design and placement. The Bike Parking Manual will provide:

- Options for bicycle parking facilities that address user needs, public and private spaces, short-term security, weather protection and full security,
- Textual and photographic examples illustrating the principal factors affecting design and placement,
- A clear ranking system for rack types that enables informed choice based on sound design principles and cost-benefit analysis,
- Principles of choosing locations for security and optimizing efficiency through rack size and orientation,
- A guide to aesthetics, including colour, finish, compatibility with street furnishings and pedestrian environments, and the necessity for utility of design,
- Examples of structures for weather protection, including off-the-shelf and custom designs, and creative use of existing building overhangs,
- Review of long-term, weather-protected, fully secured storage options including outdoor, indoor and underground facilities,
- Design of free-standing, secure bicycle storage lockers at transit hubs, Park n' Rides, shopping and recreation centers,
- The basic principles of effective bicycle parking.

#### D. International Cycling and Walking Conference

In September 2004, over 700 delegates will arrive in Victoria for the biennial Pro Walk-Pro Bike Conference, offered by the National Centre for Bicycling and Walking in Washington DC. This will be the second time in its 20-year history the organization has chosen a Canadian city for this important conference. It offers an ideal opportunity to present the intentions and results of our Showcase proposal.

The conference attracts an international gathering of bicycle and pedestrian program specialists, public health practitioners, and community advocates who are dedicated to

improving conditions for bicycling and walking. Professionals and advocates who attend the conferences comprise one of the most effective constituency groups in planning and decision-making processes.

We propose to partner with the Capital Bike and Walk Society, a non-profit society founded to promote and enhance the 2004 Pro Walk–Pro Bike Conference and to spotlight Victoria’s cycle/walk initiatives. The society’s goals are to:

- raise awareness of walking and bicycling issues and to promote walking and bicycling objectives,
- encourage new pedestrian and bicycling infrastructure and programs,
- develop conference program elements that attract Canadian planners, engineers, and transportation advocates to attend.

Proposed conference activities include support for mobile workshops that expose participants to evolving active transportation infrastructure, and custom workshops to pilot replication components of the Showcase. Showcase will also encourage provincial and federal decision makers to consider launching bold new initiatives from the conference platform.

#### E. Victoria Walks! – Canada Walks!

Proven events such as Bike To Work Week underline that well-planned promotional campaigns can succeed in prompting behaviour change. Walking for fitness and transport has received little attention to date, so this Showcase project will develop Victoria Walks! as Canada’s first-ever attempt to assert walking as a viable transportation option. This project will be designed for replication in other communities under the banner of a nation-wide initiative, prospectively called Canada Walks!. The week-long promotional event will be held in September to coincide with World Heart Day and conclude on International Walk to School Day. Elements of these international campaigns will be blended with a local program that invites participation and addresses location-specific challenges. Promotions will include community events, fitness-walking seminars, workplace challenges, and incentives, all anchored in a comprehensive media campaign providing ‘how-to’ suggestions. It will target large employers as partners and include schools, colleges and universities, local and provincial agencies and significant corporate employers. School-aged children and their parents will be given specialized program opportunities.

The potential to promote walking’s connection to transit also remains virtually unexplored. Since every transit trip involves two walking trips, Victoria Walks! sees opportunity to design a marketing campaign that encourages people living beyond comfortable walking distances to intentionally combine transit use with fitness walking. By learning to get off



the bus at a walkable distance from an ultimate destination, patrons can easily incorporate fitness walking into their daily lives. Transit/walk promotion will dovetail with the improved walking linkages and stop environments being developed by Showcase's transit component.

#### F. Safer School Travel Program

Children learn about transportation choices from an early age. To this end, our Showcase proposes an outreach component, linked to minor infrastructure improvements, that targets school-age children and their parents in a walk-to-school initiative. Recognizing that safe walking environments are critical to the success of walk-to-school initiatives, Showcase proposes involving an elementary school in the Safer School Travel Program (SSTP) to demonstrate how barriers to walking can be addressed. Building on a successful pilot at the middle school level, the Showcase proposal will revise and test the program for application in elementary schools.

Reducing traffic near schools and promoting alternative modes of travel is integral to school road safety planning. SSTP's Road Safety Plan aims to reduce or minimize conflicts between children and cars by:

- Identifying road safety issues or conflict areas between home and school,
- Devising remedial measures to deal with identified issues,
- Implementing plans to manage the behaviour and actions of children and motorists travelling to, from or past the school.

It's generally recognized that school road safety is most effectively addressed by adopting a holistic approach which considers:

- engineering, including the planning of school sites, and the provision and maintenance of road infrastructure and transportation facilities,
- education, addressing the road safety culture and skills of children and drivers; and,
- enforcement, dealing with police and local government initiatives to achieve compliance with speed and traffic regulations.

This Showcase proposal will use an elementary school/SSTP partnership to demonstrate how to improve conditions and effect a modal shift to greater walking at a local school, with a view to replication at the community level. This initiative will dovetail with the schools component of Victoria Walks!





# Section Four

## IMPACT ASSESSMENT AND REPORTING

Victoria is uniquely able to monitor the effects of showcase programs on travel habits and greenhouse gas emissions.

BC Transit vehicles are equipped with automated passenger counting which provides statistically reliable data on passenger boarding, alighting and kilometers traveled.

The CRD conducted an origin and destination, trip-making and travel mode study in 2001 that conforms to best practices established by the Transportation Association of Canada, providing reliable baseline data. The vehicular survey data includes peak-hour bicycle and walk counts.

Census Canada collects information regarding the journey to work on a five-year basis. 1996 and 2001 data provide a trend line to which accomplishments achieved by 2006 and 2011 can be compared.

BC Transit collects travel mode and attitude data monthly and has done so for more than five years. This provides an ongoing profile of attitudes towards transit, cycling, carpooling and other travel choices. The survey mechanism also provides an efficient way to ask specific market awareness questions with respect to the Showcase program and its components.

Victoria, the CRD and other member municipalities have extensive vehicle flow, vehicle occupancy, and bicycle flow data at many locations around the region. This data has been collected for more than five years.

Together these data form a strong foundation for analysis of travel changes in the Victoria region. All data have been collected in reliable, replicable form and are fully available to analysis. Major surveys like the CRD O&D survey and Stats Canada census survey will be repeated in 2006 and 2011. BC Transit's ongoing data collection provides longitudinal analysis of travel change, which can both demonstrate travel choice shifts and serve to identify the success of Showcase's marketing/outreach programs and infrastructure investments.

Performance measures, used to identify the success of Showcase projects, will include:

- Travel by mode in the Victoria-Langford BRT corridor
- Travel by non-auto modes by students in the S-Pass trial project
- Regional travel habits by mode and trip purpose



- Bicycle counts to UVIC and on major bicycle facilities
- Participation in programs like Bike to Work Week and Victoria Walks!

These data will be used to develop estimates of social cost savings and greenhouse gas reductions using best practices methodologies.



# Section Five

## FINANCIAL PLAN

The total Showcase budget established by this submission is \$13,213,700 as detailed below. A detailed budget is contained in Appendix A. Federal, provincial, regional transit, municipal, regional district and private partnerships will contribute to the total funding of this project.

### CASH FLOW AND PARTNERSHIP PARTICIPATION

Cash flow and partnership activities are documented in the table below. Cash flow is heaviest in the first two years of the program while costly elements of physical infrastructure and vehicles are being constructed and acquired. Funding is generally based on one-third contribution from each level of government.

The City of Victoria's showcase proposal is strongly supported by the Capital Regional District, BC Transit, other local municipalities, and community and non-profit organizations. Municipal funding will come from future annual program budgets and through allocation of discretionary funding to advance specific Showcase projects. Provincial contributions will come from existing cost-shared programs and from new expenditures.

Cash Flow and Partnerships (See Appendix A for detailed budget)

	Year 1 - 2004	Year 2 - 2005	Year 3 - 2006
Total Showcase Budget	\$6,452,500	\$5,834,200	\$2,265,000
Federal	\$2,150,618	\$1,944,539	\$754,925
Provincial, Municipal, Regional and Private agencies	\$4,301,822	\$3,889,661	\$1,510,076

Agencies contributing financially to the completion of the Showcase project include:

BC Transit	British Columbia Ministry of Transportation
City of Victoria	Provincial Capital Commission Greenways Fund
District of Oak Bay	District of Saanich
District of Langford	City of Colwood
District of Central Saanich	Town of Sidney
Capital Regional District	Town of View Royal

It is also the intent of the partners in this proposal to apply for additional funding support from other programs to assist financially in Showcase implementation. However, additional grants are not necessary to achieve the goals of the Showcase project.

bus it



bike it



hike it



# Section Six

## SHOWCASE SCHEDULE

The project is based on an assumed announcement date of September 2003, with project funding and full activities commencing on January 1, 2004. The schedule assumes that in the period between project announcement and startup, all administrative and contractual issues between the Showcase sponsors and funding participants are finalized. Major activities include:

### YEAR 1

#### Victoria-Langford BRT Activities

- Finalize planning of transit-priority elements on BRT corridor
- Commence construction of BRT transit-priority elements
- Implement signalization infrastructure on BRT corridor
- Order transit vehicles, GPS equipment and hybrid engines
- Prepare BRT identity plan and station architectural standards
- Commence implementation of passenger information system
- Commence station construction
- Community planning for Langford Terminal

#### Non-Motorized Infrastructure

- Finalize planning for Showcase components
- Construct Bay Street Bridge connector
- Construct Lochside/Airport Gateway bicycle facilities
- Construct Saanich Lochside Trail Connector

#### Education, Outreach and Communications Activities

- Bike to Work Week enhancements
- Design and host Victoria Walks!
- Develop Cycling Toolbox components
- Design/pilot Pro Walk Pro Bike Showcase workshops
- Undertake Walkable Village community planning
- Set up and initiate Schools Program – collect baseline data
- Initiate Showcase monthly awareness and response surveys
- Initiate Showcase website



## YEAR 2

### Victoria-Langford BRT Activities

- Complete construction of BRT transit priority elements
- Receive vehicles and paint buses for BRT service
- Complete implementation of passenger information system
- Complete station construction
- Install bicycle infrastructure at BRT stations
- Start and market BRT Service

### Non-Motorized Infrastructure

- Construct UVIC cycle/walk improvements
- Construct Colwood/Galloping Goose Overpass
- Construct Cadboro Bay Walkable Village

### Marketing, Outreach and Communications Activities

- Bike to Work Week Year 2 activities
- Victoria Walks! Year 2 activities
- Continue Schools Program – monitor change and support student travel
- Continue Showcase monthly awareness and response surveys
- Walkable Village Year Two activities
- Plan travel data collection surveys and initiate count programs
- Distribute 'Toolbox' through TDM programs/TMAs;

## YEAR 3

### Victoria-Langford BRT Activities

Monitor BRT service and support new service

### Non-Motorized Infrastructure

Construct North Downtown Greenway

Construct Oak Bay Walkable Village

### Marketing, Outreach and Communications Activities

Bike to Work Week Year 3 activities

Victoria Walks! Year 3 activities, leading to Canada Walks!

Continue Schools Program – monitor change and support student travel – Prepare final report on success

Continue Showcase monthly awareness and response surveys

Distribute Showcase Toolbox provincially/nationally

Introduce the Walkable Village Improvements

Prepare final reports, website, videos of Showcase lessons

Collect and assess travel data

Develop outreach and public education program to share outcomes nationally.







# Section Seven

## SHOWCASE STAFFING

The Showcase Project will be directed by a Steering Committee chaired by Mr. Joe Martignago, the City Manager of the City of Victoria. This Committee will include a senior staff representative of the participating regional municipalities and one from BC Transit as sponsors of the Project.

The Project Director reporting to the Steering Committee will be Ron Drolet, Vice President, Customer Services. Mr. Drolet will be responsible for managing the delivery of the Showcase Project elements within the agreements set out between the federal government and the regional Showcase partners.

The Steering Committee will provide oversight and direction to the Project Director and the staff teams undertake individual project elements. The coordination of projects will also be facilitated through this committee structure. The Committee will give final approval on resource allocation, project scope, and where required, consultant selection. All monitoring and evaluation reports will be approved for issuance by the Steering Committee.

The management of individual project elements will be broken into three streams with the bus rapid transit and associated roadway project elements under the management of Mike Davis, BC Transit's Manager of Planning and Scheduling. Mr. Davis and other staff at BC Transit have considerable project management experience in the Region involving a number of multi-disciplinary, multi-agency projects.

A separate project manager position will be created for the cycling, walking, public outreach and education elements of the showcase. This position will be a part-time external contract filled through a request for management services proposal.

The majority of projects involving facility construction and equipment/vehicle acquisition will be managed by the host municipality or agency directly involved. For example, BC Transit will acquire the vehicle specified for the bus rapid transit element and each municipality will oversee the construction of the cycling or sidewalk facilities within their jurisdiction.

bus it



bike it



hike it





# Section Eight

## PARTNER ROLES AND RESPONSIBILITIES

The City of Victoria will chair the Steering Committee and be the primary sponsor point of contact, and support the meetings and activities of the Steering Committee. BC Transit will provide the project direction and coordination internally, and where required, contract for project management services for those elements requiring external resources. Each sponsor municipality will handle the project planning, management and construction of the facilities elements within their jurisdiction. The host municipality shall also be responsible for the local share of each project budget. The list of sponsor/host municipal agencies and other agencies involved are as follows:

### MUNICIPALITIES

- City of Victoria
- District of Saanich
- District of Oak Bay
- District of Langford
- City of Colwood
- District of Central Saanich
- Town of Sidney
- Town of View Royal

### OTHERS

- Capital Regional District
- BC Transit
- Victoria Airport Authority
- University of Victoria
- BC Ministry of Transportation
- Greater Victoria Bike To Work Society
- Capital Bike and Walk Society
- Safer School Project
- Vancouver Island Toursim Alliance





# Section Nine

## CONTACT INFORMATION

### SUBMISSION CONTACTS:

**Project Director** – Ron Drolet

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**Project Manager** – Mike Davis

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**Submission Contact for Community Outreach and Public Information** – Chris Foord

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**Steering Committee, Chair Host Sponsor** – Mr. Joe Martignago,

City Manager, City of Victoria

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# Appendices

## APPENDIX A

### DETAILED BUDGET

Item	Description	Quantity	Unit Cost	Estimated Cost
<b>Total Showcase Budget</b>				<b>\$14,551,700</b>
<b>Roadway Elements</b>				<b>\$2,875,200</b>
Queue Jumpers	Outbound at Tillicum Road			\$380,000
Queue Jumpers	Outbound at Burnside Road			\$69,200
Queue Jumpers	Outbound Pembroke to Hillside			\$596,000
Queue Jumpers	Planning and Analysis			\$150,000
Queue Jumpers	Inbound at McKenzie			\$380,000
Queue Jumpers	Inbound at Tillicum			\$550,000
Queue Jumpers	Inbound Tillicum to Downtown			\$750,000
<b>Traffic Signal Control Elements</b>				<b>\$568,000</b>
Signal Coordination	McKenzie to Tillicum			\$29,700
Signal Coordination	Downtown Victoria			\$82,500
Signal Coordination	Saanich Road to Finlayson			\$41,800
Signal Timing Review & Transit Priority	Traffic management plan for BRT corridor from Thetis Interchange to Langford Terminus			\$50,000
Review for Colwood Langford Signal Priority	Control systems upgrade			\$100,000
Computer System Signal Priority/Preemption	# signalized intersections north of Pandora to Langford = 13 assume 11 need new controllers (@\$20,000 each) + Opticom or similar system (@\$4,000 each)	11	\$24,000	\$264,000
Item	Description	Quantity	Unit Cost	Estimated Cost
<b>Transit System Vehicles and Components</b>				<b>\$3,325,000</b>
Operating Costs will be borne by BC Transit. Fleet of 15 buses is required.				
Transit On-Board Components for ITS	Cost estimates are for full APC outfit including GPS + Base Station downloading + 40,000	15	\$14,000	\$250,000
Hybrid Engine	Costs Estimates from manufacturer are premium of \$250,000 per bus over diesel	12	\$250,000	\$3,000,000
Identity	Develop premium service and identity			\$75,000



Item	Description	Quantity	Unit Cost	Estimated Cost
<b>Passenger Information</b>				<b>\$570,000</b>
Customer information control system	Real time information systems implementation			\$500,000
Customer Information displays	On-street variable message displays for bus arrival broadcast	28	\$2,500	\$70,000
<b>Station Facilities, and Amenities</b>				<b>\$1,223,500</b>
Identity	Specialized bus stop plates	28	\$250	\$7,000
Station Design	Architectural Design work			\$100,000
Station Shelters and facilities	Will provide more detail regarding stations later. Estimate for all stations improvements – information, construction, shelters etc is \$25,000 per station * 26 stations	26	\$25,000	\$650,000
Terminal shelters and facilities	Security	2	\$50,000	\$100,000
Bike facilities at each station	(Cycle-Safe ProPark series, \$6,500 US per set of 4 * 26 stations + 12 at each terminal	32	\$9,750	\$312,000
Bike facilities at each station	Bike Racks (inverted U). \$100 US installed per rack * 30	30	\$150	\$4,500
Langford Terminal	Terminal Facility Planning, Design and Community participation			\$50,000
<b>Public Education &amp; Outreach</b>				<b>\$1,175,000</b>
Introduction of Bus Rapid Transit	Marketing to support new service			\$100,000
Bike to Work	Value-added Bike to Work Week plus national template			\$150,000
Mode Shift Community Toolbox				\$150,000
Pro Bike Pro Walk Presence	Major international conference in Victoria in 2004. Strong showcase presence			\$25,000
<i>Victoria Walks!</i>	New program to encourage walking			\$200,000
Schools Program	500 students for three years with 12 months bus passes + funding for analysis			\$500,000
Walkable Village Promotion				\$50,000



Item	Description	Quantity	Unit Cost	Estimated Cost
<b>Non-Motorized Infrastructure</b>				<b>\$4,400,000</b>
Bay Street Bridge to Goose and tie ins	Bicycle connector across Bay Street Bridge plus community connectors in Songhees and Westside			\$600,000
Colwood Galloping Goose Overpass	Overpass of regional arterial to reduce major barrier to bicycle use in Western communities			\$750,000
Mt Doug X Road connector to Lochside Trail	Connector bicycle route to join major residential community and University of Victoria to Lochside Trail			\$600,000
UVIC Connector - McKenzie - Gordon Head to Sinclair	Improved bicycle facilities on entrance to University of Victoria			\$600,000
Lochside Gateway/ Airport Cluster	Trail upgrade and connection to Victoria International Airport			\$700,000
Langford/Colwood connector to Rapid Bus	Pedestrian facilities construction along BRT route to improve community access to service			\$450,000
Cadboro Bay village	Walkable Village improvements Pedestrian environment improvements to encourage walkable village center			\$400,000
North Downtown Victoria Greenway	Downtown greenway connecting major community facilities to BRT corridor			\$300,000
<b>Data Collection and Monitoring</b>				<b>\$190,000</b>
2006 CRD O/D and vehicle count program	Origin, destination and vehicle census			\$100,000
Community attitudinal and use surveys	monthly tracking Longitudinal surveys of travel habits and attitudes toward transportation modes and investments			\$90,000
<b>Showcase Communication</b>				<b>\$225,000</b>
Website	Develop Showcase website with presenting Showcase project to community and world including component descriptions, implementation			\$60,000



Item	Description	Quantity	Unit Cost	Estimated Cost
	progress, monitoring, marketing and feedback opportunities			
Publications	Project documentation and reporting, translation and publication			\$15,000
Video summary	15 to 20 minute video covering the accomplishments of Showcase			\$50,000
Webinars/AV Seminars/Conference Participation	<p>Series of web-based or audio-visual seminars to Canadian communities on the Victoria Showcase.</p> <p>Participation in planning, environment and transportation conferences to present the Showcase.</p>			\$100,000



# Appendices

APPENDIX B

## LETTERS OF SUPPORT