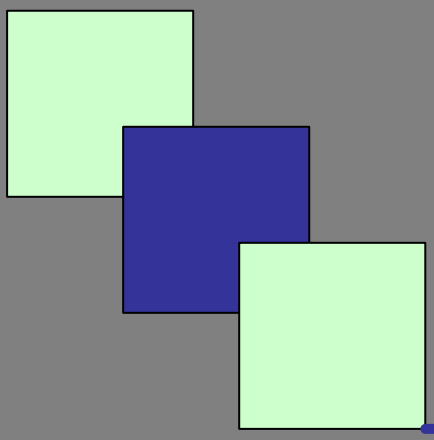
Central Okanagan

Transportation and Mobility

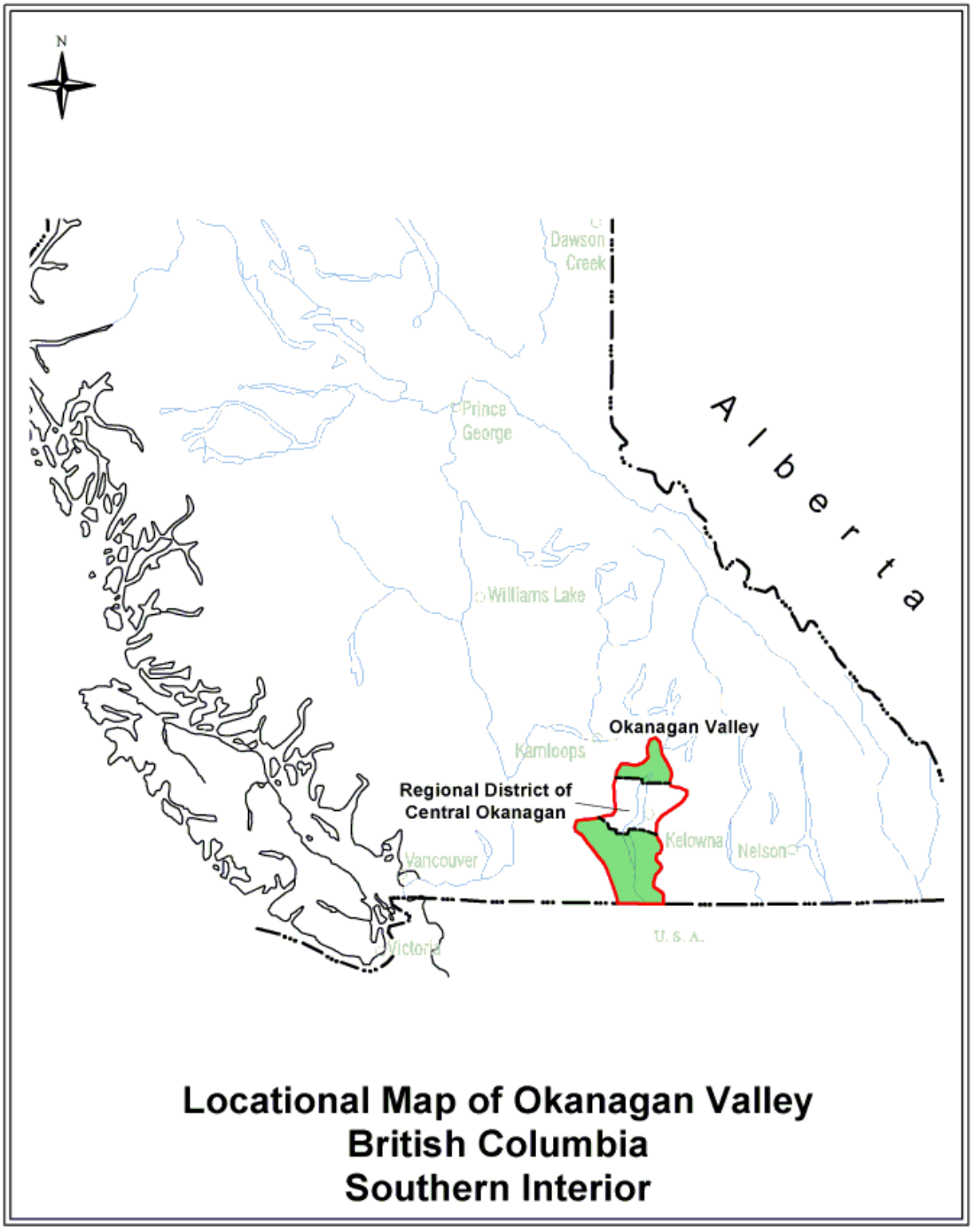
February 2003



Regional Growth Strategy
Planning for the Future

Kelowna / Lake Country / Peachland
Regional District of Central Okanagan

Transportation and Mobility
Contents of Discussion Paper



Locational Map of Okanagan Valley
British Columbia
Southern Interior

Foreword
Transportation and Mobility
Options for the Central Okanagan

One of the fastest growing regions of British Columbia and Canada, the Central Okanagan is home to 156,000 people and is expected to grow by an additional 80,000 residents by the year 2025. Community leaders within the Central Okanagan (Kelowna, Lake Country, Peachland, Westbank First Nation, and Electoral Areas of the Regional District) have identified transportation as a key issue that needs to be addressedregionally when planning for this future growth.

This Discussion Paper is part of a process in developing a clear vision for transportation and mobility investments that will support quality of life and sustainable development of the Central Okanagan. Its authors gratefully acknowledge the contributions of the following agencies in the development of this transportation discussion paper.

Ministry of Transportation
City of Kelowna
District of Lake Country
District of Peachland
Westbank First Nation
BC Transit
Central Okanagan Economic Development Commission
Ministry of Community, Women's & Aboriginal Services
Kelowna Chamber of Commerce
Lake Country Chamber of Commerce
Westbank and Area Chamber of Commerce
Peachland Chamber of Commerce
Urban Development Institute, Central Okanagan Region
Provincial Ministries and Agencies of the Intergovernmental Advisory Committee
Resident and Neighbourhood Associations and Advisory Planning Commissions

This report was prepared through Central Okanagan Regional Growth Strategy with funding from District of Lake Country, District of Peachland, City of Kelowna, Regional District of Central Okanagan, and the Province of British Columbia Growth Strategies Office.

For further information about the Regional Growth Strategy, see the Central Okanagan website at www.regionaldistrict.com or call the Planning Department at (250) 868 5227, Address: 1450 KLO Road, Kelowna British Columbia V1W 3Z4

Executive Summary

One of the fastest growing regions in British Columbia and Canada, the Central Okanagan is home to 156,000 people and is expected to grow by an additional 80,000 residents by the year 2025[1]. The employment base will grow with 35,000 new jobs; and community services will expand to serve the continued growth and prosperity of the region.

Investments in transportation and mobility services will be among the most influential in bringing about sustainable forms of development. Communities of the Central Okanagan see opportunity for proactive investments in transportation and mobility, in part through coordination of modes (transit, highways & rail), through dedication of long term funding, and through protection of future land-based corridor options.

Recognizing the value of transportation and mobility, the Regional District of Central Okanagan Board of Directors is currently working to establish a regional transportation authority with dedicated and sustainable financial resources that will enable transportation agencies to make the necessary investments in local and regional systems to serve growth of the Central Okanagan.

This discussion paper summarizes the issues facing transportation in the Central Okanagan. It presents three general options for future transportation investments; presents input from community, economic, provincial and national stakeholders; and proposes a number of collective local actions intended to bring about the desired investments.

[1] BC Stats January 2003 projections.

Introduction

Transportation is an important element in supporting community development and preparing for growth. Transportation ideally involves a choice of modes (vehicles, transit, rail, pedestrian, etc) and a system that links one mode to another, one destination to another. The very nature of transportation is that it crosses jurisdictional boundaries and becomes most effective when communities work together to achieve common transportation goals and objectives.

The main objective of this Transportation Discussion Paper is to identify local and regional interests, constraints and opportunities that will set the stage for negotiation of future "cross boundary" transportation investments. It encourages community stakeholders to consider different transportation strategies and the significance of regional population growth and land use projections. Through discussion, it explores key objectives for the regional transportation system envisioned for the future.

The intent of the discussion paper is to focus on transportation choices; the current management policies, future requirements and various actions needed to maintain mobility in the Central Okanagan. Any action plans would be followed up through partnership arrangements with local communities, provincial or federal authorities, or other agencies responsible for the financing and operation of transportation systems.

The content focuses on the area covered by the Central Okanagan Regional District (roughly from Peachland to Lake Country)[2]. In this region, through a "Regional Growth Strategy", there is commitment to work on transportation as a key issue related to changing land uses, growth and development. The discussion focuses on land-based systems, particularly highways and collector ("network") roads. These systems are most sensitive to topographic constraints and are under most pressure to serve anticipated growth.

This document in itself is not a transportation plan. The document is for the purpose of supporting community leaders as they make choices and take collective action in future transportation system investments.

[2] While this report does not address the entire Okanagan Valley, its authors recognize that activities taken within the Central Okanagan often have consequences on the larger region, and vice versa. In particular, Highway 97 is an important component of economic trade and development extending through the Okanagan Valley and is part of an inland transportation corridor extending from Washington State north to Alaska. Highway 97C (Okanagan Connector) is an important alternative to the TransCanada Highway 1 and to the Interprovincial Highway 3; together with Highway 33 it forms an important east-west transportation corridor from the Lower Mainland through to the Kootenay region.

Background

One of the fastest growing areas of British Columbia, the Central Okanagan is home to 156,000 residents and is expected to grow by an additional 80,000 before the year 2025. It is expected to remain the third largest metropolitan region of British Columbia, following the Lower Mainland and Capital Regions. City of Kelowna is home to 100,000 residents. The District Municipalities of Peachland and Lake Country are home to almost 5,000 and 10,000 residents respectively. The "Westside" (Westbank and Lakeview) is the province's largest unincorporated area. At 35,000 residents, it is similar in size to urban communities such as Vernon, Mission and West Vancouver.

Within the Central Okanagan, communities are connected through provincial highways, network roads, and the Kelowna Regional Transit system. Extending beyond the region are rail, air and highway systems.

Transportation Assets of the Central Okanagan

A description of each system and analysis of future expansion opportunities is detailed in Appendix A.

- Provincial Highways 97, 97C, 33.
- Kelowna International Airport
- CP Rail Corridor, Okanagan Rail line
- Kelowna Regional Transit system
- Municipal roads, sidewalks, cycle routes
- Provincial roads (other than highways), sidewalks, cycle routes
- Forest service roads
- Marinas, boat launches, public wharfs.

Constraints – topographic and jurisdictional

Two major constraints face transportation systems in the Central Okanagan.

Existing urban and agricultural development patterns have built up around town centers situated in lower elevations of the Okanagan valley. As future growth is encouraged in higher density and sequential outward development patterns, the need for new infrastructure is competing with other land uses in the same narrow north-south corridor. Thus, a first major constraint is a limited number of financially feasible corridor options.

In the words of a provincial transportation planner,

"The region is dominated by Okanagan Lake, which runs along the valley floor beneath steep hills. Development is effectively constrained to the lower levels of the valley where valuable and productive agricultural lands and sensitive ecosystems must also be protected. On the Westside of the lake, there are only limited development opportunities to the north of the Okanagan Lake Bridge because of the topography. On the east side of the lake, development opportunities are mainly in Kelowna and northward. This results in a "¿ " (dog-leg) shaped development pattern with Kelowna's central area at the critical bend or junction.."

A second constraint within the Central Okanagan is the number of jurisdictions involved in the provision of transportation. This complicates effective transportation planning and financing, particularly between modes or between geographic communities. Major players are:

- Local Governments including City of Kelowna, District of Lake Country, District of Peachland, responsible for municipal roads.
- First Nation communities including Westbank First Nation and Okanagan Indian Band. Individual band members ("locatees") undertake much of the planning for reserve land development.
- Provincial Government agencies including Ministry of Transportation and BC Transit. Ministry of Transportation owns and manages the local roads, sidewalks and public right of ways in "unincorporated areas", and the provincial highway network.
- BC Transit, in partnership with the Regional District and individual municipalities, oversees the operation of the Kelowna Regional Transit and associated services.
- Federal Government agencies oversee operations of the rail line, commercial marine traffic, and the Kelowna airport.

Economic Factors

An efficient transportation system is considered important for continued economic competitiveness and prosperity within the Okanagan. Effective transportation investments are those that are closely linked with the future market. Through transportation planning initiatives, there has been an attempt to understand the future economic market, land use and community development patterns that the system is to serve.

Describing the general economic picture of Central Okanagan, the provincial Ministry of Transportation notes[3]:

- *"The economy of the Regional District of Central Okanagan is not significantly dependent on any particular industry sector. The non-resource sectors account for the majority of basic income – including pensions, investments, other, non-primary resource industries, and the public sector.*
- *Manufacturing is an important activity in the area and there were almost 280 manufacturing establishments in RDCO in 1994. The area offers four season tourism and recreational opportunities with several larger commercial operators. Kelowna also acts as a service, health and education center for the area. The strong service infrastructure is a key factor in the region's ability to attract retirees to the area, and rapid growth supports a relatively large construction industry.*
- *Good transportation links are a key factor in the growth of RDCO's economy. The Kelowna airport serves as an important transportation link for the region and has seen high growth in passenger volume. The Coquihalla Highway has enhanced Kelowna's role as a distribution center and tourism destination."*

[3] Ministry of Transportation, Systems Policy and Planning Branch. *South Okanagan Corridor Management Plan,* December 2001.

Key Issues

Settlement areas were originally designed around Okanagan Lake steamships, later grew along rail corridors and farm roads, and then expanded outwards on the network of provincial highways and local roads. Within the Central Okanagan, communities grew rapidly along the Highway 97 corridor following opening of the Okanagan Lake Bridge in 1959. Development has focused on the "valley bottom" bench lands, in part because of the challenge and expense posed by building roads on the steeper hillsides.

Today, communities are witness to tremendous cost of building and maintaining public roads that meet the demand generated by an auto - dependent society. Faced with shrinking taxpayer resources, all levels of government are struggling to provide urban communities with efficient, productive and accessible modes of transportation[4].

Through the Okanagan Valley Transportation Planning process of the 1990's, detailed analysis of highway corridor options and of financial implications was compiled, but few agreements were reached on funding or on priorities. Now, 10 years later, new highway right of way options and the function of the existing Highway 97 corridor is being lost through expansion of the urban communities. Segments of Highway 97 are now well over capacity and exceeding their design standards.

At the same time, there is mounting uncertainty in ongoing public funding for transit systems and uncertainty in public or private commitment to the protection of railway systems.

Without major shifts in transportation policy, including financing mechanisms[5], it is possible that corridors, associated facilities, and the integrity of the transportation system in the Central Okanagan may be irreparably lost.

Operation of the Kelowna Airport is an example of a regional and national partnership arrangement that has allowed for investments to keep pace with growth of the region. Transportation authorities such as have been established in Greater Vancouver, Calgary and Edmonton are examples of arrangements that coordinate transportation investments with community based growth and development objectives.

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[4] "The government estimates that the total cost of addressing (provincial) transportation priorities could require capital expenditures in excess of $10 billion over the next 10 years" (Min of Transportation Draft Policy Paper, June 2002). BC Transportation Financing Authority, in April 2000, estimated that capital expenditures in the range of $635 million were required for highway improvements in the Central Okanagan to serve growth projected over the next 20 years.

[5] "During the 1960's, transportation expenditures were 30% of the provincial budget. Today, they are 4% of the budget" (Minister of Transportation, July 30 2002). "Municipal expenditures on transportation across Canada, in 1988 averaged $1216 per capita. In 1998, this had decreased by 14.4 % to $1041 per capita (using 1998 dollars both years) (CD Howe Institute Commentary: Municipal Finance in a New Fiscal Environment, November 2000)

Issues of Concern

Citizens and community leaders of the Central Okanagan express concern about the following issues.

Financial Pressures

- The average household spends 14 per cent of its budget on transportation. Central Okanagan households travel on average 30,528 kilometres per year in their personal vehicles. (Source: Draft TDM Strategy)
- Highway construction through the Central Okanagan is expensive. Projected costs of an upgraded lake crossing with approaches range from $ 250 million (5 lane bridge) to $ 635 million (2nd crossing). Depending on route selection, the land costs and the amounts required for rock blasting and fill, the costs of a highway corridor parallel to Highway 97 could exceed $1 billion.
- Communities of Kelowna, Peachland and Lake Country are concerned about "downloading" of provincial and federal responsibilities for highway and access road administration, maintenance and/or capital construction costs, particularly if policy decisions and transportation revenues such as the gas tax remain with senior levels of government. Local communities are equally concerned about equitable transportation financing policies in all regions of the province.

Air Pollution & Global Climate Change

- In some urban areas within Canada, transportation accounts for up to two thirds of all smog forming pollutants.
- Transportation (all modes) is considered responsible for 25% of Canada's greenhouse gas emissions. (Source: Transport Canada Action Plan 2000)
- Air quality is an issue to the Central Okanagan. Situated perpendicular to prevailing winds, the Valley experiences greater air stagnation in summer months. Higher temperatures and increased sunlight can result in greater concentrations of ground-level ozone. In winter, thermal inversions inhibit the dispersion of pollutants.
- A study conducted in 1995 by Levelton and Associates predicts that, by the year 2013, vehicles in the Central Okanagan will emit over 7,500 tonnes of fine particulates annually from tire wear, brake linings, engines emissions and road dust. That works out to 20 tonnes daily.

Accident Impacts

- In 1997, ICBC reported 405 death claims and 50,733 accident claims across British Columbia.

Financial Inequities

- Vehicle use is an ineffective choice for many residents - youth, seniors, or persons with a low income.
- Local roads inside a municipality are maintained through municipal tax revenues whereas local roads in unincorporated areas are maintained through provincial general revenues (all provincial citizens pay). Comparing the different property tax rates, it is estimated that households in unincorporated areas benefit by an annual $100 or more. (using numbers, reported in Capital News Nov 18, 2001 based on an average $150,000 residential assessed value) .

Land Use and Development Impacts:

- Development patterns of the past and those forecasted for the future anticipate that people will drive several times a day between residential neighborhoods, schools, shopping and employment opportunities. The road capacity (number of lanes), together with the need for parking lots typically eats up 20% of the land base.
- Many of these local trips occur using the provincial Highways 97 and 33. For example, projections to the year 2020 show 50% of total regional employment will be located along the Highway 97 corridor between Okanagan Lake Bridge and the Kelowna Airport. (Source: RDCO Traffic Zone Projections)

Linking Settlement and Transportation

Development policies in the Central Okanagan, from the 1960's and the 1970's were responsive to market demand that favored suburban, large lot forms of residential development. Large lots allowed on site septic systems and portrayed an image of country living within an attractive setting. Highway travel allowed for easy commutes between commercial centers and suburban neighborhoods.

Experience soon showed that this form of settlement was not sustainable – either from environmental or economic perspectives. In order to protect the environment and quality of valley bottom lakes, a concerted effort began during the 1980's throughout the Okanagan to provide community sewer service to urban areas and to new residential development enclaves.

Town Centers

From an economic perspective, the cost of maintaining community infrastructure became a focus of policy discussion through the 1990's. Following "sustainable community" planning policies, municipalities, first nation communities and the Regional District of Central Okanagan became cohesive in endorsing "town center" forms of development. The town centers are intended as areas of mixed land use offering employment opportunities, schools and shops with medium and higher density forms of residential development within 10 to 15 minute walking distance. As such, the need for infrastructure and the costs of services per person would be somewhat reduced. Evidence of a gradual transition to higher density is appealing (see table below).

Population Density, 1996 & 2001

	Land Area* (sq. km)	1996 Population	1996 Persons per sq. km	2001 Population	2001 Persons per sq. km
Kelowna incl. IR 7	225.6	91,322	**405**	98,267	**436**
Peachland	15.6	4,524	**290**	4,654	**298**
Lake Country	121.6	9,007	**74**	9,267	**76**
Westbank & Lakeview (OCP areas + Indian Reserves)	108	26,650	**247**	30,235	**280**
Rural Areas Joe Rich/Ellison/Westside Rd	166	4,849	**29**	5,316	**32**

Practical application of "sustainable community" transportation and settlement policies will require long term planning that identifies future town centers, that identifies future highway corridors and commercial truck routes (not necessarily situated in or adjacent to town centers), that builds network roads and transit routes to link town centers, and that makes links between network roads, transit stations, air and rail terminals; pedestrian and cycle networks.

Over time, these land use and transportation planning practices should result in fewer conflicts between transportation modes, more effective highway travel (maintaining highway speed and safety), fewer personal automobile trips and more efficient use of roads (fewer kilometers per person).

Length of Roads in Central Okanagan

	Population	Length of Public Roads & Highways	Km / 1000
Year 1999	150,538	1500 km	9.9

Source: BC Stats and Regional Transportation Committee staff records

New Roads in Central Okanagan

As an example, the following shows two options for the future, one building new roads at the same ratio as found in year 1999. The second option (based on town center settlement patterns and transportation demand management) might for example, require only 75% of the new road length typical of our communities today, resulting in a savings of 185 km new roads.

	Population	Length of Public Roads & Highways
Year 2025	235,000	
Option 1 based on 9.9 km / 1,000 pop'l		2,325 km
Option 2 based on 7.5 km / new 1,000		2,140 km

Source: Population numbers from 1996 and 2001 Census, by Statistics Canada.
*Land acreages include all lands inside municipalities. In electoral areas, all lands inside official community plans, rural land use bylaw boundaries are included as these generally define the private/crown land boundary. In rural areas, a margin of error is presented by large tracts of crown land situated inside planning bylaw boundaries (recreation reserves, surveyed crown lands, etc) and by numerous isolated residential enclaves (summer recreation homes, etc.) situated outside of planning bylaw boundaries.

The Options

As a basis for engaging community leaders in considering transportation investments and priorities, this discussion paper focuses on three optional plans for transportation in the Central Okanagan. None of the three options are suggested as a plan for action. Rather, the options reflect major differences in transportation planning and the type of decisions currently before community leaders.

The three options are categorized as:

1. *Do "nothing" for as long as possible*
2. *Build network road capacity and expand capacity*
3. *Build regional transportation services.*

On the following pages, a brief description of each of the options is presented. The description of "anticipated results" is based on technical analysis conducted as part of the Okanagan Valley Transportation Plan. A variety of comments from community stakeholders[6] are presented following each of the three options.

[6] Comments presented in this Discussion Paper from community stakeholders (unless otherwise noted) were recorded in August and September 2002 at a series of Central Okanagan forums held with chambers of commerce and economic associations, neighborhood and resident associations, advisory planning commissions, municipal and first nation councils. A full "Report of Stakeholder Feedback" is available, reference the Central Okanagan Regional Transportation Committee, November 21, 2002.

Transportation Option 1: Do "nothing" for as long as possible

Option 1 Leads To
Year 2020 Anticipated Results

Travel Time **90 Minutes**
Estimated Westbank to Lake Country in Year 2020 during peak commuter times.

Capital Budget **$160 Million**
20 year Capital Budget for transportation improvements, sufficient for four-lining of Okanagan Lake Bridge and approaches.

Mobility **Poor**
There are major deficiencies in the transportation system – gaps in the corridor, poor coordination between modes, inconsistent standards, etc.

How will we arrive at this scenario?

The operation and funding of transportation systems will be fragmented between seven major government authorities.

Each authority will be responsive to the priorities of their constituency (one corridor segment, or one particular mode of transportation).

Budgets for capital expenditures will be limited. Each agency will endeavor to reduce congestion through "soft" mechanisms such as traffic signal timing, traffic calming devices etc.

Decisions are based on short-term commitments and project-specific funding packages.

Range of Comments from Community Stakeholders:

- "Do nothing" is not a viable option. It'll incur greater costs later.
- There is support for transportation network coordination across the Central Okanagan urban region, perhaps entailing the entire Okanagan Valley.
- Keeping roads and bridges in a good state of repair is a high priority.
- There is a general agreement that people will choose to live where there are economical savings in housing prices. The length of a daily commute (exceeding one hour round trip) may not be sufficient to influence housing choices.

Transportation Option 2: Build highway infrastructure and expand capacity of network

Option 2 Leads To
Year 2020 Anticipated Results

Travel Time **30 Minutes**
Estimated Westbank to Lake Country in Year 2020 during peak commuter times.

Capital Budget **$1.6 Billion**
20 year Capital Budget for transportation improvements is in the $ 1.6 billion vicinity, including "twinning" of Highway 97, interchanges, and second bridge.

Mobility **Great**
There are no deficiencies in the highway system, it operates at designed speed, a well-developed network of regional roads supports the highway and is designed to carry most of the local trips.

How will we arrive at this scenario?

Provincial, local and first nation governments will agree on and commit to a regional highway and network road plan. Future route corridor options will be protected. The existing bridge will be upgraded or replaced. New highway corridors and a second crossing of Okanagan Lake will be underway when population is in the vicinity of 250,000.

Measures will be put in place for financing of highway and network road construction to meet demand for personal vehicle, trucking, transit and emergency vehicle and other trips.

Range of Comments from Community Stakeholders:

- There is general agreement that the federal fuel tax revenues need to be apportioned to transportation investments in BC, and that financing policies need to be applied equitably across the province. There is support for discussion of user pay mechanisms. Highway tolls may be appropriate when an alternate route is available.
- Reliance on new development for transportation infrastructure revenues is a concern, noting that Kelowna has the "4th highest housing costs in Canada".
- There is not consensus on the need for a second highway crossing of Okanagan Lake between Westside and Kelowna as opposed to a bypass route.
- When building new infrastructure, it is important to recognize that there are different impacts on individual communities.

Transportation Option 3: Manage regional transportation services

Option 3 Leads To
Year 2020 Anticipated Results

Travel Time **60 Minutes**
Westbank to Lake Country is 45 minutes by High Occupancy Vehicle / transit lane or 60 minutes by single occupant vehicles at peak commuter times.

Capital Budget **$800 Million**
20 year Capital Budgets apportion revenues to multiple modes of transport. Demand Management (TDM) measures are effective in reducing peak hour commuter congestion.

Mobility **Faster by Bus**
A well-developed network of local and regional transportation systems (dedicated transit lanes, park and ride, cycle routes) supports ease of mobility between urban centers.

How will we arrive at this scenario?

The funding and operation of regional transportation networks will be overseen by a regional authority responsible for investments in multiple modes of transportation. All communities will agree to take measures that slow the rate of increase of single occupant vehicle trips in the region.

Measures will include a mix of capital investments in commuter cycle corridors, transit and HOV lanes, and other TDM measures proportional to highway and network road investments. Measures will also include a mix of "soft" mechanisms such as traffic signal timing, traffic calming devices, etc.

Range of Comments from Community Stakeholders:

- High priority needs to be given to rebuilding public confidence that has been eroded by the number of highway investment announcements with no real action.
- Public transit is viewed as a viable alternative mode of transport. Less certainty that investments in cycling and pedestrian modes are effective in hillside communities.
- If town center development eases the demand for transportation, governments need to find mechanisms to make this form of development economically attractive.
- High priority is needed to decrease vehicle emissions and air pollution relative to the rate of growth.

Perspectives of Transportation Stakeholders

An initial vision for transportation is contained in the Regional Growth Strategy Bylaw[7] that says, in part:

> *The Central Okanagan is "an area that actively promotes a transportation system that is energy-efficient, affordable, accessible and convenient. The needs of all residents, including youth, seniors, and those without access to a car, are considered in our planning decisions".*

Working with policies suggested by the Transportation Association of Canada[8], community stakeholder groups such as chambers of commerce and neighborhood associations suggested the following priorities for transportation planning in the Central Okanagan:

Rated as High Priority:

1. "Roads and bridges are in a good state of repair".

Generally Rated as High Priority[9]:

2. "Transit, highways, arterials, parking and truck routes are planned and coordinated across the urban area".
3. "The physically challenged enjoy universal access to public transport facilities and services".
4. "Air pollution from motor vehicle sources is declining".
5. "Urban transportation infrastructure and services are adequately funded from stable and sustainable revenue sources".
6. "Political leaders have the support of a well informed public when making decisions on urban development and transportation systems to serve the area".

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[7] The Central Okanagan Growth Management Strategy Bylaw 851 (adopted by Regional Board of Directors June 26, 2000 and supported by member municipalities and the Province of BC) identified transportation as a key issue that needs to be addressed in order to protect quality of life within communities of the Central Okanagan.

[8] From "A Generic Vision for Urban Transportation in 2023" endorsed by Central Okanagan Regional Transportation Committee, May 1999; and by Transportation Association of Canada, Federation of Canadian Municipalities, Canadian Institute of Transportation Engineers, 1996

[9] Refer to "Report of Stakeholder Feedback, November 2002" for input from stakeholder groups. Note that other "visions" endorsed by Regional Transportation Committee in May 1999 received mixed feedback – some groups ranking the visions as high priority, others suggesting that they were of low to medium priority.

Moving Forward

In assessing the options, in consideration of the priorities expressed by local stakeholders, and in fulfilling its Central Okanagan growth strategy objectives, the Regional District has concluded that the first priority for action is to secure a mechanism for sustainable funding and coordination of investments in transportation modes through the region. The Regional District **Board of Directors** is working to:

- Establish a transportation taskforce to pursue with the Province of B.C. a transportation authority for funding and delivery of regional transportation services in the Central Okanagan. The task force will be comprised of the Central Okanagan mayors, the Westbank First Nation Chief, one Westside Area Director and the Regional District chair.

  The transportation authority will provide for
  - Dedicated and sustainable funding for transportation infrastructure and services
  - Governance and coordination of multi-modal urban transportation systems
  - Protection of corridors and supporting facilities necessary to serve future growth
  - Agreement on local highway improvement, access management, and upgrading priorities in order to achieve a consistent level of service through the Central Okanagan region. (Reference: Regional Transportation Committee, January 15th, 2003)
- Seek, through partnerships with neighboring regional districts, coordination of transportation investments and dedication of funding for highway improvements and multi-modal investments supporting economic development through the Okanagan corridor. (Reference: Green Sustainable Transportation Partnership administered by North Okanagan Regional District)
- Support senior government directions with respect to national or regional environmental objectives relating to transportation (e.g.: Kyoto Accord on Greenhouse Gas Emissions). (Reference: Federation of Canadian Municipalities Partnerships)
- Advocate for regional equity in the allocation of provincial and federal funding for transportation improvements.

In considering a plan for action, members of the Central Okanagan **Intergovernmental Advisory Committee** recommends that transportation stakeholders be brought together in a workshop to exchange perspectives and to endorse a plan of action (Reference: IAC February 18th, 2003). As a basis for the workshop, a draft "8 point action plan" is outlined in Appendix C. Workshop participants may be encouraged to articulate interests, using as a reference the draft Canadian Government Sustainable Transportation Principles (Reference: www.brocku.ca/epi/sustainability/sustrans.htm)

Monitoring Success

In order to monitor progress in fulfilling its regional transportation objectives, the Central Okanagan Region in year 2001 began a process of tracking economic, environmental and social statistics, including the following transportation, mobility and settlement pattern indicators[10].

Indicator: Public Transit Ridership

Transit Ridership, Central Okanagan			
	1995	**2000**	**5 year change**
Annual # Passengers	1,119,715	2,282,810	+ 104 %
# Buses in Service	16	33	
"Serviceable Area" Population	94,100	116,500	

Source: BC Transit year end reports.
Revenue Passengers, Conventional Service, Years 1994/95 & 1999/2000.
"Serviceable Area" are residents within 300 meters of a bus route

"Transit ridership illustrates our ability to operate a system that attracts riders, to plan neighborhoods that are readily serviced by transit, and/or shows a societal shift from dependence on the single occupant vehicle to public transit…Increased transit use will increase capacity of all network roads (more mobility with less congestion), will decrease per capita energy consumption, will increase personal safety and security on streets, will increase household disposable income, and will reduce air and water pollution associated with cars."

Indicator: Transit Efficiency

Transit Efficiency, Central Okanagan			
	1995	**2000**	**By 2018** (Aiming for)
Annual # Passengers	1,119,715	2,282,810	5,500,000
"Serviceable Area" Population	94,100	116,500	185,000
Passengers/Population	11.9	19.6*	29.7

Source: BC Transit year end reports, # Revenue Passengers, Conventional Service, Years 1994/95 & 1999/2000. Year 2018 Projection from Draft KELTRANS Report, Jan 2000.
* The average efficiency rate of six communities in B.C. that receive "tier one" service in year 2000 was 20.1 passengers/population.

Neighborhoods designed for transit service will result in a larger percentage of "serviceable area" population relative to total residents of the region. It should further result in a larger number of passengers from with the "serviceable area", so long as investments in the regional transit service keep pace with population growth.

[10] Source: Regional District of Central Okanagan, Monitoring Progress Year 2001 Report, reference Regional Board of Directors April 22, 2003.

Indicator: Passenger Vehicles per Capita

	Year 2000 # Insured Passenger Vehicles	**2000** Average # per Capita
Central Okanagan	104,000	.69

Source: Insurance Corporation of BC

The number of vehicles per capita is directly related to the number of vehicles on the road. It provides indirect information regarding energy use, air pollution and levels of investment in public road infrastructure.

Indicator: Highway Traffic Volumes at Okanagan Lake

Highway Traffic	**1969**	**1990**	**1999**
Daily vehicle counts (both directions)	4,500	38,189	49,940
Traffic growth rate since last reporting period.		10% per annum	3% per annum (slowed after 1994)

Source: Ministry of Transportation
Total Number of Vehicles, daily average, July & August on Highway 97 at Okanagan Lake Bridge.

The highway traffic volume is considered an indicator of regional disparity in residential and employment bases between neighbourhoods. Research shows residents of the Central Okanagan travelling to and from job, school, medical, shopping and other daily appointments generate 85% of the Highway 97 vehicle traffic. A reduction in traffic volumes relative to regional population growth would indicate an improved distribution of residential and employment base or would indicate changes in personal habits to reduce the number of daily trips across Okanagan Lake.

Indicator: Air Travel Passenger Volumes

Air Travel, Kelowna Airport				
	1995	**2000**	**2001**	**2011 Forecast**
Passenger Volumes	348,711	835,932	850,311	1,000,000

Source: Kelowna Airport website and news release, January 2002

Air travel passenger volumes are considered an indicator of national policies in support of a safe, efficient and competitive airline industry. However, trends are influenced by factors such as the price of fuel, competition with other Okanagan airports, and attractiveness of Canadian economy to foreign tourist trade.

Appendix A

Inventory of Transportation System Components:

For purposes of the regional growth strategy, focus is on inter-regional (between regions) and intra-regional (between communities of the Central Okanagan) components of the transportation system.

In the year 2002, the system consists of seven major components:

- highways and "network" roads,
- local and forest access roads,
- air, rail, marine, public transit, and
- pedestrian/cycle networks.

An overview of each is provided on the following pages.

Overview of Highways and Roads

Assets:

Highways 97, 97C and 33 are components of the provincial highway system that support passenger vehicles, transport trucks, busses, and emergency vehicles in the movement of people, goods and services to their destinations from all regions to provincial, national and international markets.

Highway 97, forms one of the longest north-south international routes in North America, stretching from northern California, through the length of British Columbia to the Yukon territory. Following a route parallel to Okanagan Lake, Highway 97 traverses the town center core areas of Peachland, Kelowna and Lake Country, as well as the town center of Westbank, industrial lands of Lakeview, and First Nation Indian Reserves 9, 10 and 7.

The Highway 97 Okanagan Lake Bridge features a manned lift span to permit closure of highway traffic flow and passage of marine vessels through the span.

Highway 97C, the "Okanagan Connector" runs east-west from Peachland to Merritt where it intersects the Coquihalla Highway 5 route between Kamloops and the Fraser Valley/Lower Mainland. The 97C route was constructed as a controlled access freeway with no "at grade" intersections.

Highway 33 provides travel south-east from Kelowna to intersect Highway 3 "Southern Trans-Provincial" at Rock Creek.

Network Roads provide for mobility within communities, provide "collector or arterial" access between neighbourhoods, provide access from economic centers to the highway system, and provide alternate corridors to the highway system.

Local Roads provide for travel within a community. The pattern of local roads and 20 year plans for future improvements are established by Official Community Plan and Capital Budget bylaws. Local roads have not presented an issue to communities of the Central Okanagan and are not addressed further in this report.

Network and local roads are built and maintained by the applicable municipality, by the First Nation community, or, in unincorporated areas, by Ministry of Transportation.

Forest Access Roads provide access to timber, mineral, recreation and other resources on Crown Lands and are solely managed by provincial agencies and operating forest license companies.

Highway Operation and Funding:

Highway and network road travel through the Central Okanagan is currently free of tolls or other charges. Funding for maintenance and operations comes predominantly from property tax assessments (respective municipal and provincial tax revenues), municipal development cost charges, and from provincial gasoline tax revenues (11 cents/litre).

A variety of commercial freight transport, delivery, taxi and shuttle services, scheduled and tour bus transportation, emergency vehicles, farm vehicles[11] and bicyclists use the highway and network road system, but by far the largest volume of usage in the Central Okanagan comes from passenger vehicles.

Highways 33 and 97C are projected to have sufficient capacity for future growth in the Central Okanagan. Highway 97 has, in many segments, already exceeded its design capacity. It requires upgrading and additional capacity to meet future growth projections in the Central Okanagan and other neighbouring regions.

Analysis of Highway 97 Lake Crossing Alternatives

Cost projections associated with providing additional capacity on Highway 97 at Okanagan Lake are provided in the following table. These options and parts of the associated access routes have no dedicated revenue sources in place and are therefore not protected within community plan bylaws.

	4 lane Bridge	**5 lane Bridge**	**2nd Crossing**
Cost Capacity by	$ 250 Million 2005-2010 (≅ 190,000 population)	$ 303 Million 2014 – 2016 (≅ 220,000 population)	$ 635 Million Beyond 2018
Congestion at year 2018	Westside Approach, Kelowna Downtown, Rutland Town Center	Kelowna Downtown, Abbott-Richter Abbott to Hwy 33 Rutland Town Centre	Gordon to Hwy 33 Rutland Town Centre
Environmental Impact	Low	Low	High
Economic Barrier	High	Medium to High	Low
Vulnerability to Bridge Closure	High	High	Low

Source: Ministry of Transportation and Highways and BC Transportation Financing Authority, Presentation to Central Okanagan Regional Transportation Committee, April 2000. All cost numbers include associated improvements to highway system approaching the bridge.

[11] Farm and other slow moving vehicles are restricted by controlled access and minimum speed restrictions on Highway 97C

Other portions of a future upgraded Highway 97 and network road system are endorsed in Official Community Plan bylaws, as shown on the enclosed Road Network map. These portions are associated with capital budgets and development cost revenues currently in place within municipalities.

	Year 2002	Projected Year 2020
Length of Network and Highway Roads[12]	447 kilometres	562 kilometres

Future highway corridor(s) through the Westside are not protected in Official Community Plans, as provincial funding sources are not yet dedicated. Protecting options for future highway corridor(s) is a provincial policy and objective of the Okanagan Shuswap Land and Resource Management Plan.

[12] Road length calculations shown on map from RDCO Arcview data base, 2002. Excludes Westside Road, upper reaches of Highways 97C and 33 and accesses required with a second highway bridge crossing.

Passenger Vehicles

The Insurance Corporation of BC (ICBC) records 104,000 insured passenger vehicles in the Central Okanagan (averaging 1.6 vehicles per household, or more than one vehicle for each adult of driving age).

85% of the traffic on Highway 97 at Okanagan Lake Bridge is intra-regional[13] It originates and is destined for locations within the Central Okanagan. Within urban communities, residential development, shopping and school destinations, and job sites are dispersed, in some cases connected only by the highway system. Residents have chosen to invest in car ownership and have expressed support for municipal and provincial expenditures in maintaining and upgrading the local road network to meet anticipated demand.

Congestion

Highway 97 traffic volumes at Okanagan Lake Bridge were recorded in 1969 at a daily average of 4,500. In 1999, this had risen to 49,940 vehicles of which approximately 87 % are automobiles, 12% are trucks and recreational vehicles. Buses and motorcycles make up the remaining 1%.

Given that local residents travelling in the region generate 85% of trips across Okanagan Lake, and assuming that most were return trips, the figures show that one of every 13 residents drove daily across the lake in 1969. Today, it's one of every 5 residents.

A large part of the bridge traffic is commuter traffic, causing capacity shortfalls at peak times (3 to 6 pm) and during summer tourist traffic season. This "commuting factor" will continue so long as land use decisions perpetuate existing development patterns. For instance, 23 % of the regional population but only 9 % of the jobsites are located in communities on the Westside. This trend is projected to continue into the next 20 years as residential growth on the Westside outpaces growth in employment[14].

Summer Highway Traffic Volumes at Okanagan Lake Bridge				
	1969	**1990**	**1999**	**Projected Yr 2020**
Daily vehicle counts	4,500	38,189	49,940	**78,231**
Traffic growth rate since last reporting period.		10% per annum	3% per annum (slowed after 1994)	
Portion of residents travelling daily across Okanagan Lake	**1/13**	**1/ 5**	**1/5**	Assume 1/5

Source: Ministry of Transportation
Total Number of Vehicles, daily average, July & August
Portion of residents travelling daily across Okanagan Lake calculated by: # Regional population per 85% of daily vehicles counted x 2 crossings per day.

[13] 1994 Origin/Destination Surveys.

[14] Residential and employment projections based on Official Community Plans in place, 1997.

Overview of Bus Transit

Public Transit:

Kelowna Regional Transit operates a conventional (bus) transit, a custom (handyDart), Taxi-Saver and Taxi Supplement service through annual operating agreements with communities of the Central Okanagan and the provincial BC Transit.

The conventional service provides fixed route scheduled service, operated with 33 buses and carried over 2 million passengers in year 2000 (up by 104% over 1995).

Custom Transit service within the Central Okanagan is available for passengers with disabilities and provides door-to door service by prescheduled appointment. HandyDart service consists of 12 vehicles carrying 99,000 passengers[15]. Taxis maybe dispatched by the handyDart operator at times of high demand as a supplement to the handyDart vehicles.

The Taxi Saver program is a 50% taxi discount offered to handyDart passengers, to allow for spontaneous trips.

Transit Ridership, Central Okanagan		
	1995	**2000**
Annual # Passengers	1,119,715	2,282,810
# Buses in Service	16	33
"Serviceable Area" Population	94,100	116,500

Source: BC Transit year end reports and Actran (1997)
Revenue Passengers, Conventional Service, Years 1994/95 & 1999/2000.
"Serviceable Area" are residents within 300 meters of a bus route.

Transit Efficiency, Central Okanagan				
	1995	**2000**	**By 2018, Aiming For**	**Yr 2000 Comparison with BC Average**
Annual # Passengers	1,119,715	2,282,810	5,500,000	9,759,772
"Serviceable Area" Population	94,100	116,500	185,000	485,800
Passengers/Population	**11.9**	**19.6**	**29.7**	20.1

Source: BC Transit year end reports, # Revenue Passengers, Conventional Service, Years 1994/95 & 1999/2000.
Year 2018 Projection from Draft KELTRANS Report, Jan 2000.
Yr 2000 Comparison is based on 6 communities in BC that receive "Tier One" service.

[15] Source: BC Transit presentation at Central Okanagan Transportation Initiatives Information Exchange, August 1996

.

Transit Costs:

Double Decker bus, 120 passenger capacity, wheelchair accessible $ 600,000
Park & Ride Lot, land & 10 stalls $350,000 *(Source: verbal Nov 21, 2001)*

School bus:

Central Okanagan School District subsidizes bus service to students residing further than 4.0 or 4.8 kilometers (depending on grade level) from school. Until year 1999, the subsidized service was offered to additional students situated "on route". Withdrawal of free service in the fall of 1999 resulted in many students reverting to public transit service (an increase in transit passengers in same year is directly attributable to the decline in school bus ridership).

Provincial Bus Services:

Greyhound is the principal operator of scheduled inter-city bus service within and to and from the Okanagan Valley.

Motor coach tours are a large sector of the tourist industry in the Okanagan. In 1995, it was estimated that about 1,700 group tours "overnighted" in Kelowna and 3,000 groups "stopped for lunch" in Kelowna.

Overview of Air Transportation

Air Transport and Facilities:

Kelowna Airport consists of a 2,225 metre long runway and manned air traffic control tower. Number of scheduled commercial flights totaled 21,022 in year 1996 and 22,096 in year 2000. Passenger volumes in the same years rose from 550,000 in year 1996, to 835,932 in year 2000. Scheduled carriers in year 2000 included Air Canada, Horizon Air and WestJet.

Winter weather conditions (fog) present a challenge to flight reliability. Work is underway with NAV CANADA to improve instrument landing systems.

Airport operations are leased from Transport Canada to City of Kelowna. The City receives input from an Airport Advisory Committee comprised of membership from Regional District of Central Okanagan, Districts of Peachland and Lake Country, and communities in the North Okanagan.

Private helicopter service operates on the Westside by Alpine Helicopters Ltd. and by Skyline Helicopters Ltd. at the Airport. Small charter floatplane services operate on Okanagan and Wood Lakes.

Air Travel, Kelowna Airport		
	1995	**2000**
Passenger Volumes	348,709	836,564

Source: Kelowna Airport (Annual Report, 2001)

Overview of Rail Transportation

Railways:

Canadian National Railways owns a single-track line that extends from Kelowna City Centre north through Kelowna and Lake Country industrial parks, north through Vernon to connect with the national rail system running between Kamloops and the Alberta/BC border. The 20 metre wide corridor parallels Highway 97 with at grade crossings (some signalized, and one overpass- the Ellison Overpass at intersection with Highway 97).

In 1994, freight traffic carried by CN Rail was about 900,000 tonnes per year, equivalent to 90,000 truckloads. Freight inbound to the region is mainly consumer goods and bulk supplies (e.g., cement, propane, feed and grain, fertilizer) and outbound loads are mainly forest products. The CN line is currently leased to Kelowna Pacific Railway Ltd.

Overview of Marine Transport

Marine Transport and Facilities:

The federal "Navigable Waters Act" regulates Okanagan, Wood and Kalamalka Lakes but marine transport in the year 2002 consists almost exclusively of recreational boating.

Marine facilities now include a variety of public and private moorage and launch facilities established for pleasure and commercial tour boat operators (refer to map). Freight transport occurs infrequently, with the main activity being log boom transport between Bear Creek to Riverside Forest Products mill in Kelowna.

Several small private initiatives to establish commercial passenger service across Okanagan Lake have failed. However, development of IR10 may provide sufficient ridership to look at the feasibility of a public marine transit system to and from the Kelowna City Centre. Comparison with the Greater Vancouver "Burrard Inlet Seabus" is provided below.

INFORMATION ASSOCIATED WITH THE BURRARD INLET SEABUS CROSSING[16]

Total North & West Vancouver Population 175,249 (2001 Census)

Seabus Service

- *15 minute daytime service, 30 minute evening*
- *Total: 62 round trips/weekday*
- *passenger capacity: 400 , wheelchair and bicycle accessible*
- *crossing distance: 1.75 nautical miles*
- *crossing time: 12 minutes*

General Ridership Stats (stated as of summer 2001 and excluding exceptional "skews")

- *average weekday ridership (autumn, winter, spring): 14,000*
- *average load per trip (autumn, winter, spring): 113*
- *average weekday ridership (summer): 17,000*
- *percentage of Seabus passengers making transfers: 60%*
- *Major regional tourist attractions account for much of the off peak travel to the North Shore via Seabus, as displayed by the higher summer ridership numbers*

Financial Stats

- *1977 capital costs (when the service was implemented): $35 million*
- *estimated incremental annual operations and maintenance costs per new vessel: $1.4 million*

[16] From Translink, April 2002.

Overview of Pedestrian and Cyclist Mobility

Sidewalks and Paths:

Within the Central Okanagan, there is growing awareness of potential greater use of pedestrian and cycle networks. A sidewalk network within the municipal road right of way is required in most new urban residential neighborhoods. Few sidewalks are present or required in rural agricultural areas or in older established neighborhoods

Cycling is legal on all roads and highways within the region. During the 1990's communities began developing a network of designated cycle lanes, paths and signage and that within the City of Kelowna now totals approximately 200 kilometres[17] of route length. Cycling facilities such as bike lockers or racks are considered at time of major development proposals. Bike carrying racks are installed on all of the conventional buses in the regional transit system.

A north-south pedestrian and cycle route within the rail corridor is currently being examined. This potential 22-kilometre long cycle path (3 meter wide paved route in urban areas) through Kelowna to the Okanagan University Campus is forecast to attract upwards of 65,000 cyclists and 30,000 pedestrian trail users annually.

The unincorporated areas and First Nation reserves have no developed bicycle or pedestrian networks apart from neighborhood sidewalks leading to schools and commercial destinations; as well a sidewalk on Okanagan Lake Bridge.

Proposals for a regional bicycle network on all new collector and arterial routes and linkages between communities and destinations of the Central Okanagan have failed due to lack of funding programs.

Costs of Bicycle Routes:

Estimates used by Ministry of Transportation include:

	Planning & Construction costs
2.5 metre wide asphalt path	$240,000 per kilometre *
1.5 metre retrofit of highway shoulder	$ 48,000 per kilometre*

Sources:
* Crude estimates in 1991 cited by province of Ontario, excluding land acquisition, as per 1992 BC "Interim Cycling Policy". City of Kelowna Rails to Trails Feasibility Study projects an average $300,000 per kilometer for a 3-metre wide dual use pedestrian/cycle trail.

[17] Source: City of Kelowna Traffic Division.

Transportation Demand Management

In 1998, City of Kelowna and the Regional District of Central Okanagan endorsed a Transportation Demand Management Business Plan that established "the goal of reducing peak period automobile traffic in the Central Okanagan by 12% by the year 2013 relative to trend growth in traffic volumes."

Recent citizen surveys show community support for increased investment to improve services such as transit, bicycle lanes and carpooling. The type of mode changes that will be required in the Central Okanagan if TDM goals are to be achieved is shown below.

Current and Future Mode Share

	Mode Share (3 – 6 pm)	
Mode	**Yr 1993**	**Yr 2013**
Walk	8.3%	10%
Bicycle	1.0%	3%
Transit	1.4%	4%
School Bus	3.1%	3%
Other	0.3%	1%
Auto Passenger	19.8%	21%
Auto Driver	66.1%	58%

Source: City of Kelowna Transportation Plan, 1995

Public attitudes / research surveys

According to the 1996 Census, travel patterns for persons 15 years of age and over in the Central Okanagan region show that 90% of residents travel by automobile to work (84% as driver and 6% as passenger). (source: 1996 Census, 20 % sampling). The use of personal vehicles rises to a high of 97% in rural areas of the region such as Ellison, Carrs Landing and Upper Glenrosa/Trepanier.

A Transportation Demand Management Survey of 400 residents in Kelowna and the regional electoral areas, in June 2000, confirmed the travel patterns shown in the 1996 census, and showed a range of support for various strategies that would reduce the frequency of automobile use.

Results of the most recent Annual Citizen Survey conducted in Kelowna show that almost half of respondents (56%) feel that the most important issue facing the City of Kelowna over the next 5 years involves roadways and transportation (source: Kelowna Citizen Survey, Sept 2002).

When polled about level of satisfaction, the Kelowna Citizen Survey showed:

- The more frequently that residents use the public transit service, the less satisfied they are with the service. Only 47% of residents who take the bus everyday are satisfied with the service.
- The more frequently that residents ride their bike, the less likely they are to be satisfied with the number of bicycle lanes and bicycle lane maintenance. Only 39% of residents who ride the bike everyday were satisfied with the number of bicycle lanes.

Appendix B

Transportation Planning Initiatives, Policies and Priorities:

Recent regional and provincial transportation policy and planning programs are relevant in establishing goals and objectives, identifying issues and discussing potential solutions, such as the following:

Province of British Columbia Ministry of Transportation
(Performance Plan, April 2001)

"The vision of the Ministry of Transportation, consistent with government priorities, is an excellent and safe transportation system that meets the social and economic needs of B.C. citizens, businesses and communities and to serve as a partner and advocate for a viable integrated transportation network throughout B.C."

Provincial Transportation Minister Judith Reid
(July 2002 presentation, "Transportation Challenges and Choices in British Columbia")

"A reliable transportation system is integral to economic development… Improvements are needed… to reduce congestion for commuters and goods … The Central Okanagan Valley has had a 7% increase in traffic in the last five years with no increase in capacity infrastructure…The highway infrastructure needs to keep pace with this growth. It affects us all… Significant government funding for transportation just isn't available…(thus) we have a huge challenge in meeting our transportation needs."

Senator Ross Fitzpatrick
September 20, 2002 (Kelowna Daily Courier)

"I am a strong advocate of Highway 97 being designated as part of the national highway system…The key to good, green, development of the area (Okanagan & Similkameen) is to deal with the transportation infrastructure requirements of the whole area and to develop a strategic transportation infrastructure plan considering the projected population growth over the next decades."

British Columbia Chamber of Commerce,
2001-2002 Policy and Positions Manual regarding the National Highway System – Transportation Investment Strategy:

> *" The Chamber recommends that the provincial and federal governments include Highway 97, from Vernon to the United States border, in the National Highway System as soon as possible."*

Agricultural Land Commission
(2003 IAC correspondence)

The Agricultural Land Commission's goals are to preserve agricultural lands and encourage farming. The Commission's recommendations regarding transportation infrastructure are:

1. Avoid establishing new transportation routes within the Agricultural Land Reserve whenever possible.
2. Where there are no alternate routing options except through Reserve lands; that new road, rail and trail alignments be sited sensitively (for example, not bisecting active farms; at the edge of the ALR), and that expanded right of ways mitigate impacts on farm operations.

Examples of mitigation are; the construction of farm over/underpasses to link agricultural areas across arterials; frontage roads to permit farm vehicle movements and direct marketing; fencing and planting vegetative screening to prevent trespass onto farms.

Provincial Mines Branch
(2003 IAC correspondence)

Interests of energy and mines producers and the Ministry include:

1. Provincial freight and transportation corridors that are unimpeded and allow secure shipment to provincial, national and international markets.
2. Avoiding establishment of new transportation routes on mineral tenures where possible.
3. Maximizing utilization of aggregate resources and maintaining access, recognizing the scarcity of the resource and the demand for aggregate in all road and building projects.

Ministry of Water, Land and Air Protection
(2001 IAC correspondence)

Interests of the agency include:

1. Minimizing impact on species and species habitat through location and design of transportation infrastructure (new or upgraded*);
2. Promoting transportation options that reduce detrimental impacts to air, water and land (soil) quality;
3. Recognizing that all components of the regional transportation vision (energy efficient, affordable, accessible and convenient) may not always be doable in concert.

*Note, generally, expanding existing infrastructure, except in sensitive areas, is a better approach from an environmental perspective than locating in virgin locations.

Ministry of Sustainable Resource Management
(2003 IAC Correspondence)

In accord with the strategic direction of the Okanagan – Shuswap Land and Resource Management Plan, an overriding objective is "to maintain existing transportation routes and utility corridors and options for future corridors". Meeting this objective will ensure that crown land is available for transportation and utility corridors. Thus promoting sustainable economic development through efficient transportation systems for moving people, goods and services and reliable utility networks throughout the Okanagan valley.

Land and Water British Columbia Inc.
(2001 IAC Correspondence)

Land and Water British Columbia's interest is to see economic development in a sustainable environmental context, in accordance with the Okanagan – Shuswap Land and Resource Management Plan and other strategic planning direction. This will include the protection of existing land and water tenures, and the development of future land and water allocation options in the design of an effective transportation system.

Ministry of Agriculture, Fisheries and Food
(2003 IAC Correspondence)

Ministry of Agriculture, Fisheries and Food interests are:

1. Safe, reliable and efficient means of transport for agriculture and food products, services and supplies.
2. Avoid the Agriculture Land Reserve lands to ensure the long-term options of continued farming of the land.
3. Avoid the hindrance of normal farming operations by the encroachment of transportation corridors near farmland. If this is not possible, support the use of buffers, and vacant strips of land on the non-agriculture side, to soften the potential for conflict or loss of productivity.

Transportation corridors should be planned so as to minimize disruption to agriculture and to protect the public from the hazards of agriculture operations.

1. Support the development of agri-tourism and direct farm marketing to foster the small component of the industry. Many of these operations have a special need for access by the public.

Official Community Plans

Community Plan bylaws applicable to urban areas of the region are consistent in supporting future upgrade of highway and network roads and managing access in response to growth projections. They are also consistent in supporting upgrade of transit service, of pedestrian and cycle networks, and of "town centre" and "neighbourhood plan" forms of development that allow for easy pedestrian, cycling and transit circulation between homes, shopping, school and work.

Policies of the Official Community Plans are summarized in the attached table. Wording of each is similar to the following sample of Kelowna Transportation goals.

Kelowna Official Community Plan, 2001:

"Transportation Goals:

- To provide for the safe and efficient movement of people and goods within and through the City of Kelowna;
- To decrease emphasis on meeting demand for automobile capacity, parking and other related facilities, while increasing emphasis on walking, cycling, and the transit service;
- To encourage a more compact urban form to promote (alternatives to) single occupant vehicles;
- To provide the transportation system required to support and improve the efficiency of the urban goods distribution system in recognition of the role of transportation in providing a vibrant and competitive economy;
- To consider energy conservation, public safety, (community, social and environmental) impacts and special user needs in decisions regarding the planning, operation and construction of transportation facilities;
- To plan future transportation facilities as part of a comprehensive integrated transportation system which recognizes the inter-agency relationships between all modes of transportation and land use within the City, Region and Province;
- To optimize the use of the existing transportation system utilizing new technologies and transportation demand management initiatives; and
- To seek and develop alternative funding opportunities and partnerships in the provision of transportation infrastructure."

Supportive Transportation Policies In Official Community Plans

√ Supportive policies (applicable November 2001)

Policies or Supporting Background re:	Kelowna OCP	Lake Country OCP	Peachland OCP	Ellison OCP	Lakeview OCP	Westbank OCP	Westside OCP	Joe Rich RLUB	IR 9 & 10 Plan
Highway 97	√	√	√	√	√	√			√
Highway 97C			√						
Highway 33	√		√					√	
Highway Access Management	√	√	√	√	√	√	√	√	√
Arterial & Collector Network Roads	√	√	√	√	√	√			√
New highway or network road corridors	√	√	√	√	√	√			√
Westside Highline/ North End Connector/ Winfield alternate road corridor protection	√	√	√	√					
Preferred use travel (HOV, emergency, transit lanes)	√								
Railway line Operation	√								
Airport Operations	√	√		√					
Airport Noise Contour	√			√					
Transit Service	√	√	√	√	√	√	√		
Transit Facilities	√	√							
Park & Ride	√								
Pedestrian & bike routes	√	√	√	√	√	√	√	√	
Transportation Demand Management	√	√			√	√			
Marine Transport (boat launches)	√	√							
Resource Extraction – Crown Land Access			√	√				√	
Development Plan emphasis on multi-use, high density along connecting corridors	√	√	√		√	√			√
Neighborhood plan emphasis on pedestrian, cycle & transit friendly design	√	√	√	√	√	√			
Avoid ALR Lands	√			√	√	√	√		

Appendix C

Central Okanagan Transportation and Mobility
Draft Action Plan
February 2003

What to Do: ➢ **Protect Highway 97 highway corridor options including alternate corridor and regional arterial road networks (recommended per OVTP Phase B) for future transportation infrastructure.**
When & why do It: ➢ Within 12 months, so as to minimize costs. ➢ Corridor options are in areas now being identified for future settlement. Once a corridor is broken by development, it becomes politically difficult to acquire the land.
How to do it and to measure success: ➢ Refer to OCPs, OVTP Phase B and to LRMP Transportation Map for corridor alignments. ➢ Overcome MoT legislative barrier by establishing corridor protection as a Growth Strategy objective, putting a regional mechanism in place to fund acquisition of the corridors (land acquisition only, not highway construction), and then protecting it's function through regional context statements adopted by municipal councils. ➢ Success is measured by protection being in place at the present assessed value of the land. Therefore funding source(s) will need to be put in place to acquire land as it comes available.
What to Do: **Sustain the current transportation systems, and make interim improvements including upgrade of roads, highways, transit, rail and airport, as well as cycle and pedestrian routes.**
When & why do It: ➢ Immediately to overcome deficiencies in current routes and to replace aging infrastructure.
How to do it and to measure success: ➢ Dedicate capital plan funds, assess allocation of funds to priorities.
What to Do: **Keep rail corridor as an intact functioning corridor from Okanagan Lake (Kelowna) to Vernon.**
When & why do It: ➢ When able to negotiate with railway. ➢ The corridor is the most direct and functional route for transportation, it has priority over cross traffic, it connects a number of town centres and destinations, and, it is situated where the bulk of future growth is projected (3/4 of the projected increase is targeted to Kelowna and Lake Country).
How to do it and to measure success: ➢ Initiate discussions and negotiations with CN and Kelowna Pacific Railway towards achieving joint interests for the corridor. ➢ Establish long-term interest for the corridor with CN as their current lease expires within twenty years.
What to Do: **Give priority to transit, to emergency vehicles, to low emission vehicles, to carpools, or to other "preferred modes" during peak commuter hours in the design of any new arterial routes or highway capacity in the Central Okanagan.**
When & why do It: ➢ This is a key strategy to demonstrate preferential treatment to efficient and environmentally friendly transportation. ➢ The details of this have not been worked out and implemented with major road improvements.
How to do it and to measure success: ➢ Undertake a detailed plan for transit priority in the Central Okanagan. Consider what additional things can be done to support emergency vehicles and carpools within the plan.

What to Do: **Establish sustainable transportation funding including existing gas taxes, road pricing and dedicated property taxes.** **Develop an apportionment of "public expenditures per capita" that begins to equalize subsidies to major modes of transportation, particularly within the urban settlement areas. Eg: a predetermined percentage of annual budget for local road maintenance and capital costs is matched by the budget for transit, rail, cycling, pedestrian routes and ancillary infrastructure (stations, park & rides etc).**
When & why do It: ➢ Starting 2004 fiscal year in consultation with the Province through BC Transit and the Ministry of Transportation.
How to do it and to measure success: ➢ Through negotiations with the Province establish ongoing self sufficient funding by the end of 2004.
What to Do: **Establish TDM targets for modes of transport during peak commuter hours as a target of the Regional Growth Strategy**
When & why do It: ➢ Within 12 months. ➢ These targets are largely accepted by local governments. Adoption has not followed as they were tied to a regional function. The growth strategy allows for monitoring of the target but is not prescriptive. **How to do it and to measure success:** ➢ Finalize the regional Transportation Demand Management Action Plan (draft Jan 2001)
What to Do: ➢ **Provide 5-year seed funding to a non profit society advancing sustainable transportation practices in the Central Okanagan.**
When & why do It: ➢ 2003 to 2008 fiscal years ➢ To conduct educational, awareness building
How to do it and to measure success: ➢ **Partner** with BEST (Vancouver Based) or put out call for proposals – strike as a regional committee that within a year is incorporated as a society.
What to Do: **Negotiate with province and First Nations to establish a regional transportation financing mechanism.**
When & why do It: ➢ Immediately. ➢ Do it to gain the ability to influence provincial highway and transportation policies applied to the region. ➢ Do it to provide more certainty that transportation revenues (eg: fuel tax) are spent where they are paid.
How to do it and to measure success: ➢ Through a Regional Task Force, initiate a process towards establishing a regional transportation mechanism.

Appendix D

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