

Memo



Date: August 3, 2011
File: 1405-06
To: City Manager
From: Ron Westlake, Director, Regional Services
Subject: Central Okanagan Region - Transit Future Plan
Report Prepared by: Dave Colquhoun, Regional Services

Recommendation:

THAT Council endorse the '*Transit Future Plan - Central Okanagan Region*', as the guiding document for expansion of public transit service within The City of Kelowna over the next 25 years.

Purpose: The proposed Transit Future Plan identifies the services and infrastructure that are required to build a strong, effective, efficient and innovative transit system that addresses major emerging issues such as climate change, population growth, increasing traffic congestion and an aging population.

Background:

High quality public transit service is an essential requirement for the creation of healthy, economically competitive cities. Investment in transit improvements can significantly improve the social, economic and environmental health of cities by:

- Enabling citizens to participate in the social and economic life of the community;
- Providing lower cost mobility options for transportation users and society by reducing the need for and expense of new roadway and parking infrastructure and operation of private vehicles;
- Improving air quality and reducing energy demands and greenhouse gas emissions that are contributing to global climate change;
- Helping to shape and create more compact, mixed use development within walking distance of transit stations, which in turn, will generate increased transit use;
- Ensuring regional labour force mobility to support economic development.

The City of Kelowna's transportation objectives are focused on generating greater use of sustainable modes - active transportation (cycling/walking) and transit - as well as TDM programs that promote reduced car ownership, reduced vehicle trips, reduced peak hour trips and managing parking supply toward reduction of the need to expand the road network or capacity.

Over the next 25 years, the population of the Central Okanagan Region is projected to grow from 188,000 to approximately 264,000. Today, there are over 120,000 registered vehicles in the region, and 90 percent of residents commute to work by car. Transit travel currently accounts

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for only three percent of work commuting trips. However, by linking land use and transit decisions and investing in new services and infrastructure where it makes sense, there is potential for transit to accommodate a significantly larger share of regional travel market and contribute to the goal of creating stronger, more sustainable communities. To help build a sustainable future in the region, the Transit Future Plan has been designed to achieve a mode split target of 7 percent by 2035, which equates to a four-fold increase in transit ridership from 4.3 million annual revenue trips to over 16 million annual revenue trips.

The proposed Transit Future Plan reflects creative thinking on how transit can play a larger role in mobility in the region. It is based heavily on creating a *Primary Transit Network*, operating at frequencies of 15 minutes or better, 15 hours a day, seven days a week, linking major urban and village centres. Focusing a greater proportion of future growth in compact, mixed-use, pedestrian friendly developments within the City Centre and other designated Town Centres is one of the key directions in the new City of Kelowna OCP in order to achieve Provincially-mandated greenhouse gas reduction targets (33 percent reduction from 2007 levels by 2020), and enable our communities to adapt to other changes which are occurring in society (e.g., peak oil and rising energy prices, an aging population).

In order to be successful, land use and transit decisions need to be linked to ensure that the urban form supports quality transit service and that quality transit service is provided in a timely manner to support land use intensification. In this regard, the Primary Transit Network will be an organizing tool for transit planning and land use to ensure that each element supports the other. The regional transit vision also recognizes that investments in new pedestrian and cycling infrastructure must be incorporated within the scope of the proposed transit stations to safely connect pedestrians with transit services and urban development across the region and encourage new Transit-Oriented Developments to take advantage of enhanced transit services.

The Primary Transit Network will form the foundation of the transit system and incorporate two layers of service - a regional Rapidbus service operating in the Highway 97 corridor and an integrated web of high frequency express and regular transit routes operating in other major transportation corridors. The transit network will deliver operational excellence and attract new riders by providing frequent, fast, comfortable and reliable service. Well-designed transit stations, customer-friendly transit exchanges, transit priority measures and real-time schedule information will be incorporated to improve the customer travel experience and elevate the public image of transit service.

Major changes to the built environment will take time to occur; therefore, the proposed Primary Transit Network will evolve gradually to respond to changes in urban form. The Transit Future Plan also recognizes that full implementation of the plan will require significant capital and operating investment in the transit system over the next 25 years. For this reason, BC Transit proposes to establish a task force, in partnership with local government partners, to explore options to achieve stable and predictable funding sources and reduce the dependence on increasing local property taxes, provincial and federal taxes to fund transit projects.

The Transit Future Plan proposes that the level of transit investment across the Central Okanagan Region be increased gradually over the next 25 years from 0.94 transit operating hours per capita to 2.3 hours operating hours per capita. The new transit service hours will enable improvements in transit service frequency, span of service (i.e., longer operating hours) and introduction of new transit routes. Ideally, specific route investments should align with Primary Transit corridors as much as possible to achieve the desired 15-minute service levels in high demand transit corridors which connect the downtown and other town centres.

In order to achieve Transit Future Plan targets, a three-fold increase in annual transit operating hours is required over the next 25 years. This equates with an annual service increase of approximately 17,000 growth hours annually, distributed among the Local Governments in the Central Okanagan Region. The total operating cost of this new service would be approximately \$1.8 million and the municipal share (53.3%) would be approximately \$960,000, less expected annual revenue of \$540,000, for a total of \$420,000 annually, distributed among local government partners. All requests for new transit service hours would have to be supported by a solid business case and be capable of achieving minimum ridership and economic performance thresholds referenced within the Transit Future Plan.

Internal Circulation:

Director, Infrastructure Planning
Director, Policy and Planning
Director, Financial Services
Director, Communications

External Agency/Public Comments:

The report has been reviewed and endorsed by BC Transit.

Considerations not applicable to this report:

Legal/Statutory Authority
Legal/Statutory Procedural Requirements
Existing Policy
Financial/Budgetary Considerations
Personnel Implications
Community & Media Relations Comments
Alternate Recommendation

Submitted by:

R. Westlake, P. Eng.
Director, Regional Services

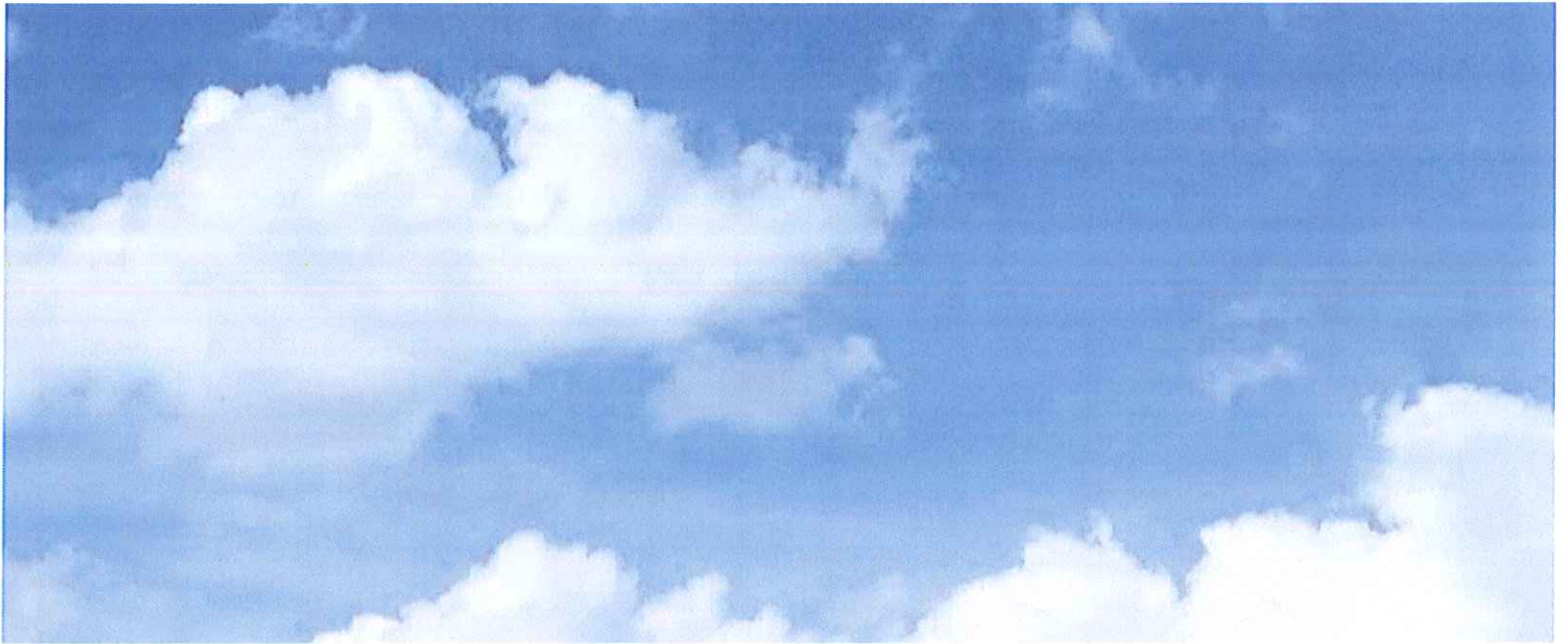
Approved for inclusion:

J. Paterson, GM Community Services

cc: Director, Infrastructure Services
Director, Policy and Planning

Attach. Transit Future Plan - Executive Summary Draft
Council Presentation





Transit Future Plan

CENTRAL OKANAGAN REGION | August 2011

EXECUTIVE SUMMARY DRAFT



Acknowledgements

This plan was made possible by participation from provincial and local governments, key stakeholders and the public. BC Transit would like to thank staff from:

The City of Kelowna
The District of Lake Country
The Ministry of Transportation and Infrastructure
The District of Peachland
The Regional District of the Central Okanagan
The District of West Kelowna
Westbank First Nation

BC Transit would also like to thank key stakeholders who participated in the Stakeholders Advisory Group by attending meetings, and providing written or verbal comment. The Stakeholders Advisory Group members are listed below:

Casa Loma Community Association	Peachland Residents Association
Clifton Rd/Magic Estates Residents Association	Quails Gate Estate Winery
Downtown Kelowna Association	Rutland Residents Association
Glenmore Valley Residents Association	School District #23
Highway 97 Bypass Task Force	Seniors Outreach Services Society
Holiday Park Resort	Shannon Lake Residents Association
Interior Health Authority	Smith Creek Residents Association
Kelowna Access Awareness Committee	Southwest Mission Residents Association
Kelowna Area Cycling Coalition	Special Needs Advisory Committee
Kelowna Chamber of Commerce	Sunnyside Residents Association
Lake Country Chamber of Commerce	The Lakes Neighbourhood Association
Lake Country Mobility and Access Committee	University of British Columbia Okanagan
Lakeview Heights Community Association	Uptown Rutland Business Association
McKinley Landing	Vernon Chamber of Commerce
North End Residents Association	West Kelowna Residents Association
Okanagan College	Westbank Chamber of Commerce
Peachland Chamber of Commerce	Westside Residents Association

Finally, thank you to the nearly 2,000 members of the public, riders and non-riders alike, who contributed to the plan's development by attending open houses, taking surveys, or submitting written or verbal comment.

Executive Summary

Transit has tremendous potential to contribute to stronger, more sustainable communities. The need to realize this potential in the Central Okanagan is increasingly important because of factors such as climate change, population growth, increasing traffic congestion, and an aging demographic. For example, today, there are over 120,000 registered vehicles in the region, and 90 per cent of residents commute to work by car. With the population increasing from 188,000 today to approximately 264,000 in 2035, the number of automobile trips will increase in a constrained road network. Transit Oriented Development supported by a strong multi-modal network and Transit Demand Management measures will reduce the rate at which congestion grows.

Meeting the demands of the forecasted population and traffic growth in the Central Okanagan requires a shift in focus from moving vehicles to moving people. In the past, government at all levels has attempted to build its way out of traffic congestion by expanding the road network, but this has only provided temporary relief. Major investments in expanding the road network to accommodate the private automobile do not align with local, regional and provincial planning aspirations. Without a significant increase in the use of transit and other sustainable modes (e.g., walking and cycling) the increase in daily trips will result in increased congestion on key local and regional transportation corridors. Congestion has negative environmental, social and economic impacts on the community and contributes to higher transit costs. To help build a sustainable future in the region, this plan has been designed to achieve a mode share target of seven per cent by 2035, which means an increase from 4.3 million rides today, to nearly 16 million rides in 2035.

The Transit Future Plan envisions the Central Okanagan's transit network 25 years from now and describes what services, infrastructure and investments are needed to get there. In order to achieve the seven per cent mode share target, the plan creates a stronger link between transit plans and local land use and transportation plans. It also supports the Provincial Transit Plan and key initiatives of BC Transit's Strategic Plan.

“This plan has been designed to achieve a mode share target of seven per cent by 2035, which means an increase from 4.3 million rides today, to nearly 16 million rides in 2035.”

The Transit Future Plan includes a review of the existing transit services, local land use plans, travel data, demographic projections and travel demand forecasts. Consultation efforts included detailed discussions with municipal partners, stakeholders, numerous public open houses, the Transit Future bus tour, a project web site and an online planning game. In total, BC Transit engaged nearly 2,000 people in the region.

The background research and community engagement resulted in the creation of a unified vision for transit and the development of a transit network designed to meet the needs of the Central Okanagan for years to come.

Vision

"Transit influences urban form by providing a high-quality, affordable service that puts the customer first."

Goals

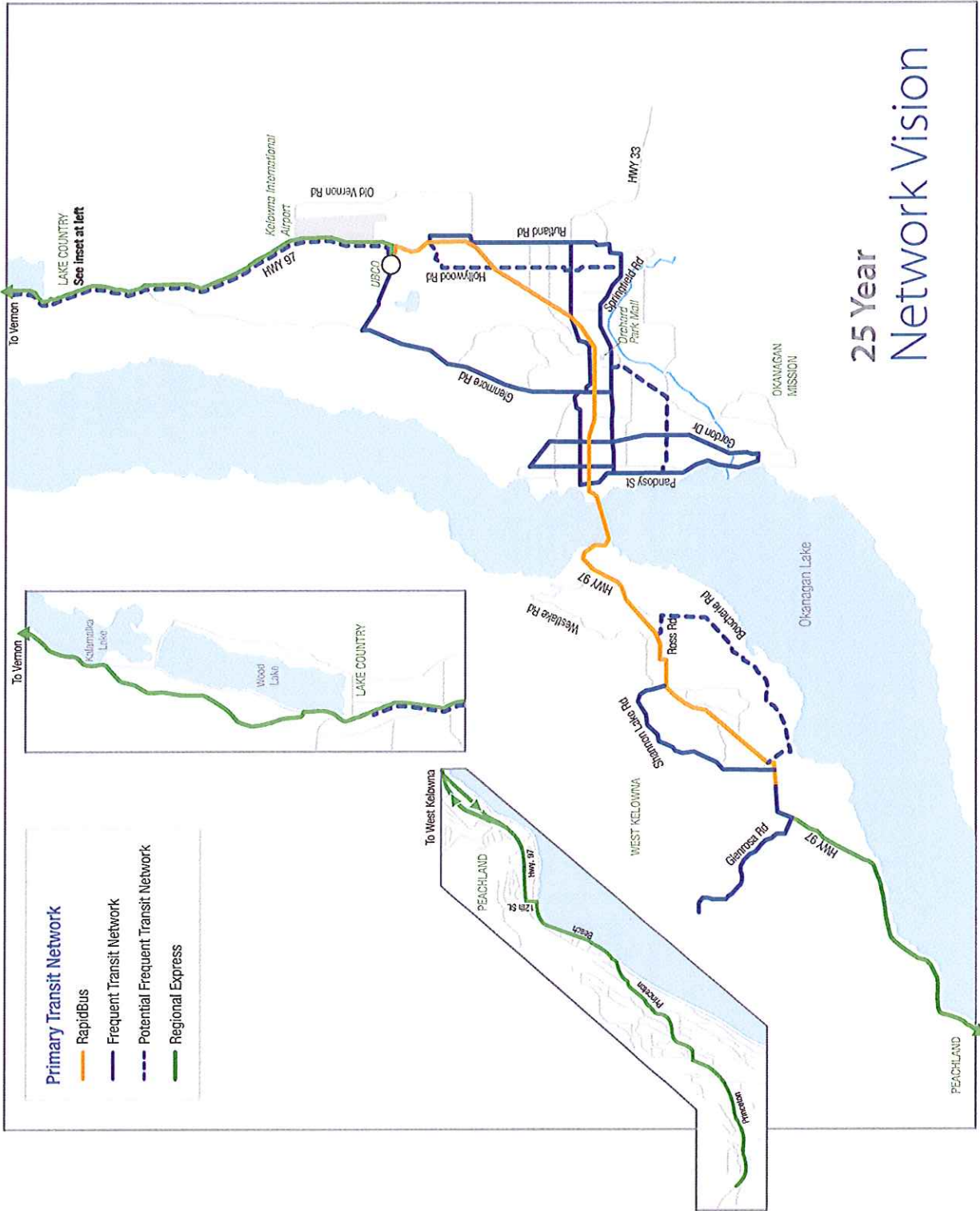
1. Attract New Riders
2. Deliver Operational Excellence
3. Improve Transit Sustainability
4. Improve Custom Transit Utilization

The Transit Future Network

The 25-year network vision is designed to achieve the Vision and Goals of this plan. More specifically, the following planning principles, developed through the public consultation process, were used to guide the development of the network:

- Direct connections between regional and local major destinations
- Transit priority will be in place on Frequent and Rapid Transit corridors to reduce travel time
- Transit service is convenient, comfortable and easy to understand
- Transit service is modern and attractive





The Transit Future network is composed of four layers of service that are designed to efficiently and effectively move people and are facilitated by transit priority measures.

Primary Network

Rapid Transit Network (RTN)

RTN service is designed to move high volumes of passengers between major regional destinations along key transportation corridors. The level of investment in RTN infrastructure, technology, vehicles and service levels combine to significantly increase system performance. RTN services utilize an exclusive or semi-exclusive right-of-way with limited stop service.

Frequent Transit Network (FTN)

The FTN provides key corridors with a convenient, reliable and frequent transit service. The FTN will carry a large share of the transit system's total ridership and for this reason justifies capital investments in transit priority, a high level of transit stop amenities and corridor branding.

Secondary Network

Local Transit Network (LTN)

The LTN is designed to connect neighborhoods to local destinations and to the RTN and FTN.

Targeted Services

Targeted Services are a collection of transit services which include handyDART, regional, express and rural transit services.

Implementation Strategy

Establishing the Transit Future network requires prioritizing transit investments into an implementation strategy to transform today's network into the future network. Listed below are the initial priorities first for the system as a whole, and then for each community.

Network Priorities

- Establish or upgrade key transit infrastructure
 - Operations and Maintenance facility
 - RapidBus stations and exchanges
 - Rutland and Orchard Park exchanges
 - Strategically located Park & Rides
- Establish the Highway 97 RapidBus line from UBCO to Westbank Centre
- Establish the Frequent Transit Network (FTN)
- Initiate aggressive rideshare (carpooling) marketing effort
- Increase custom transit availability and hours of operation

Kelowna Priorities

- Establish the north-south FTN corridors along Pandosy/Lakeshore and Gordon Dr
- Provide direct service to the H2O recreation centre and the Capital News Centre
- Provide direct east-west service to Kelowna General Hospital and establish the Springfield FTN corridor
- Increase service between Glenmore and UBCO
- Streamline Glenmore service

West Kelowna and Westbank First Nation Priorities

- Extend RapidBus to Westbank Centre and complete all associated transit capital infrastructure
- Improve the efficiency and effectiveness of LTN routes in West Kelowna and Westbank First Nation
- Maintain coverage to transit supportive neighbourhoods and provide alternative methods to access the transit system (e.g., Park & Rides)

Lake Country Priorities

- Increase service between Lake Country and Kelowna
- Introduce a Park & Ride in Lake Country's Town Centre and explore shared use opportunities
- Reconfigure how Oyama accesses regional transit service in conjunction with the Highway 97 realignment
- Increase service between Vernon, Lake Country and Kelowna
- Introduce new service to The Lakes neighbourhood

Peachland Priorities

- Adjust the schedule on Route 22 Peachland to better serve commuters
- Introduce a Park & Ride in the community and explore shared use opportunities
- Begin handyDART service
- Initiate a feasibility study to explore Dial-A-Ride service

Ongoing Regional Initiatives

- Address existing operational service needs
- Match vehicle type to local demand
- Improve customer information
- Improve transit facilities
- Make transit more accessible



Moving Forward

Funding the Plan

Full implementation of the Transit Future Plan will require significant capital and operating investment in the transit system over the next 25 years. To reach the mode share goal of seven percent, the following goals and investments must be obtained:

- Quadrupling of transit ridership from 4 million to 16 million
- A three-fold increase in annual transit operating hours (from 177,000 to 600,000), requiring 17,000 annual growth hours to reach the 25 year targets
- Expansion of the conventional transit fleet from 72 to 184 buses and the custom fleet from 23 to 51 vehicles
- Investments in transit priority measures to decrease travel time, increase demand and create an increasing return on service hour and fleet investments.

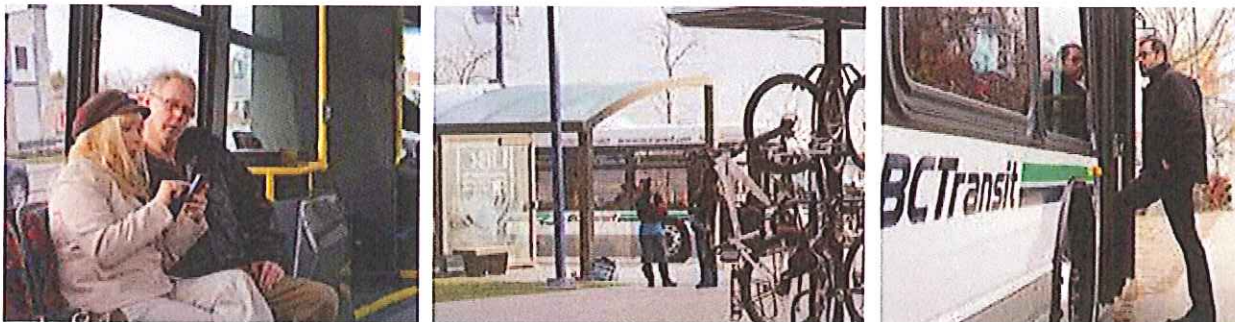
The ambition of this plan and the Provincial Transit Plan requires local and provincial partners to continue their endeavors to achieve stable and predictable revenue sources. For this reason, BC Transit will establish a task force to investigate alternative funding and transit incentive options in an attempt to reduce the dependence on increasing local property, provincial and federal taxes to fund transit projects.

Achieving Success

BC Transit has begun to take steps to guide the Transit Future Plan from vision to reality. A key step is the need for ongoing dialogue with local partners and the Province on transportation policy, funding and the linkage between land use and transit planning.

Moving forward, BC Transit will use this plan to communicate the vision and direction for transit in this region and to encourage integration into local and regional plans and projects.

The Transit Future Plan is designed to accommodate the ridership necessary to achieve the Provincial Transit Plan and municipal mode share targets; however, municipal, regional and provincial planning agencies are pivotal in the creation of demand through strategic Transit Oriented Development, transit friendly land use practices, Travel Demand Management and the provision of transit priority measures. These agencies also ensure the necessary active transportation infrastructure is in place to facilitate the shift in modeshare to more sustainable modes.





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Central Okanagan Transit Master Plan

Kelowna Council

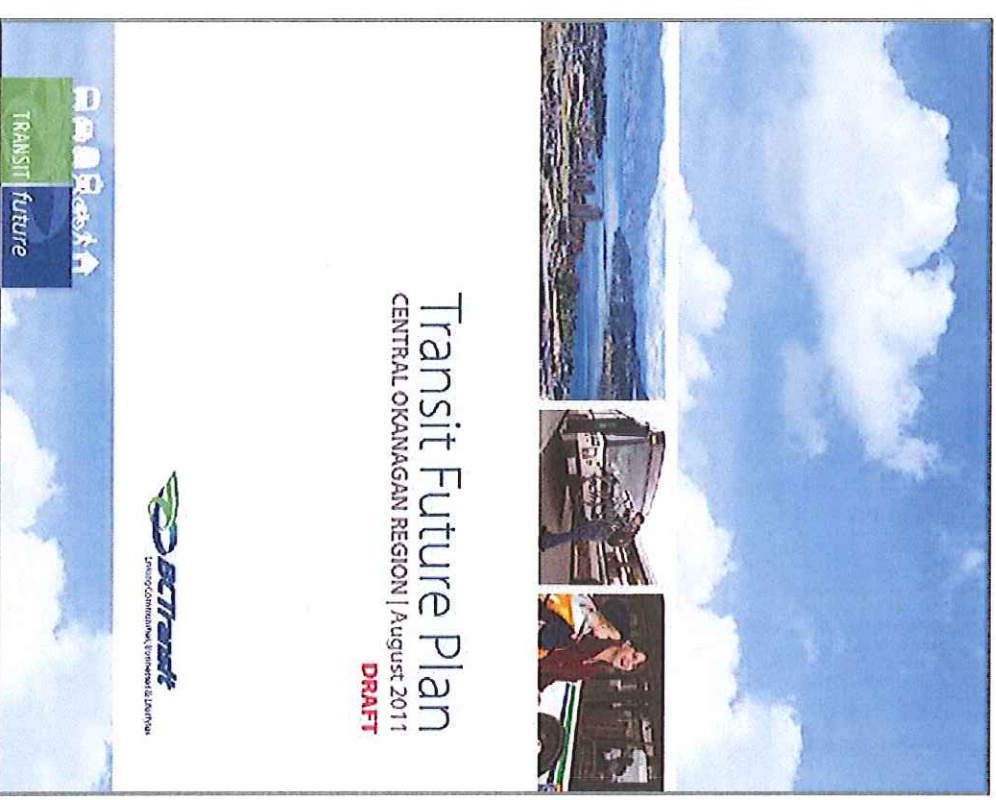
August 8, 2011

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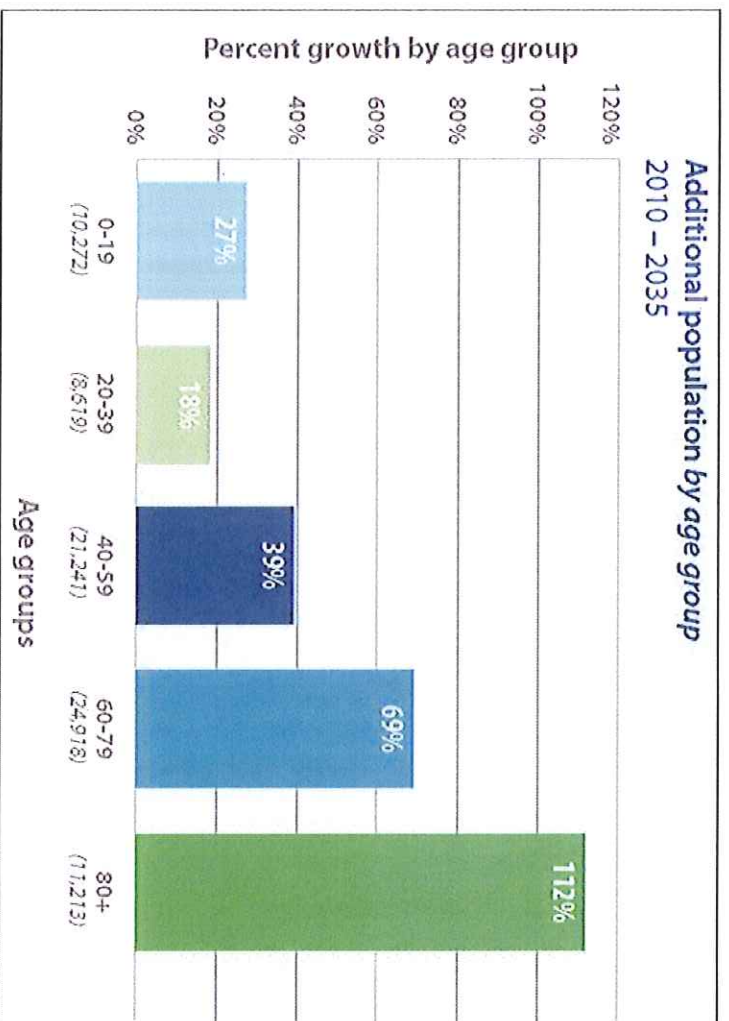
Agenda

- Why a Transit Future Plan?
- Scope & Process
- Participation
- Vision & Goals
- Network Vision
- Implementation Strategy
- Moving forward



Why do we need a Transit Future Plan?

- Increasing and aging population
- 41% increase in population
- Increasing traffic volumes, limited road space

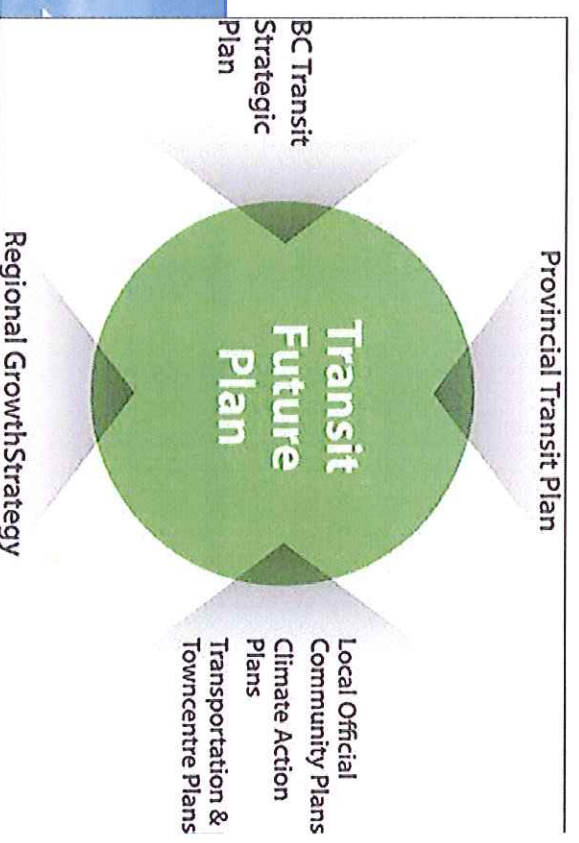
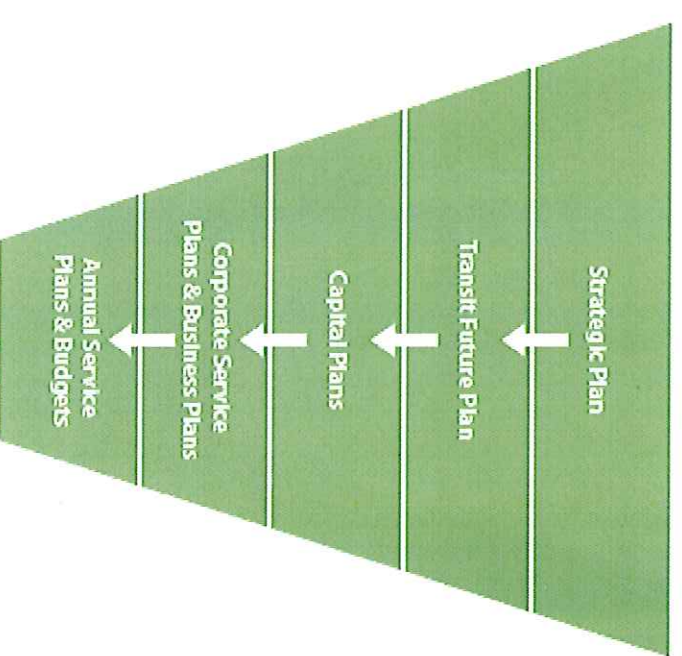


- Aggressive provincial and local climate action objectives
- Double transit ridership by 2020
- Carbon neutral by 2012
- Kelowna 33% reduction GHG by 2020



Why do we need a Transit Future Plan?

- Unified vision that directs all future investment
- Informs BC Transit processes
- Coordination
 - Land use and transit
 - Local and transit planning

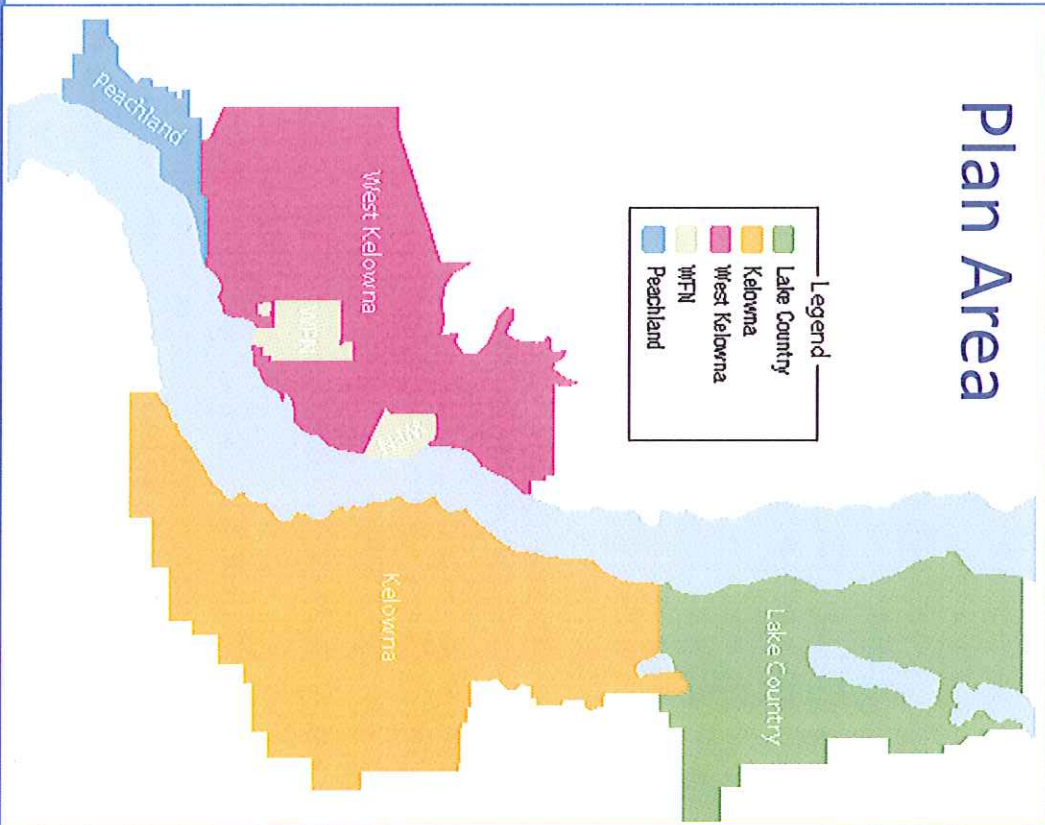


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Scope

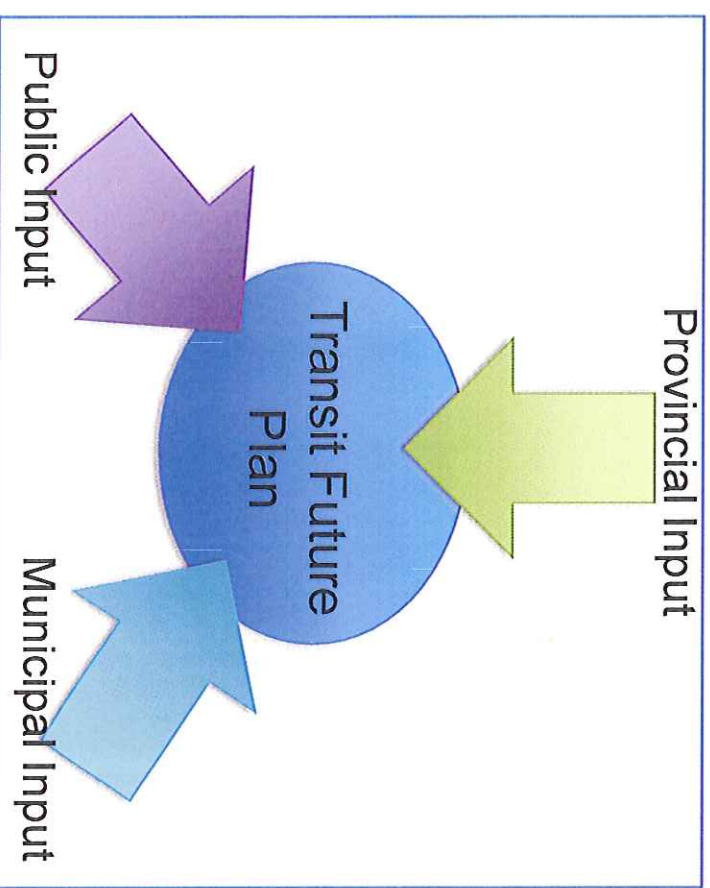
- Geographic: Central Okanagan
- Timeframe: 2035
- Detail: High-level



Process

Collaborative

- Led by BC Transit
- Frequent and direct involvement by municipal staff
- Council updates at major milestones
- Three phased public consultation



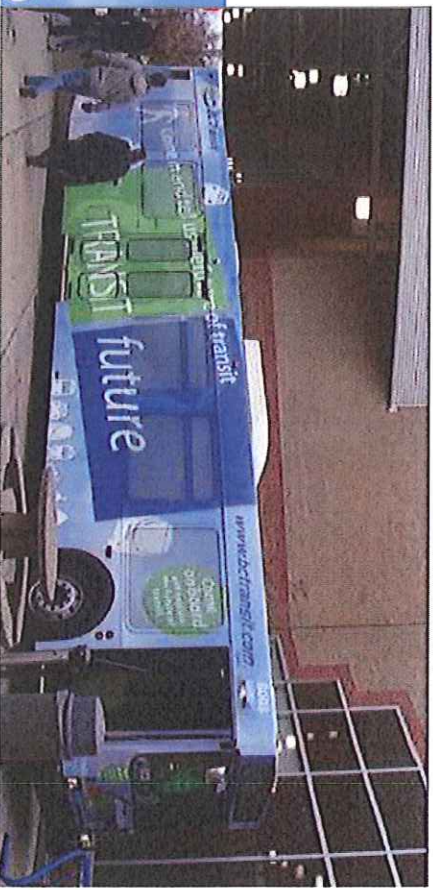
Participation



Primary objectives to receive feedback on...

- existing service
- long term priorities
- draft 25-year network vision
- network goals
- short term priorities
- raise awareness

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Participation highlights

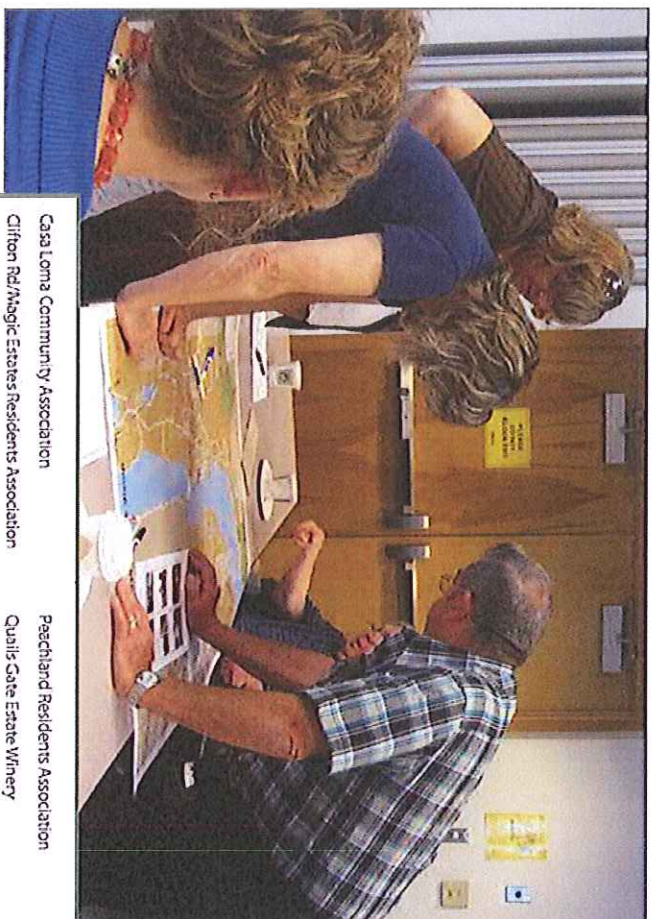
Participation Highlights	
Number of open houses	18
Open house participants	1,100
Written survey participants	650
Phase One online survey participants	340
Online survey "The Game Plan" participants	219
Stakeholder participants	35



Participation - stakeholders

Stakeholders Advisory Group

- Instrumental in creation of:
 - Vision & Goals
 - Network vision
 - Short term priorities



Casa Loma Community Association	Peaschland Residents Association
Clifton Rd/Magic Estates Residents Association	Qualis Gate Estate Winery
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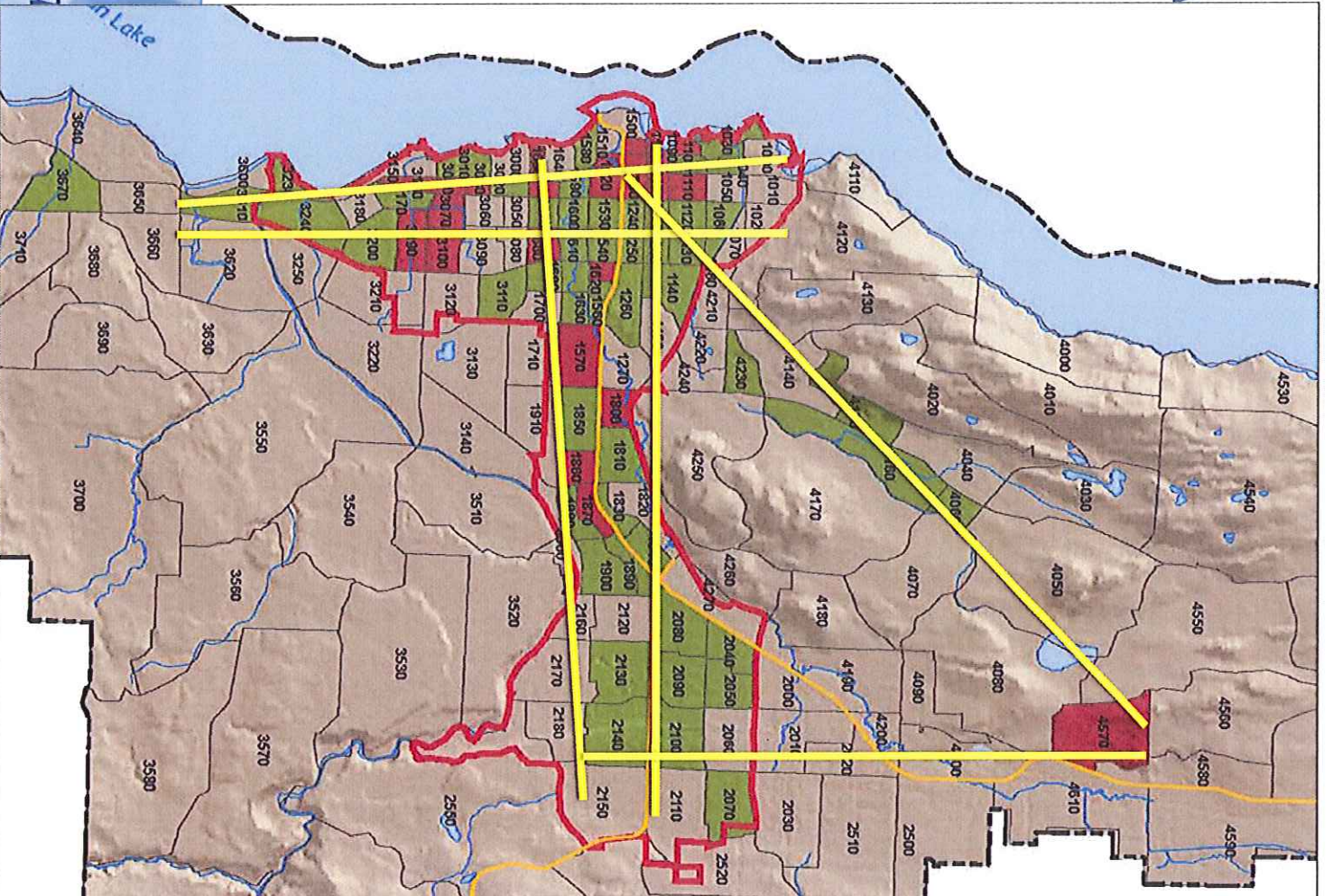
25 Year Vision

Transit influences urban form by providing a high-quality, affordable service that puts the customer first.

Goals

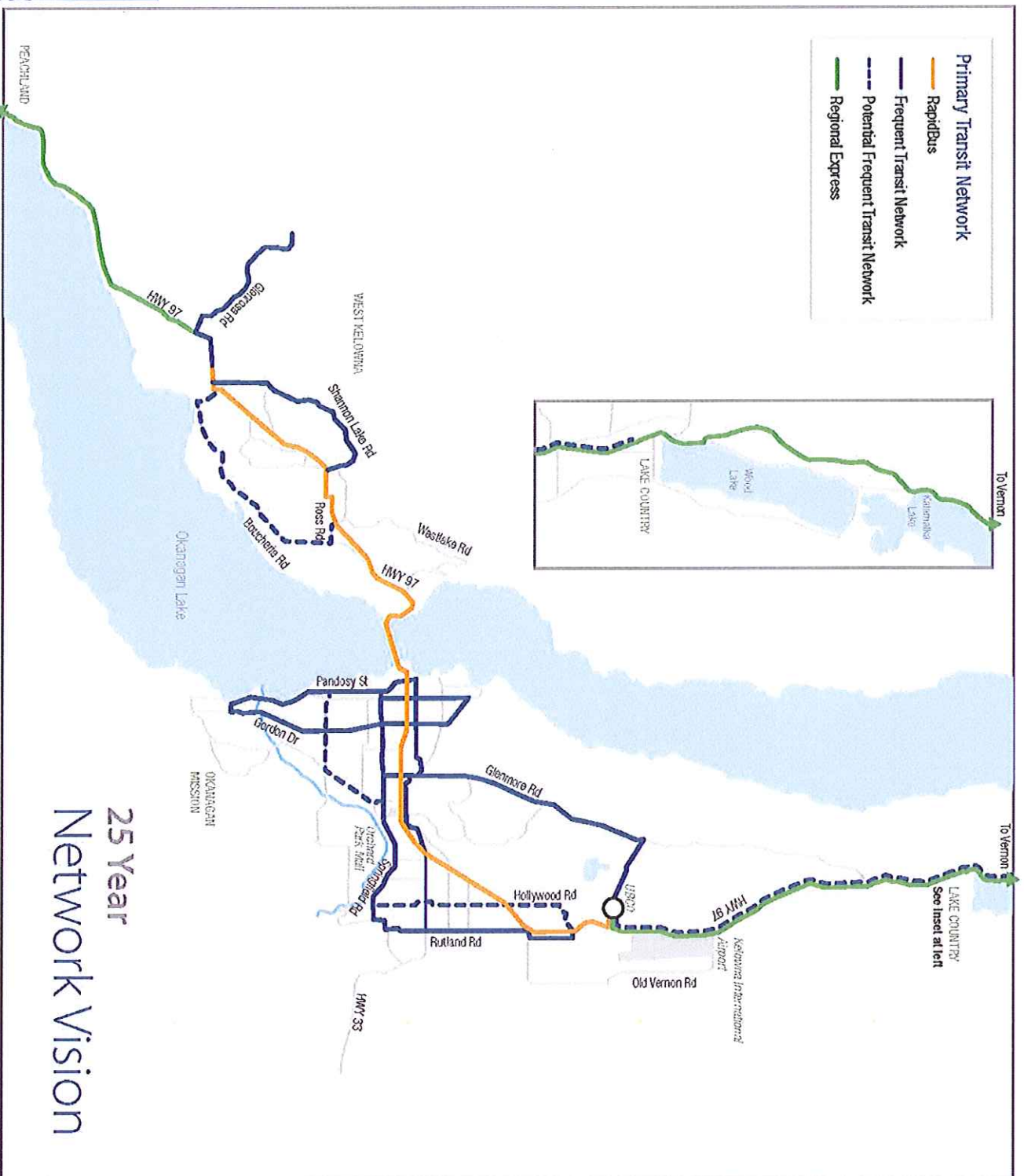
1. Attract new riders
2. Deliver operational excellence
3. Improve transit sustainability
4. Improve custom transit utilization

Network



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Network Vision



25 Year
Network Vision

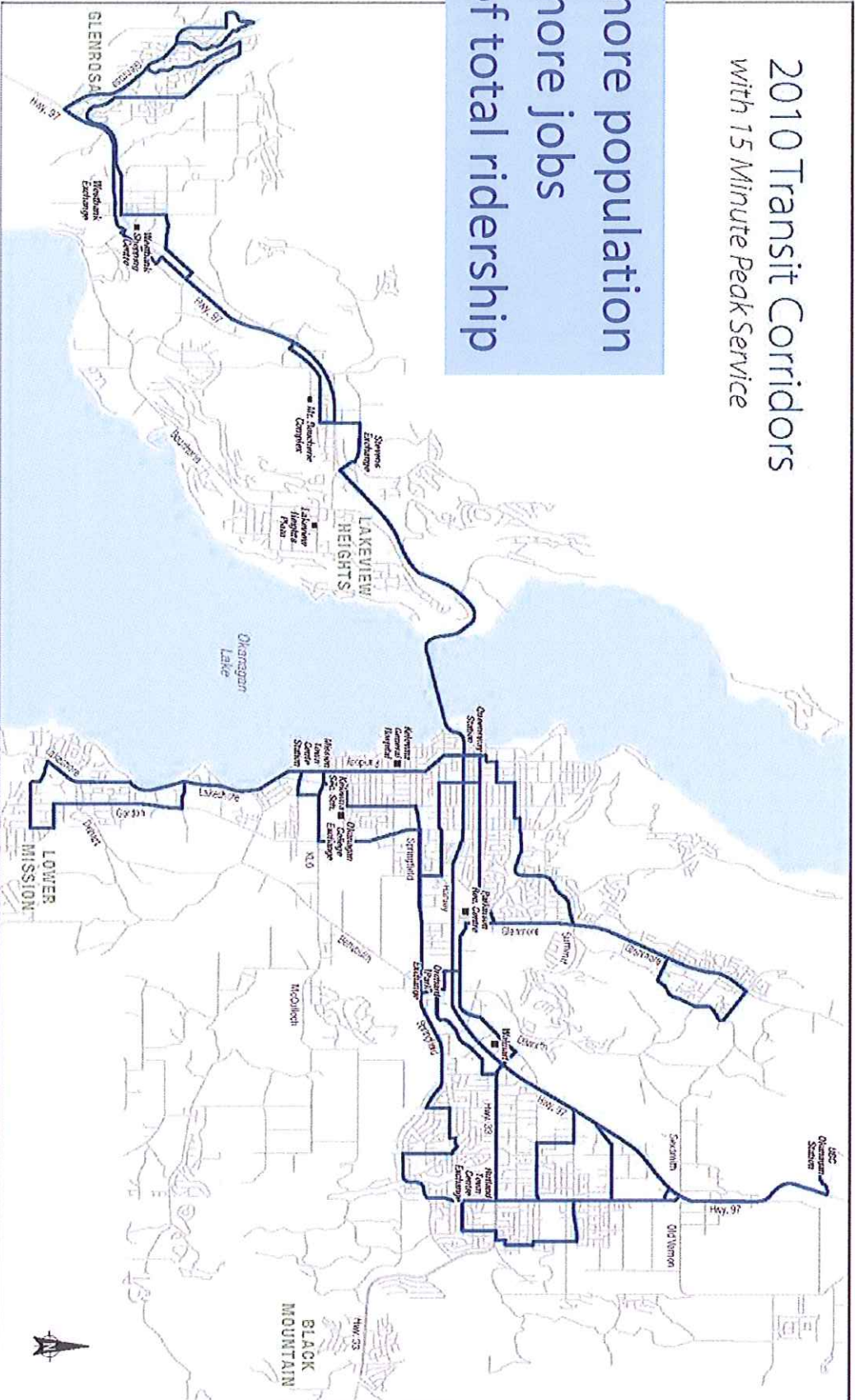
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Primary Transit Network

- Rapid & Frequent Transit
- 15 minute service all day, every day

- 75% more population
- 93% more jobs
- 80% of total ridership

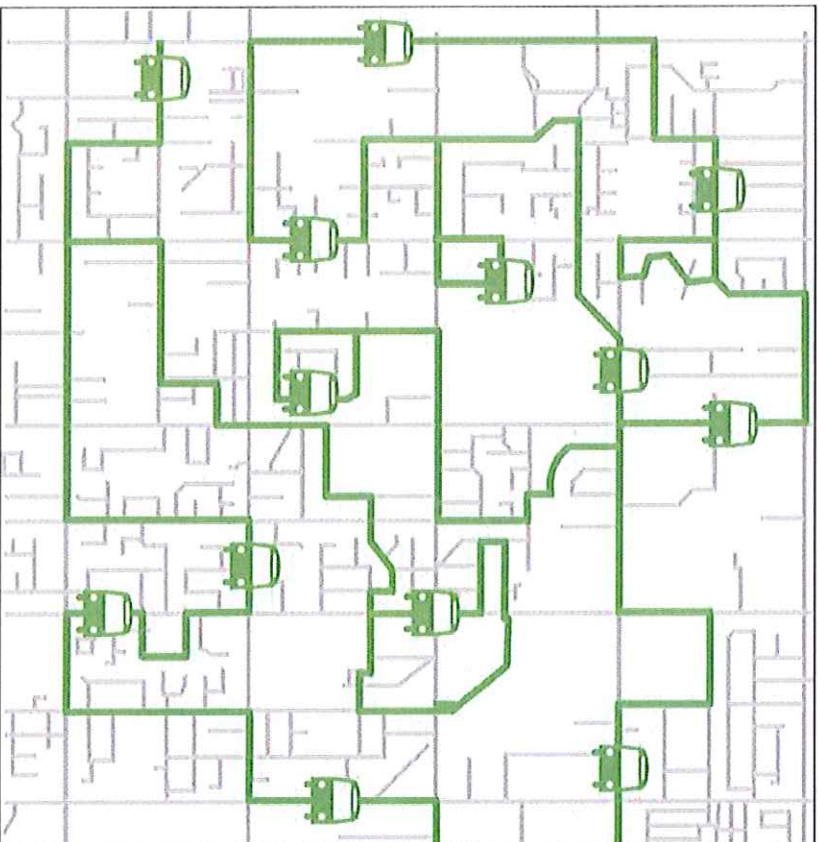
2010 Transit Corridors
with 15 Minute Peak Service



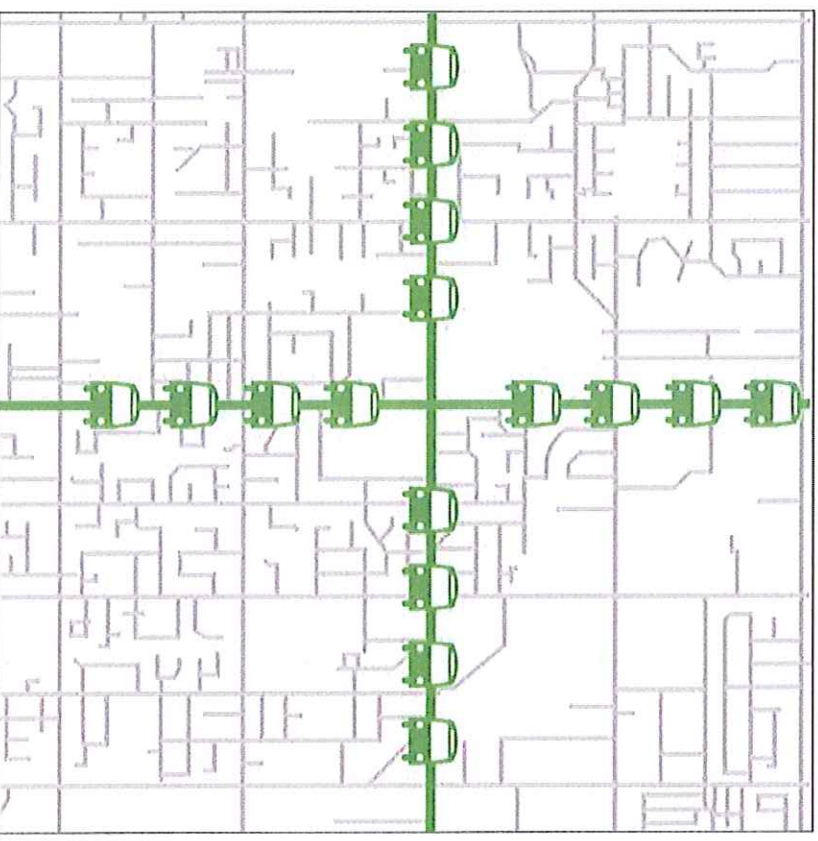
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Primary Transit Network

Infrequent – coverage



Frequent - direct



25 Year Requirements

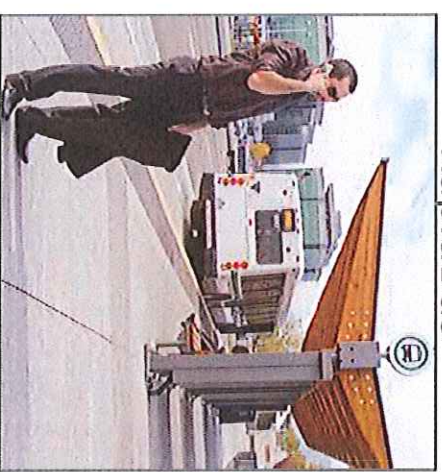
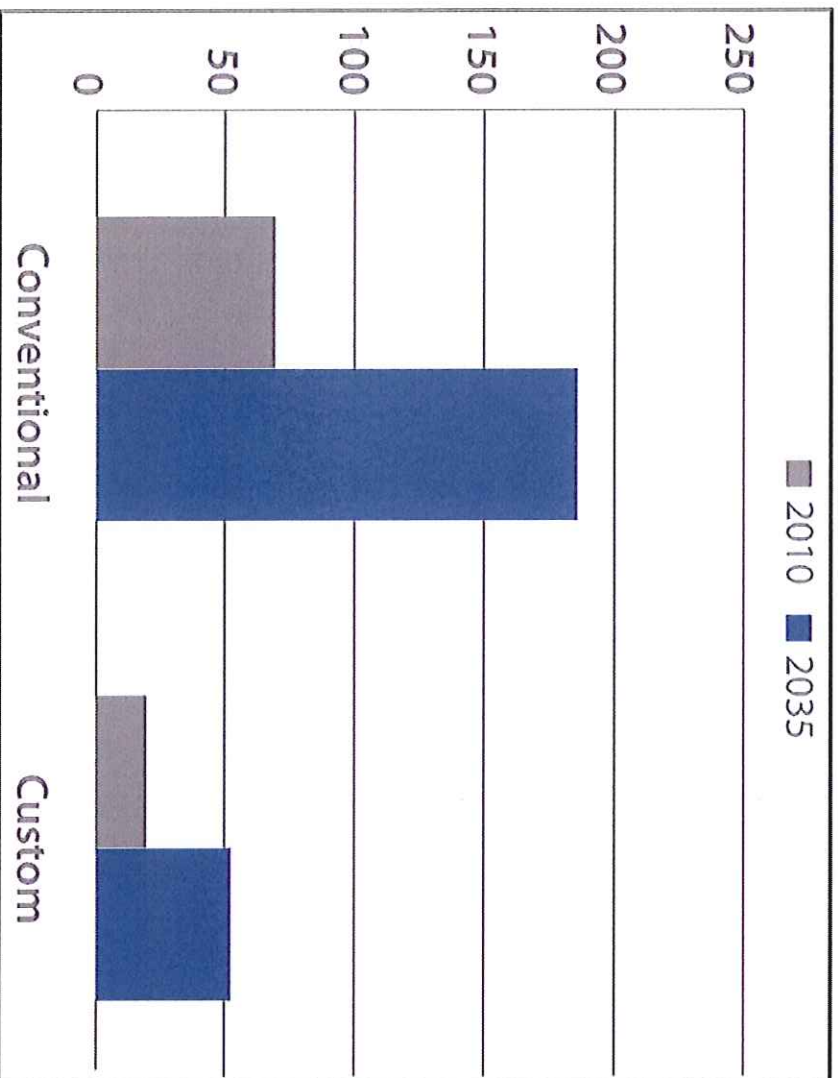
Service Hours

Year	Conventional System	Custom System	Total
2010	177,000	35,000	212,000
Projected 2035	600,000	62,000	662,000

Service Type	Minimum Frequency	Minimum Service Span	Minimum Service Days
Rapid	15	7am – 10pm	7 days/week
Frequent	15	7am – 10pm	7 days/week
Local	30	7am – 7pm	5 days/week



25 Year Requirements Fleet



RapidBus



Vicinity

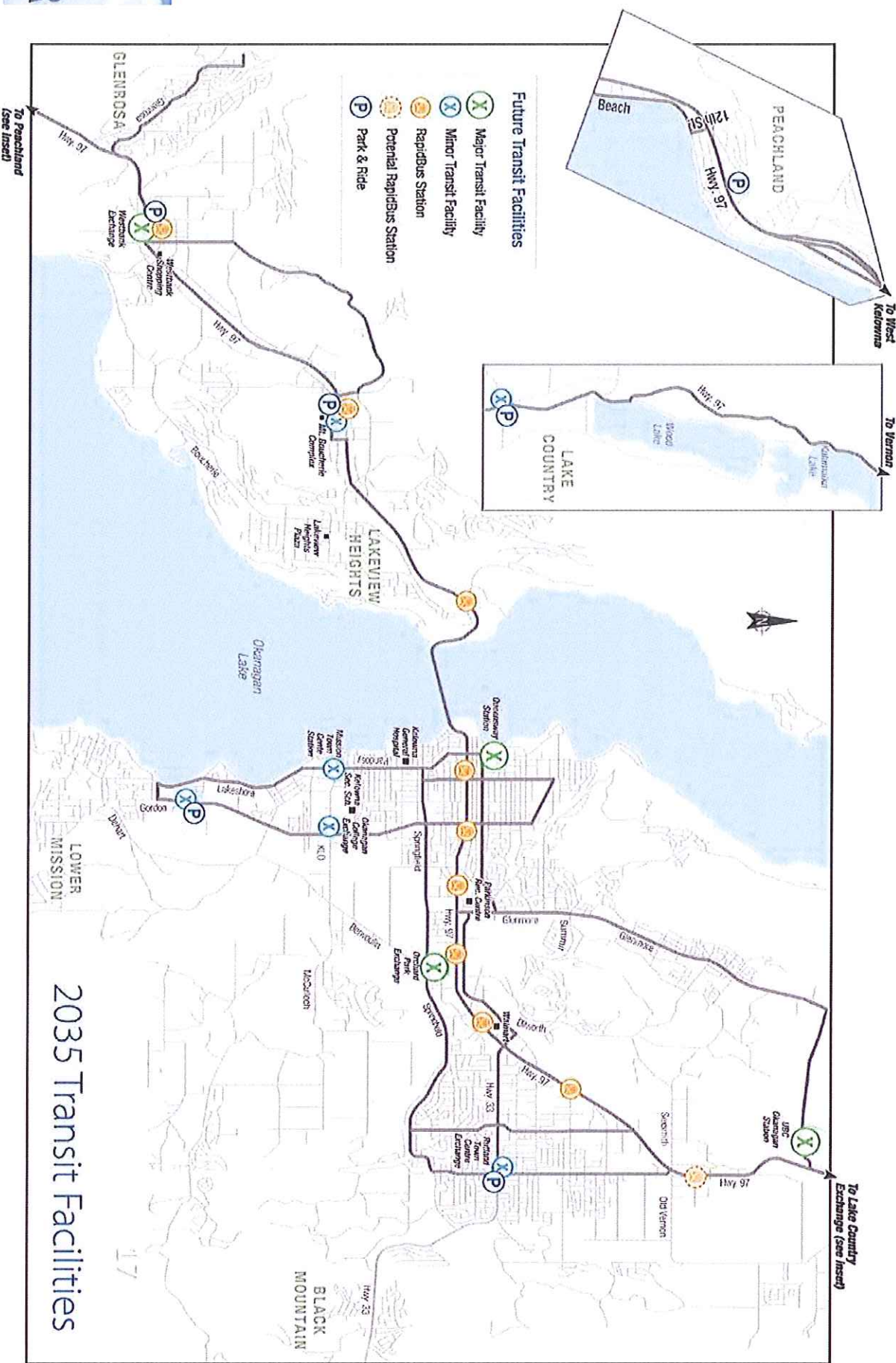


Custom

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25 Year Requirements Infrastructure



2035 Transit Facilities

25 Year Requirements Infrastructure

Operations & Maintenance Centre

- Designed for 70 conventional vehicles
- Currently houses over 95 vehicles
- Increased capacity required immediately



Growth trend – past to future

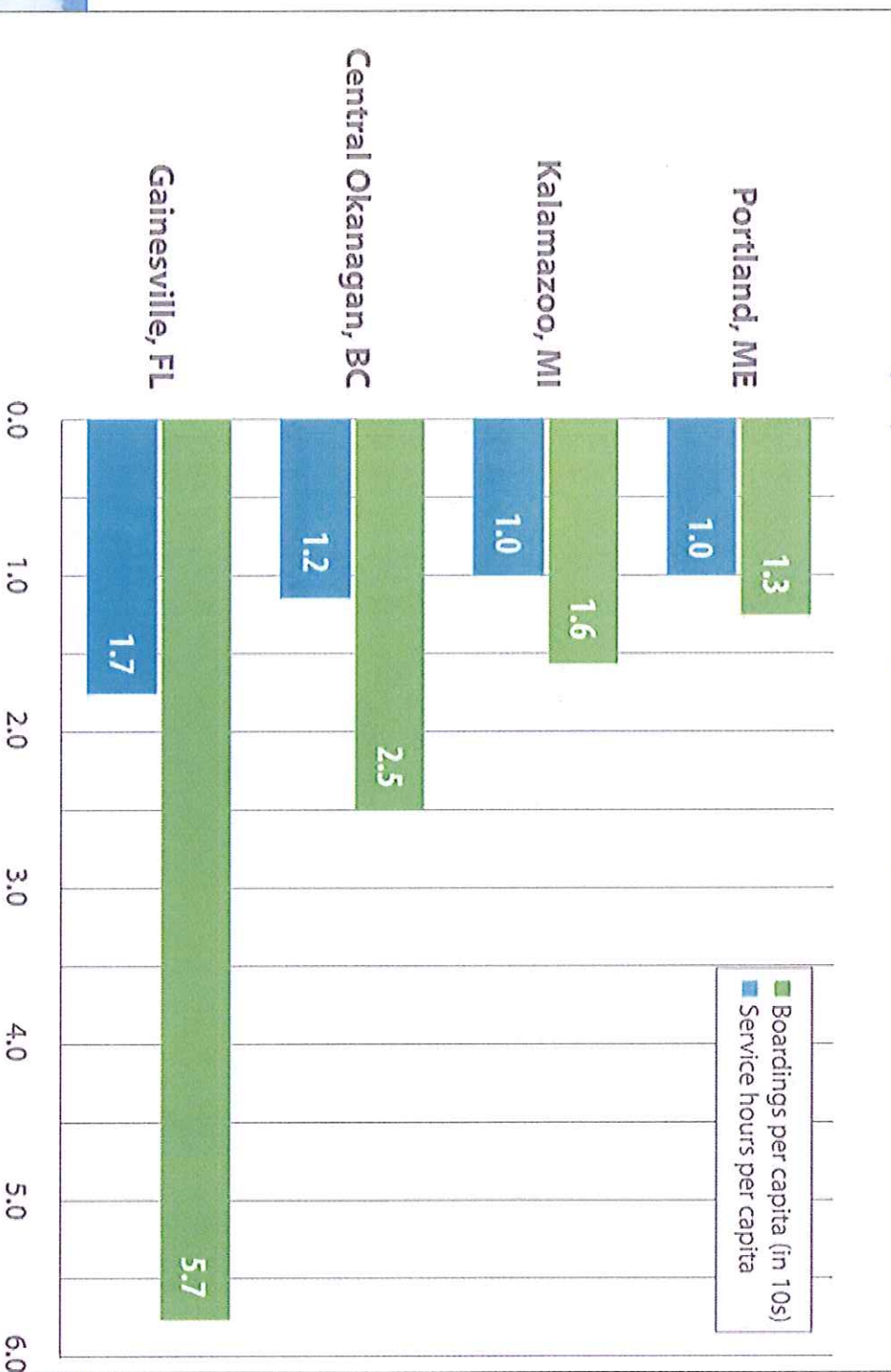
	1985	2010	2035
Ridership	768,000	4 million	16 million
Population	91,400	188,000	264,000
Service hours	28,400	177,000	600,000
Hours/capita	0.31	0.94	2.3
Rides/hour	27	24	27
Conventional fleet	-	72	184
Custom fleet	-	23	51
Mode share	-	3%	7%



Benchmarking - 2010

Boardings and Service Hours per Capita

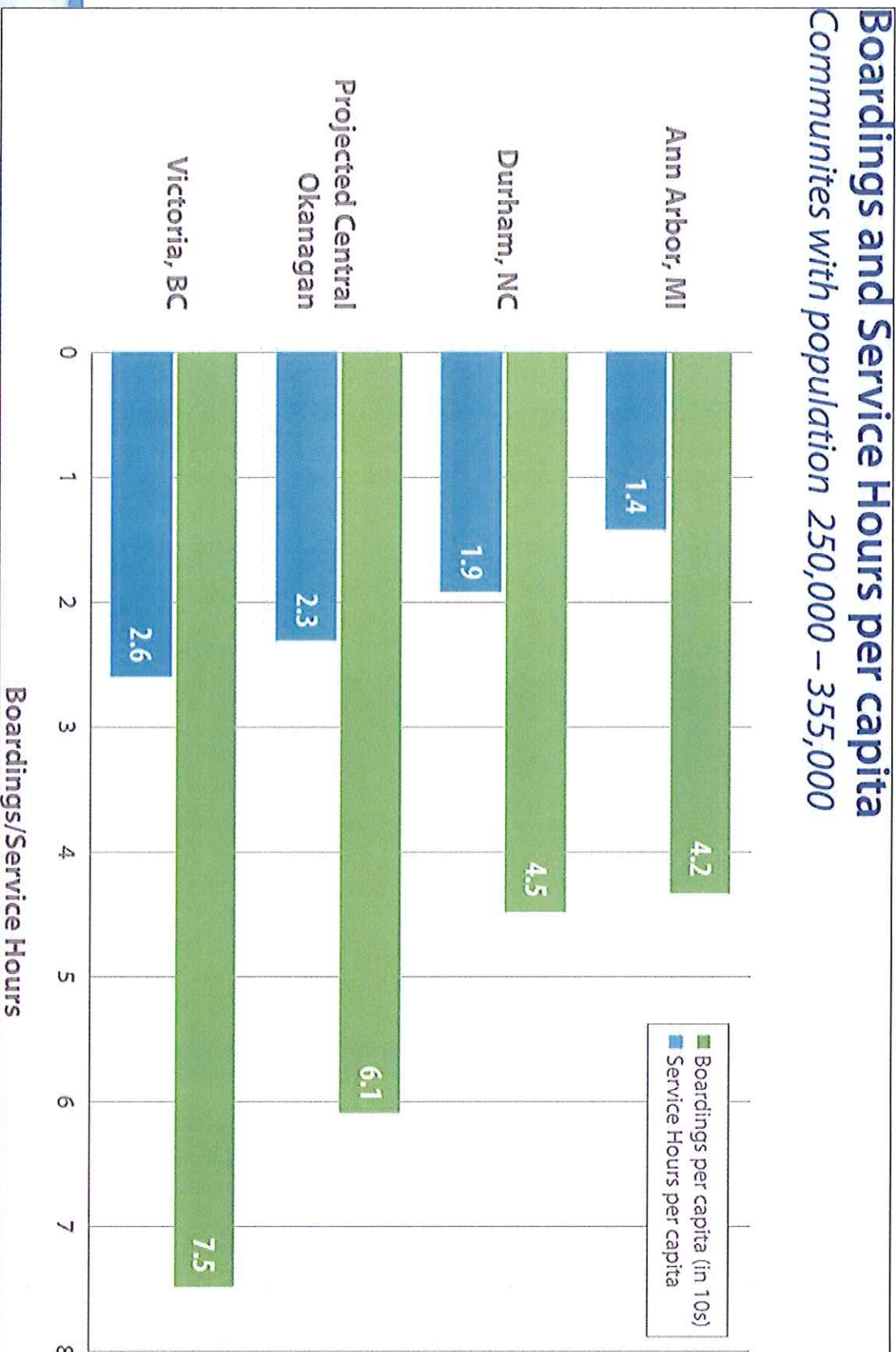
Communities with population 160,000 – 188,000



Benchmarking - 2035

Boardings and Service Hours per capita

Communities with population 250,000 – 355,000



Implementation Strategy

- Development guided by performance criteria

Performance Criteria	Target Threshold	Minimum Threshold
Rides per service hour	35	12
Rides per service km	1.5	0.5
Cost per ride	\$2.50	\$7.00
Cost recovery	35%	15%
Passengers per capita	30	10



Implementation Strategy

Regional Network Priorities

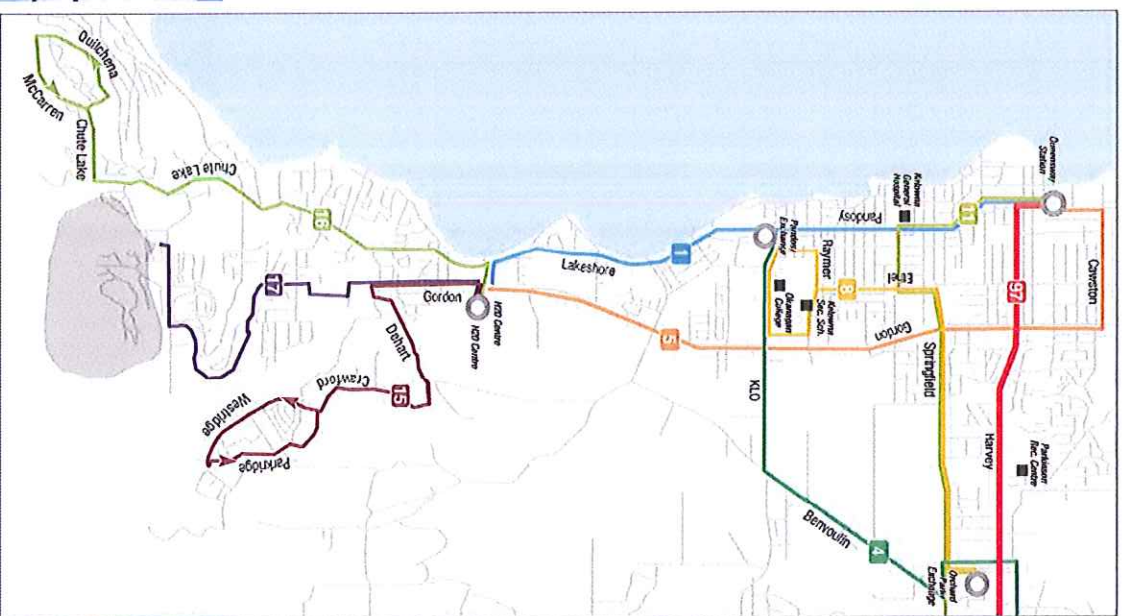
- Establish or upgrade key transit infrastructure
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- Establish the Highway 97 RapidBus line from UBCO to Westbank Centre
- Establish the Frequent Transit Network (FTN)
- Initiate aggressive TDM program including rideshare
- Increase custom transit availability and hours of operation



Implementation Strategy

Kelowna Package One

Future



Service	Frequency	Span	Annual Hours
Route Realignment (1, 8, 11, 15, 16)			
Increase SW Mission Service and add new route	15-30 peak, 30-60 off peak	12 hours	5,000
New Gordon Dr Route	15 peak, 30 off peak	17 hours	9,400
TOTAL			14,400



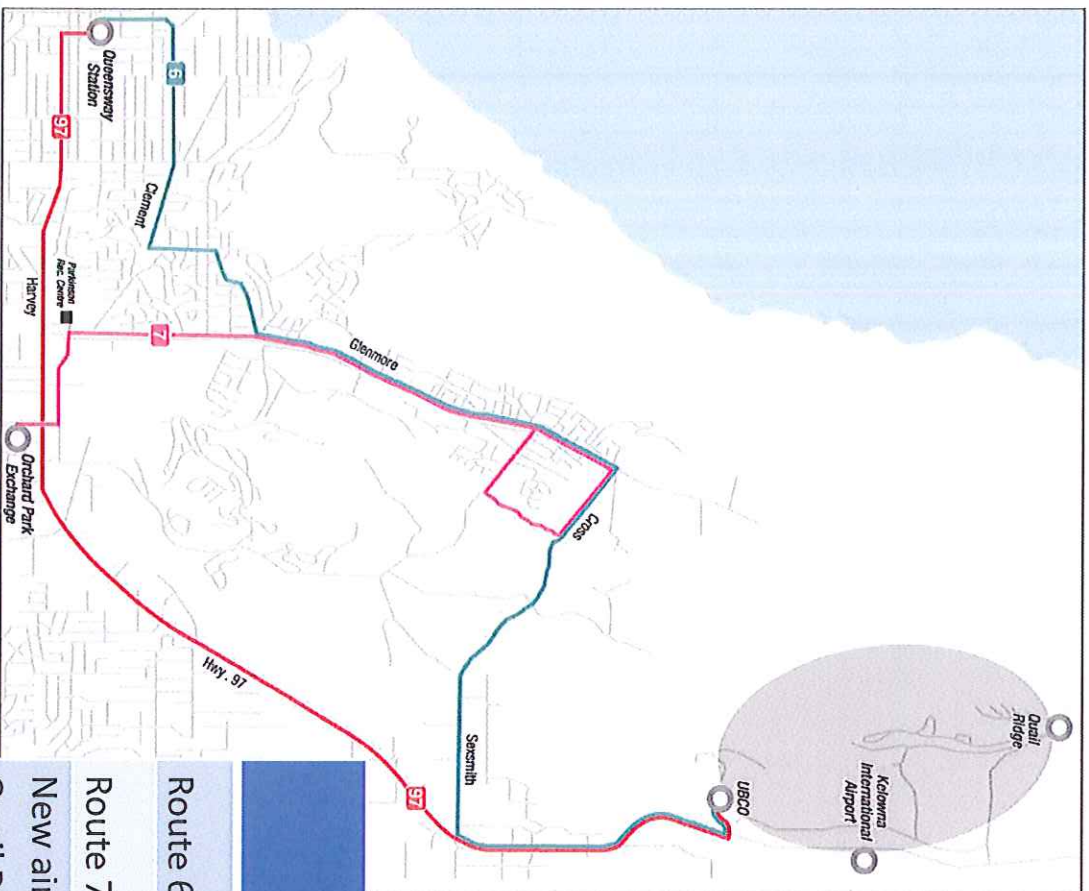
TRANSIT

future

Implementation Strategy

Kelowna Package Two

Future



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Service	Frequency	Span	Annual Hours
Route 6	15/30	15 hours	14,500
Route 7 realignment	15/30	15 hours	-10,100
New airport- Quail Ridge Service	30/select	Peak	2,500
TOTAL			6,900

Quick Wins

Operational

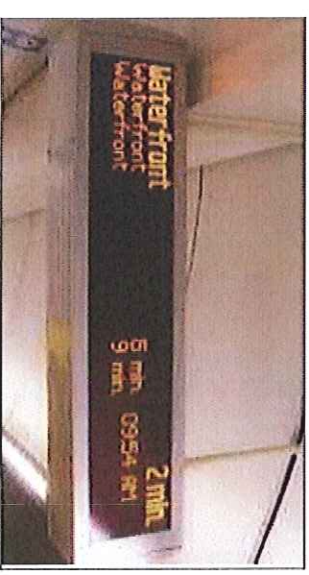
- Establish Hwy 97 RapidBus service
- Regional Spine: Peachland to Lake Country
- Direct service to H2O from Mission area
- Route realignment in West Kelowna and WFN Capital

- P&R's in Kelowna, Peachland, & Lake Country
- McCurdy southbound RapidBus station
- Initiate planning for Operations & Maintenance Centre



On-Going Initiatives

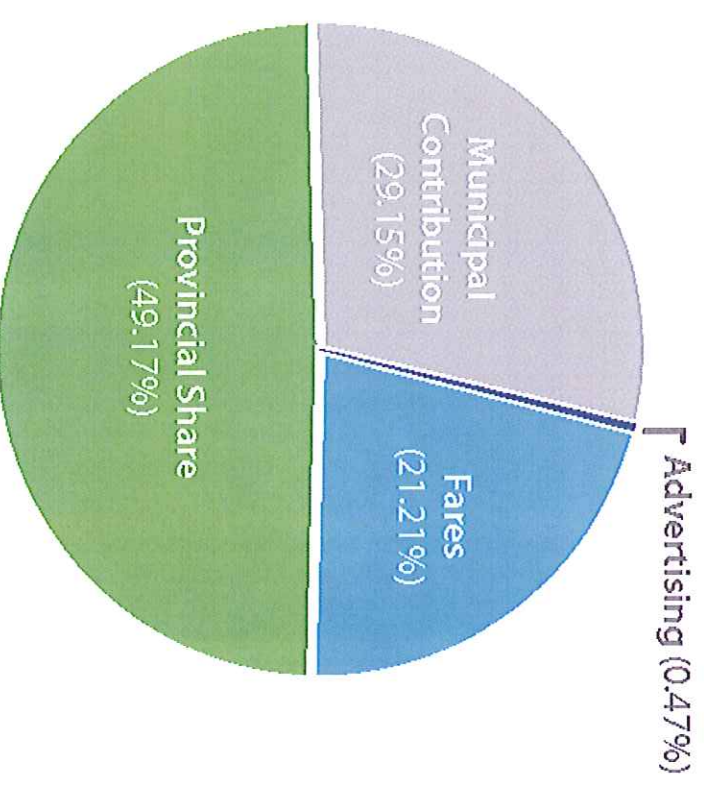
- Address existing service needs
- Match vehicle type to local service demand
- Improve customer information
- Improve transit facilities
- Make transit more accessible



Funding the Plan

- The way in which transit is funded needs to be reviewed

Kelowna Region Funding Split (2009/10)



- Stable and predictable revenue sources need to be developed
- Establish a task force to investigate alternative funding



Support for the plan locally

- Integrate into:
 - Official Community Plan
 - Transportation infrastructure plans and projects
- Ensure that development proposals and projects support the plan
- Implement TDM strategies
- Support and encourage Transit Oriented Development
- Work with BC Transit to pursue new funding streams for transit services and infrastructure



Implementing the Plan

- Identify where and in what order key transit investments will occur
- Inform our three year service planning process & budgets
- Strategically move projects through the BC Transit capital planning process
- Planning coordination
- Respond to planning and development proposals

Recommendation:

THAT Council endorse the '*Transit Future Plan – Central Okanagan Region*', as the guiding document for expansion of public transit service within the City of Kelowna over the next 25 years.



Thank you.

Michelle Orfield

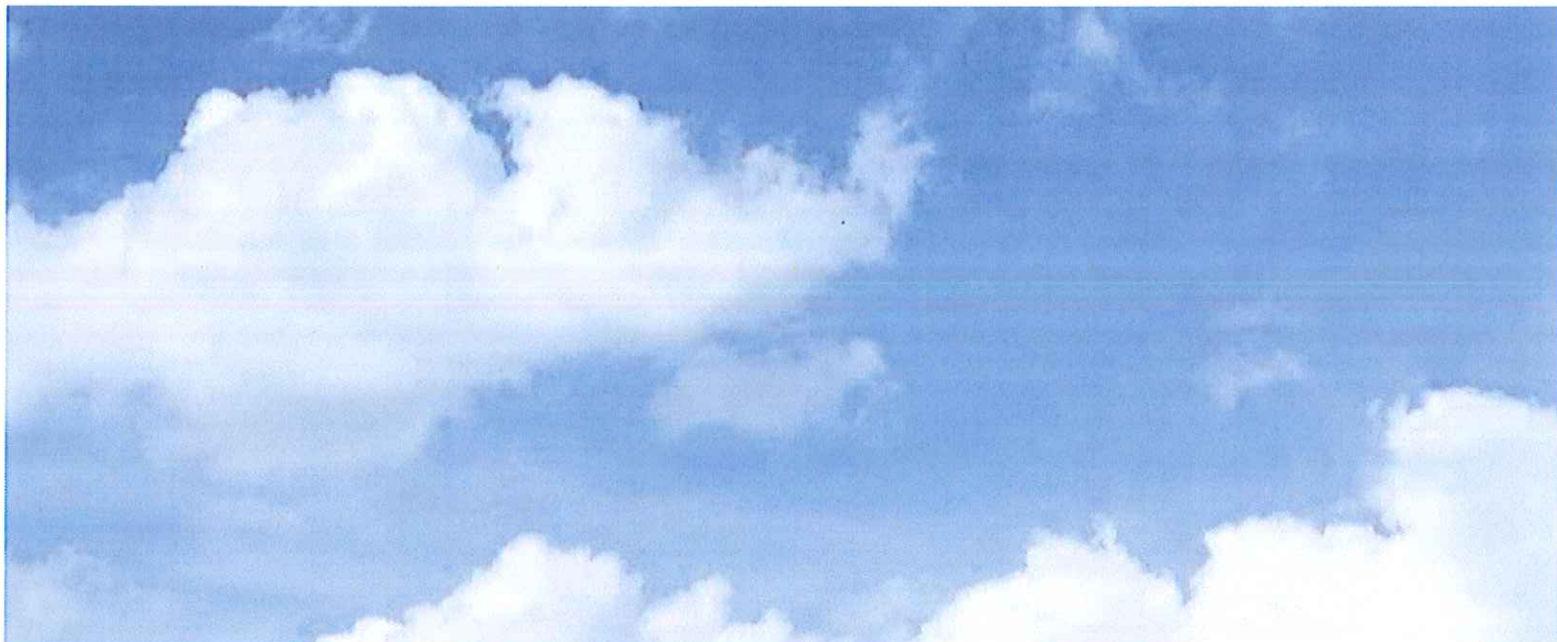
BC Transit – Senior Urban Transportation Planner

CENTRAL Okanagan



TRANSIT

future



Transit Future Plan

CENTRAL OKANAGAN REGION | August 2011

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TRANSIT future