Nanaimo Regional Transit
Business Plan

April 2008

Regional District of Nanaimo

BC Transit

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EXECUTIVE SUMMARY

Introduction and Objectives

The Nanaimo Regional Transit Business Plan is a comprehensive, long-range plan that provides a strategic vision for transit in the Nanaimo region. The plan was prepared by BC Transit in cooperation with the Regional District of Nanaimo. IBI Group consultants were also contracted to develop supporting material. The plan links with other planning processes in the region and constituent municipalities, and it will act as a guide for transit service planning and delivery in the Nanaimo region over the next ten years.

The primary goal of the Nanaimo Regional Transit Business Plan is to encourage greater transit ridership in the Nanaimo region by providing transit and other sustainable transportation options that improve mobility for people who have few other transportation options and also offer an attractive alternative for automobile drivers. The objectives for the Nanaimo Regional Transit Business Plan can be grouped into three broad categories: community objectives, passenger service objectives, and financial and performance objectives.

Market Analysis

The plan identifies a number of key market characteristics affecting future needs for transit in the Nanaimo region.

- The region has experienced moderate population growth, with a 9% increase over the last five years. This moderate growth is forecast to continue over the next ten years.
- The Nanaimo region has relatively low density, with 43% of the population living in areas that support only limited or no transit service.
- The RDN's population is older than the provincial average, especially in Oceanside. Older seniors – a key transit market – are the fastest growing group.

Review of Existing Transit Service

The plan examines the existing transit service in the Nanaimo region.

- The Nanaimo Regional Transit System has slightly below average service levels and performance when compared with its peers across B.C. and Canada.
- The Nanaimo Regional Custom Transit System has below average service levels but close to average performance when compared with its peers in B.C.
- There is a strong school and work commuter transit market in the Nanaimo region, resulting in strong peaks in demand.

Proposed Service Improvements

The plan includes 24,500 annual hours of expanded conventional transit service in the short range period (2009-10) and a further 65,900 annual hours of expanded service in the medium range period (2011-18). The projected addition of more than 90,000 annual service hours would result in nearly doubling the conventional transit service level in the Nanaimo region over the next decade. This increase falls in line with the Provincial Transit Plan, which looks to double transit ridership by 2020.

Summary of Proposed Short Range Service Options (2009 & 2010)

	Service Description	Service hours	Additional vehicles	Additional rides	Total cost	Net RDN cost
2009 - March		**5,000**	**2**	**117,000**	**$452,000**	**$135,000**
S1	5-Fairview/6-Harewood 30-minute peak period service	4,200	2	105,000	$388,000	$112,000
S2	90-Intercity Connector &10-Lantzville additional peak period trips (includes review of connections to Departure Bay and Nanoose)	800	0	12,000	$64,000	$23,000
2009 - September		**9,400**	**3**	**215,000**	**$828,000**	**$241,000**
S3	8-South/9-North 30 minute peak period service	1,600	1	40,000	$154,000	$49,000
S4	Earlier Morning Start	2,300	0	57,500	$183,000	$34,000
S5	2-Hammond Bay route restructuring, including improved service to the Departure Bay ferry terminal	3,300	1	66,000	$289,000	$97,000
S6	New route Hammond Bay to Hospital and Malaspina	1,500	1	37,500	$146,000	$46,000
S7	7-Cinnabar/Cedar 3 additional trips per day	700	0	14,000	$56,000	$15,000
2010 - September		**10,100**	**5**	**222,100**	**$937,000**	**$316,000**
S8	15-Mal U Connector - extend to South Parkway Plaza (60-minute service)	2,500	1	62,500	$225,000	$61,000
S9	Extend 3-Hospital to Woodgrove	3,800	2	83,600	$356,000	$122,000
S10	90-Intercity Connector 60-minute daytime service & increased evening service	3,800	2	76,000	$356,000	$133,000
Total Short Range Service Options*		**24,500**	**10**	**554,100**	**$2,217,000**	**$692,000**

Summary of Proposed Medium Range Service Options (2011-18)

	Service Description	Service hours	Additional vehicles	Additional rides	Total cost	Net RDN cost
M1	Bus Rapid Transit Phase 1 15-minute peak/30-minute midday, evening, & weekend service	13,800	5	414,000	$1,233,000	$233,000
M2	Extend BRT to Malaspina UC	2,000	2	60,000	$213,000	$66,000
M3	Parksville Qualicum Beach 60-minute local service	3,500	1	70,000	$305,000	$101,000
M4	Downtown-Departure Bay-Country Club Shuttle	4,600	1	92,000	$393,000	$125,000
M5	5-Fairview/6-Harewood 30-minute midday & Saturday service	3,800	0	95,000	$303,000	$57,000
M6	1-Woodgrove, 2-Hammond Bay, & 3-Hospital 15-minute peak period service	7,500	6	187,500	$757,000	$260,000
M7	10-Lantzville 60-minute service	1,100	1	22,000	$114,000	$48,000
M8	7-Cinnabar/Cedar increased service frequency	2,600	1	52,000	$233,000	$81,000
M9	Increased Evening Service	7,900	0	158,000	$630,000	$174,000
M10	15-Mal U Connector increased service frequency	4,700	2	117,500	$428,000	$119,000
M11	90-Intercity Connector 30-minute peak period & 60-minute evening service	3,800	2	76,000	$356,000	$133,000
M12	44-Malaspina UC 10-minute peak period frequency	2,800	2	70,000	$277,000	$92,000
M13	Bus Rapid Transit Phase 2 15-minute weekday service	5,500	0	165,000	$439,000	$45,000
M14	7-Cinnabar/Cedar 30-minute peak period service	2,300	1	46,000	$210,000	$75,000
Total Medium Range Service Options		**65,900**	**24**	**1,625,000**	**$5,891,000**	**$1,609,000**

The plan includes 14,400 annual hours of expanded custom transit service, $75,000 annually in additional taxi supplement funding, and $70,000 annually in additional taxi saver funding.

Summary of Proposed Custom Transit Service Proposals

	Vehicles	Hours	Taxi Supp.	Taxi Saver	Description
Short range period					
2009	1	2,400	$35,000		Increased handyDART in Nanaimo & increased Taxi Supplement.
2010	2	4,800		$20,000	Increased handyDART in Nanaimo & Oceanside. Increased Taxi Saver.
Medium range period					
2011			$20,000	$30,000	Increased Taxi Supplement & Taxi Saver.
2012	1	2,400			Increased handyDART in Nanaimo.
2013			$20,000	$20,000	Increased Taxi Supplement & Taxi Saver.
2014	1	2,400			Increased handyDART in Nanaimo.
2015	1	2,400			Increased handyDART in Oceanside.

Fleet and Facility Requirements

The plan identifies the fleet and facility requirements to support the service plan. The replacement and expansion vehicle requirements for the next ten years are outlined in the table below.

	Replacement vehicles	Expansion vehicles	Total new vehicles
Conventional Transit	24	40	64
Custom Transit	24	7	31

- Double decker buses will be considered for longer, limited-stop routes serving Malaspina and other key commuter destinations.
- Electronic fare payment technology will be introduced in the short range period, to provide a more flexible and secure fare payment system.
- The RDN's plan to upgrade the existing transit facility will accommodate the planned fleet expansion.
- Introduction of transit signal priority and AVL technology is planned.

Supporting Strategies

Supporting strategies are used to encourage greater ridership and improve transit system performance.

- Fare strategies involve setting transit fares in order to encourage greater ridership and target key transit market groups. U-PASS, Youth Pass, Employer Pass and other long-term transit passes will be key.

- On-street facilities, including bus stops, shelters, and transit exchanges, form a critical interface with passengers and the public that can help improve the overall experience of using transit. The RDN has a three year plan to replace and upgrade on-street facilities.
- Transportation demand management (TDM) strategies are used to encourage people to make more efficient use of the transportation system by reducing the amount of travel, shifting the time of travel, and shifting demand from single occupant vehicles to other modes. Transit can play a key role in this.
- Marketing strategies can be used to identify and target key transit markets, and raise the profile of transit in the region through enhanced public information and promotion.

Plan Implementation and Monitoring

The Transit Business Plan is not a static document. Transit performance will be monitored and the plan will be updated based on current performance, market information and local priorities. Implementation plans will then be developed each year based on the updated plan.

As part of the ongoing monitoring of the transit business plan, BC Transit will provide annual monitoring reports to the RDN, which will also include benchmarking against other comparable transit systems, using Key Performance Indicators (KPIs). These KPIs can be used to prioritize the service proposals and to monitor the performance of these new services once they have been implemented. Transit service design guidelines will also be used to evaluate service proposals.

The Transit Business Plan includes a well-defined process to evaluate service requests received by the RDN. If the request can be accommodated with little or no impact on the existing service and passengers, it may be considered for implementation immediately. Other requests would be evaluated as part of the annual service plan updating process, using the KPIs and service design guidelines. Service requests involving expanded coverage to new areas would require a further assessment of size and density of the proposed new service area and the efficiency with which it can be served.

Recommendations

It is recommended that the Regional District of Nanaimo and BC Transit:

1. **Approve the Nanaimo Regional Transit Business Plan as a guide for transit service planning and delivery in the Nanaimo region.**
2. **Approve the Key Performance Indicators and the Service Design Guidelines, developed by BC Transit and the RDN, as the basis for monitoring and evaluating the transit service.**
3. **Approve in principle the Short and Medium Range Service Proposals and the Supporting Strategies, and direct staff to proceed with more detailed planning work for the proposals scheduled for implementation in March and September 2009. Implementation will be subject to available funding, and final approval will be part of the annual budget process.**

1. INTRODUCTION

The Nanaimo Regional Transit Business Plan is a comprehensive, long-range plan that provides a strategic vision for transit in the Nanaimo region. The plan was prepared by BC Transit in cooperation with the Regional District of Nanaimo. IBI Group was also contracted to develop supporting material. The plan links with other planning processes in the region and constituent municipalities, and it will act as a guide for transit service planning and delivery in the Nanaimo region over the next ten years.

The plan includes an analysis of existing and future markets for transit in the Nanaimo region, and it also reviews the existing transit service. Based on this information, a series of service improvements and supporting strategies have been proposed. The process for implementation and monitoring of the plan is also described.

2. OBJECTIVES AND POLICY CONTEXT

The primary goal of the Nanaimo Regional Transit Business Plan is to encourage greater transit ridership in the Nanaimo region by providing transit and other sustainable transportation options that improve mobility for people who have few other transportation options and also offer an attractive alternative for automobile drivers. The objectives for the Nanaimo Regional Transit Business Plan can be grouped into three broad categories: community objectives, passenger service objectives, and financial and performance objectives.

Community Objectives

Community objectives describe how transit relates to key markets, existing and planned community development, and the overall transportation system.

1. Focus transit service on major activity centres and residential areas within the urban containment boundary

- Transit service should primarily serve built up areas with transit-supportive land use.
- Within this area, transit service should focus on growth centres, including urban nodes and corridors.

2. Provide transit service to other key destinations where appropriate

- Appropriate levels of transit service may also be provided outside the core urban areas, where the market is sufficient.
- The entire Regional District will be examined to determine those areas where current or future demand is sufficient to support some form of transit service.
- The potential for regional transit connections, which may extend beyond the RDN boundaries, will also be investigated.

3. **Focus service on the needs of commuters for school and work;**

   - Transit service should focus primarily on the peak period post-secondary, school and work commuters where transit can best compete with the automobile.
   - Reduce duplication and improve travel options for students through greater cooperation between public transit and school district transportation.
   - Promote U-PASS for Malaspina University College students.

4. **Provide service to those groups, particularly seniors, persons with disabilities, and youths, who are less likely to have access to alternative modes of transportation;**

   - The transit system should continue to provide a basic level of mobility for those who are dependent on transit.
   - Provide a range of options for persons with mobility difficulties, including handyDART service, taxi programs, and fully accessible conventional service.

5. **Integrate transit with land use planning;**

   - The transit system should be developed to help achieve community development objectives as described in the Regional Growth Strategy and Official Community Plans.
   - Transit should be considered in all stages of the land development process, from area structure plans through subdivision applications.

6. **Provide a range of transit service options, including community bus;**

   - Transit service levels, delivery method, and vehicle types should be tailored to specific markets and to the level of demand. In particular, make greater use of community bus to serve times and markets when demand is lower.

7. **Improve the integration between transit and other modes of travel;**

   - Provide greater integration between conventional and custom transit.
   - Make it easier for passengers to transfer between transit and other modes, including cycling and intercity bus.

8. **Provide environmentally sustainable transportation choices;**

   - Examine alternative fuel sources for transit vehicles in order to minimize energy consumption, emissions, and greenhouse gas production. This includes diesel-electric hybrid buses, hydrogen fuel-cell buses, biodiesel, and other options.

9. Use supporting strategies to encourage greater transit ridership and target key markets.

- Use Transportation Demand Management (TDM) strategies, including consideration of transit priority measures, to reduce the growth in travel demand and to encourage alternatives to driving single occupant vehicles.
- Improve fare options for passengers and encourage the use of prepaid fares targeted at key markets such as students and commuters.
- Develop marketing strategies to identify and target key markets, and to promote transit as an alternative to driving

Passenger Service Objectives

Provide an attractive alternative to driving with transit service that is frequent, direct, and convenient, and by providing a safe and pleasant environment for the transit user:

10. Provide appropriate levels of service throughout the day, during evenings, and on weekends and holidays.

- This will ensure mobility for transit dependent passengers and convenience and reliability for choice passengers.
- Service standards will be used to set these service levels.

11. Provide faster, more direct service between major activity centres.

- This will reduce travel times for most passengers, accommodate a range of travel choices, and reduce the need for transferring.

12. Improve on-street passenger facilities including bus shelters, lighting, and transit exchanges.

- This will make using transit safer and more comfortable

13. Improve transit information for customers.

- This will make using transit easier for customers.

14. Maintain or improve schedule adherence

- This will ensure reliability for customers.

15. Maintain clock-face headways where possible

Financial and Passenger Performance Objectives

Improved transit system efficiency is a key objective. While community and passenger service objectives identify needed service improvements, financial and passenger performance objectives can be used to identify which of these improvements are affordable and an efficient use of available resources. Future decisions on transit service changes will need to weigh these sometimes competing objectives.

16. Ensure that efficient use is made of resources in order to maximize customer service and community benefits at an affordable cost to the public.

17. Use Key Performance Indicators (KPIs) to monitor transit system performance over time and to make comparisons with other transit systems (benchmarks).

- The KPIs will measure both financial performance and ridership performance.

18. Use KPIs to measure the operating performance of individual routes and trips, both existing and proposed.

- This information can then be used, in conjunction with community and passenger service objectives, in making decisions on transit service levels.

3. COMMUNITY BENEFITS OF TRANSIT

Why should the continued provision and expansion of transit service be supported, given the limited resources faced by all levels of government? As outlined below, transit provides a number of benefits to the communities it serves. It provides mobility to those segments of the population which have no alternative means of transportation, while it provides additional transportation options for other groups. When all costs are considered, transit is a very efficient mode of transportation compared with the automobile, in terms of energy consumed, space required, and the amount of pollution produced. From a fiscal perspective, one of the key overall benefits of increased transit use is the reduction in other public and private costs that results from reduced automobile traffic.

While issues such as traffic congestion and air pollution may not yet have reached a critical stage in the Nanaimo region, it is still important to plan now. The region is growing and as this growth continues, transit will play an increasing role in the overall transportation system.

Some of the key benefits of public transit are discussed below.

3.1 Reduced Infrastructure and Congestion Costs

As the Nanaimo region continues to grow, it faces major infrastructure and congestion costs associated with rapidly increasing automobile use. Infrastructure costs include land, construction, and maintenance costs for expanded roadways and parking facilities, as well as traffic control and enforcement costs. Congestion costs relate to lost time and productivity which results from longer travel times due to delays. If some of the growth in automobile traffic can be diverted to transit, significant savings could be realized. The greatest impact would result from traffic diverted at peak travel times, since capacity requirements for the transportation system are based on these times of peak demand. Currently, the Nanaimo Regional Transit System carries nearly 5,000 passengers daily during peak periods. As the transit system grows over the next ten years, there could be a significant reduction in automobile traffic resulting from people that are being carried on transit. Carrying these same people in single occupancy vehicles (which take up roughly 20 times as much road space) would result in much greater traffic congestion and would require significant investment in roads, parking facilities, and other infrastructure.

3.2 Reduced Environmental Costs

An average transit trip requires less than one quarter of the energy use per person than the same trip made in a single occupancy private vehicle. The transit trip also results in a 65% reduction in greenhouse gases produced, and a 20-90% reduction in other pollutants. Transit trips also require less land consumption, as the same number of people can be carried on less road space and there are reduced parking requirements. Indirectly, transit can also encourage more efficient land use patterns that further reduce land consumption, the total amount of travel in a region, and thus, the total amount of energy that is consumed.

3.3 Community Development

As transit plays an increasingly important role in the transportation system, it can be a very effective means of shaping community development. For example, transit could play a key role in encouraging the development of town centres in the Nanaimo region. By reducing reliance on the automobile, transit can also help the community to develop in a more pedestrian-friendly manner.

3.4 Improved Mobility

For many people who do not have access to other modes of transportation due to age, disability, or income, transit provides mobility and freedom to travel without relying on others. Increasingly, this includes the growing elderly population for whom driving may pose a safety problem for themselves and for others. For the elderly, students, persons with disabilities, and single parents caring for children, transit often provides the only viable access to health and social services and to work and recreational opportunities. Transit may also allow people wider access to jobs and employers wider access to the regional labor force, providing important economic benefits for both groups.

Custom transit (handyDART) in particular, provides increased mobility that permits the elderly and persons with disabilities to live independently and still have good access to essential activities (such as employment, health care, education and shopping) as well as discretionary activities (such as social events and recreation). If transit service were not available, the costs of providing alternative services might be very high. Many people would be forced to live in institutions at a far higher public cost than provision of the transit service.

4. MARKET ANALYSIS

4.1 Population Trends

Examining population trends is a key way of determining the future demand for transit.

As shown in Exhibit 4-1, the RDN's population has nearly doubled over the past 25 years, from less than 80,000 in 1981 to nearly 145,000 in 2006. The region experienced a period of very rapid growth between 1986 and 1996, while growth has been more moderate at other times. Between 2001 and 2006, the population increased 9.1%. This moderate rate of growth is forecast to continue over the next ten years, with the total population projected to reach nearly 170,000 by 2016.

Exhibit 4-1: Population Growth in the RDN, 1981-2016

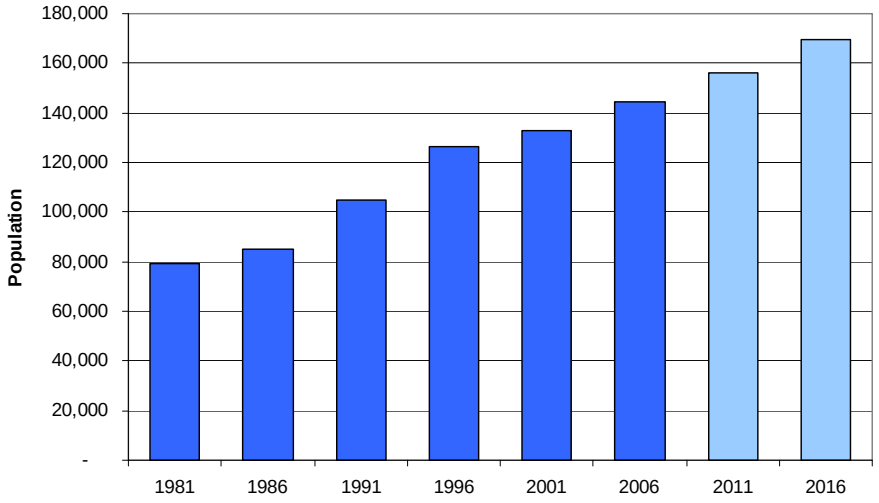


Exhibit 4-1 shows the distribution of population growth over the past five years by municipality and electoral area. The City of Nanaimo, which contains more than half of the RDN's population, grew at a slightly slower rate than the region as a whole and accounted for just under half of the total population growth over the past five years. Within the City, the fastest growth was in the north end, especially the Hammond Bay area. There was also significant growth in the south end. Among all the municipalities, Qualicum Beach grew the fastest (+8.3%), although this was still below the regional average. Except for Area A (Cedar/Cassidy), all the electoral areas grew faster than the region as a whole. The greatest percentage increase was in Area C (West Nanaimo).

Exhibit 4-2: Population Growth by Area in the RDN, 2001-06

Municipality/Electoral Area	2001	2006	Population change	
Nanaimo	76,185	82,125	5,940	7.8%
Lantzville	3,812	3,820	8	0.2%
Parksville	10,773	11,472	699	6.5%
Qualicum Beach	7,224	7,825	601	8.3%
Indian Reserves	781	895	114	14.6%
Area A – Cedar/Cassidy	6,896	7,238	342	5.0%
Area B – Gabriola Island	3,781	4,342	561	14.8%
Area C – West Nanaimo	2,074	2,689	615	29.7%
Area E – Nanoose	5,175	5,856	681	13.2%
Area F – Coombs/Errington	5,954	7,162	1,208	20.3%
Area G – French Creek	6,563	7,529	966	14.7%
Area H – Bowser/Deep Bay	3,337	3,724	387	11.6%
Total RDN	**132,555**	**144,677**	**12,122**	**9.1%**

Source: 2006 Census

Population density

Population density has a significant impact on transit usage and performance. Areas with higher density can better support transit service since there are more residents within walking distance of a given transit route. Medium and higher density neighborhoods also tend to be more pedestrian friendly, and this also encourages more transit use.

Overall, the Nanaimo region is a low-density community. As a very general guideline, a gross density of 1000 residents per square km is considered the minimum to support local transit service with a 60-minute service frequency, while 2000 residents per square km is considered to be sufficient to support 30-minute local transit service. (This translates into net residential densities of roughly 10 and 20 dwelling units/Ha respectively.) Exhibit 4-3 below shows the percentage of the Nanaimo region's population living in neighborhoods with these densities, and compares this with Kelowna and Kamloops. Based on these criteria, only about 26% of Nanaimo region residents live in neighborhoods with densities that can support 30-minute transit service while a further 31% live in neighborhoods that can support 60-minute service. The Nanaimo region has a lower percentage of residents living at densities over 2000, compared with Kamloops and Kelowna. Roughly 43% of Nanaimo region residents live at densities that support only limited or no transit service. This is a challenge for transit.

Exhibit 4-3: Comparison of Population Density

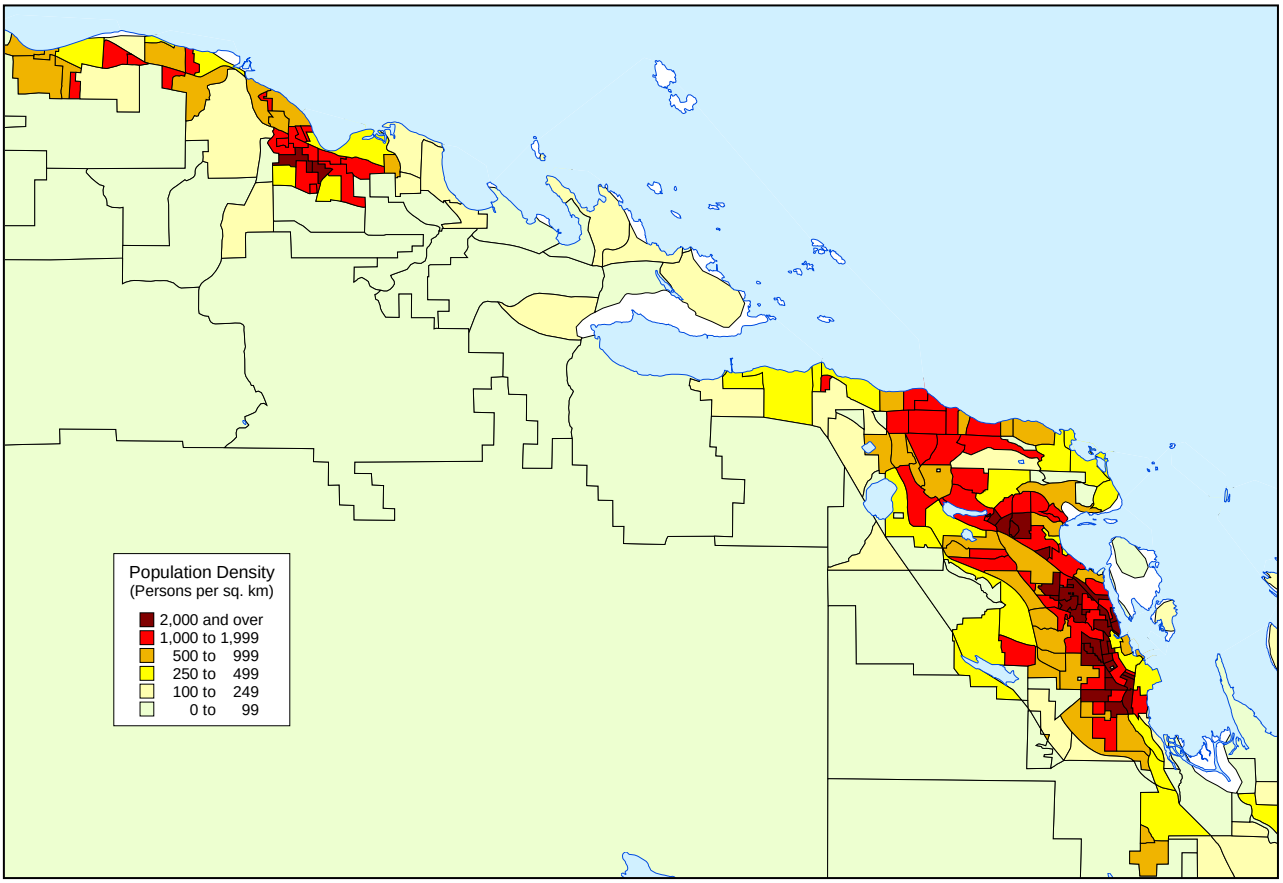
Density (persons per km^2)	**Nanaimo Region**	Kelowna Region	Kamloops
Over 2000 Supports 30-minutes service	**26%**	33%	42%
1000-1999 Supports 60-minute service	**31%**	20%	32%
Under 1000	**43%**	47%	26%

Source: 2006 Census

Generally areas with mixed housing stock, including townhouses and apartments along with single-family homes, have greater densities that can better support transit. Single-family homes account for 68% of housing in the Nanaimo region according to the 2006 Census. Again, this is greater than the share of single-family homes in Kamloops (57%) and the Kelowna region (58%).

Exhibit 4-4 shows that the highest density neighborhoods – those with 2000 or more residents per square km – are concentrated mostly in downtown and the south end of Nanaimo, along with small pockets near Departure Bay and in Parksville. Areas with 1000 to 2000 people per square km are generally located in these same areas, along with pockets in North Nanaimo near Hammond Bay Road and Long Lake as well as a few pockets in Qualicum Beach.

Exhibit 4-4: Population Density in the RDN, 2006



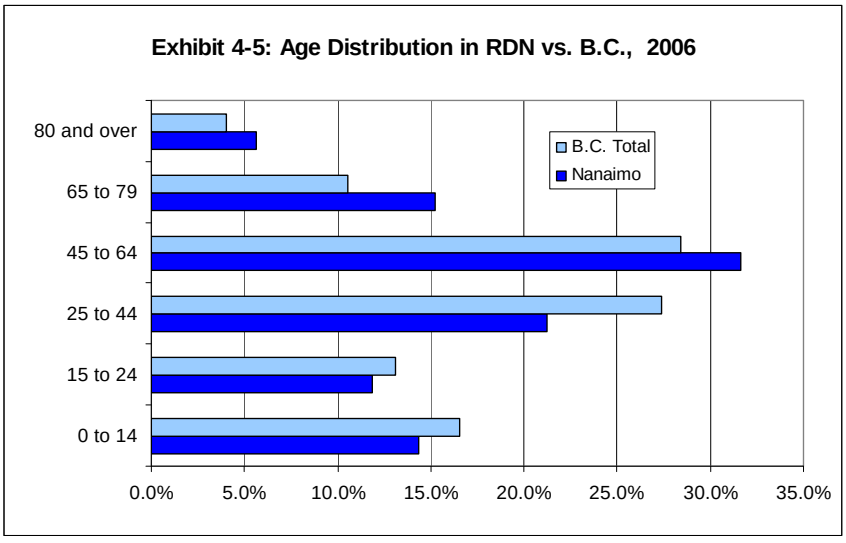
4.2 Age Distribution

Different age groups have different transit needs. The propensity to use transit varies significantly by age, so examining the current and future age distribution in the Nanaimo region can help project ridership. Two age groups form key transit markets, while transit use is lower for other groups:

- **Students & young adults (aged 15-24)** – This group has the highest rate of transit use among all age groups. This group tends to be very mobile – they make a lot of trips – but many are either too young to drive or they do not own a car. Encouraging transit among this group can help to develop lifelong transit use.
- **Older seniors (aged 80 & over)** – This group also has a high rate of transit use. While older seniors don't make as many trips overall as other age groups, they tend to be very dependent on transit. A high proportion of this group has mobility difficulties, so this groups has high demand for handyDART and accessible conventional transit.
- **Working age (25-64) and young seniors (65-79)** – Transit use tends to gradually decline with age from when people are in their mid-twenties until they are in their sixties or seventies. People that are working and raising children are often more reliant on driving. As incomes increase with age, car availability also tends to increase.

Exhibit 4-5 below shows the 2006 distribution by age groups in the RDN compared with B.C. as a whole. The Nanaimo region has an older population, with a median age of 46.6 compared with 40.8 for B.C. In fact, the RDN had the second oldest population among all regional districts in 2006. Seniors make up 20.9% of the region's population versus 14.6% for B.C. Within the RDN, the Parksville-Qualicum Beach area has the oldest population, with nearly 34% of residents over age 65 compared with 18% for Nanaimo. In fact, Qualicum Beach, with 41% over age 65, has the oldest population in Canada among municipalities with 5,000 or more.

Exhibit 4-5: Age Distribution in RDN vs. B.C., 2006



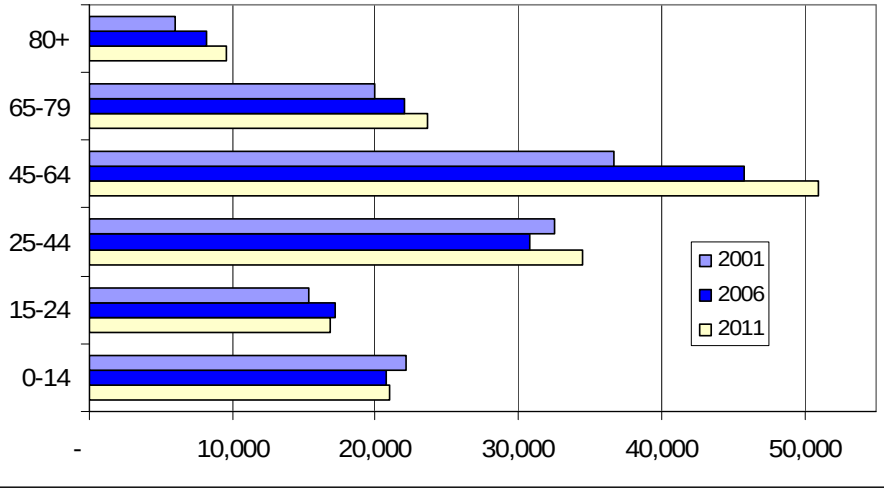
Forecast change in age groups

Exhibit 4-6 below shows the recorded population increase by age group between 2001 and 2006, and the projected increase between 2006 and 2011. The chart shows that the RDN's population is aging.

Between 2001 and 2006, the largest percentage increase was among older seniors (80+), a key transit market. The other key transit market – students and young adults – also experienced above average growth due to the baby boom echo. The largest absolute increase was among those aged 45 to 64, as baby boomers moved into this age group.

Between 2006 and 2011, older seniors are forecast to continue to be the fastest growing age group. This will impact the demand for handyDART and accessible conventional transit. The working age population (25-64) is also forecast to grow faster than the overall population, with the largest absolute increase among the older part of this group (45-64). In contrast, the key student and young adult group (15-24) is forecast to decline slightly as the baby boom echo generation moves out of this group. Ridership growth in this key market will thus be more dependent on persuading a larger proportion of this group to use transit and less dependent on increasing absolute numbers of students.

Exhibit 4-6: Population Growth by Age Group, 2001-11



5. REVIEW OF EXISTING TRANSIT SERVICE

This section of the Business Plan examines the existing transit service, its characteristics, and patterns of transit demand in the Nanaimo region. Use is made of historical data along with recent passenger counts and passenger survey results.

5.1 Comparison with Other Transit Systems

Conventional Transit

Exhibit 5-1 below compares the Nanaimo Regional Transit System with other Tier 1 transit systems in similar-sized communities in B.C. in 2006/07.

- Approximately 97,000 out of a total of 132,000 (73%) RDN residents live within 400 m walking distance of a transit route.
- With approximately 94,000 hours of service annually, the Nanaimo region has an average level of transit service per capita (0.97 hours/capita) amongst this group.
- The Nanaimo region ranks third in total ridership after Kelowna and Kamloops.
- Nanaimo's productivity of 24.7 rides per hour of service in 2006/07 is a little below the average productivity of 26.7,.
- The Nanaimo Transit System shows a cost recovery (revenue as a percentage of total cost) of 31.8%. This is somewhat lower that the average cost recovery of 33.4% of the 5 transit systems.

Exhibit 5-1: Comparison of Conventional Transit Performance Measures 2006/07

	Population Served*	Hours of Service	Revenue Passengers	Rides/ Hour	Hours/ Capita	Cost Recovery
Nanaimo Regional	**97,100**	**93,779**	**2,318,000**	**24.7**	**0.97**	**31.8%**
Central Fraser Valley	115,100	68,909	1,608,000	23.3	0.60	29.3%
Kamloops	72,500	89,585	2,980,000	33.3	1.24	41.7%
Kelowna Regional	115,100	123,149	3,118,000	25.3	1.07	33.2%
Prince George	60,700	52,706	1,211,000	23.0	0.87	29.3%
Average: other Tier 1 Systems	**90,850**	**83,587**	**2,229,250**	**26.7**	**0.92**	**33.4%**

*Population within 400 m of a transit route.

Exhibit 5-2 compares the transit service level and performance in the Nanaimo region with similar-sized benchmark communities across Canada. The table shows the 7 best performing systems as ranked by rides per hour of service, as well as the average for all 34 transit systems in the comparable population group.

- Service levels per capita are lower in the Nanaimo region (0.97) than the average for all comparable systems (1.10).
- The Nanaimo region has lower productivity than the benchmark systems and is slightly lower than the average for all comparable systems (24.7 versus 26.0 rides per hour).
- These comparisons suggest that existing routes require careful scrutiny with a view of transferring service to the high demand, more profitable routes.

Exhibit 5-2: Transit Service Levels & Performance in Canadian Cities

Transit System	Population Served*	Hours of Service	Revenue Passengers	Hours/ Capita	Rides/ Hour
Nanaimo Regional	**97,100**	**93,779**	**2,318,000**	**0.97**	**24.7**
Sherbrooke, QU	138,000	200,000	6,925,000	1.45	34.6
St Catharines, ON	148,000	143,600	4,752,800	0.97	33.1
Red Deer, AB	83,000	112,000	3,394,400	1.35	30.3
Peterborough, ON	74,900	86,100	2,513,100	1.15	29.2
Saint John, NB	90,000	87,200	2,501,800	0.97	28.7
Guelph, ON	120,000	182,400	5,115,700	1.52	28.0
Sudbury, ON	127,200	156,500	4,316,100	1.23	27.6
CUTA Population Group 3 Average†	**88,332**	**81,806**	**2,274,435**	**1.10**	**26.0**

*Population within 400 m of a transit route.

† Transit systems serving communities of 50,000 to 150,000

Custom Transit

Exhibit 5-3 compares the Nanaimo Regional Custom Transit System (handyDART) with custom transit systems in similar-sized communities in B.C.

- The Nanaimo region has the second lowest custom transit service level and ridership in this group, after Prince George.
- Nanaimo has slightly below average productivity (3.5 rides per hour versus 3.7 rides per hour for the Tier 1 systems).
- At $26.69, the total cost per ride in Nanaimo is the highest of the Tier 1 systems, and more than double the average cost of $12.57.

Exhibit 5-3: Comparison of Custom Transit Performance Measures, 2006/07

Transit System	Municipal Population	Hours of Service	Revenue Passengers	Rides/ Hour	Cost/ Ride
Nanaimo Regional	**132,000**	**16,848**	**61,061**	**3.5**	**$26.69**
Central Fraser Valley	164,600	21,222	93,122	3.9	$11.90
Kamloops	84,000	21,719	102,292	4.1	$12.24
Kelowna Regional	173,300	29,000	138,505	3.6	$12.35
Prince George	77,100	10,610	55,528	3.5	$12.72
Average: other Tier 1 Systems	**124,750**	**20,638**	**97,400**	**3.7**	**$12.57**

*Population within 400 m of a transit route.

Exhibit 5-4 compares taxi program funding levels and ridership in the Tier 1 transit systems.

- Nanaimo and Prince George have the lowest level of taxi supplement funding and ridership. However the cost per ride in the Nanaimo region is the highest of all systems.
- Taxi Saver funding and ridership is significantly lower than the other systems. However, the cost per ride is the lowest of all the Tier 1 systems. The potential exists for Taxi Saver to play a much greater role in the Nanaimo region.

Exhibit 5-4 Taxi Programs, 2006/07

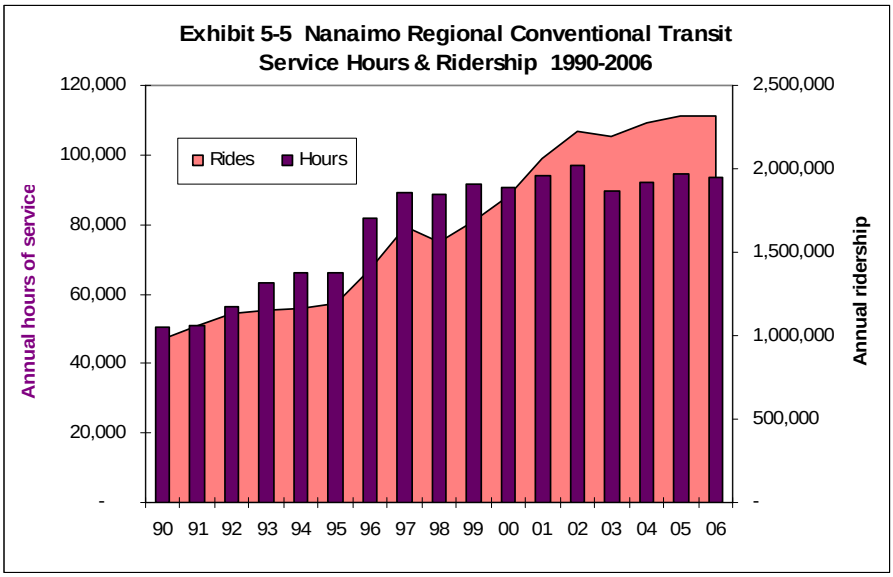
	Taxi supplement			Taxi Saver		
	Funding	Rides	Cost/ ride	Funding	Rides	Cost/ ride
Nanaimo Region	**$14,942**	**1,082**	**13.81**	**$13,183**	**1,822**	**7.24**
Kamloops	$57,650	5,089	11.33	$68,071	7,801	8.73
Central Fraser Valley	$88,254	6,555	13.46	$46,624	4,510	10.34
Kelowna Region	$122,460	10,077	12.15	$219,446	23,471	9.35
Prince George	$16,019	1,681	9.53	$128,463	16,658	7.71
Total - Tier 1	**$299,325**	**$24,484**	**12.23**	**$475,787**	**$54,262**	**8.77**

5.2 Historical Trends

Conventional Transit

Exhibit 5-5 below shows the trend in service hours and ridership from 1990 to 2006 for the Nanaimo Regional Conventional Transit System.

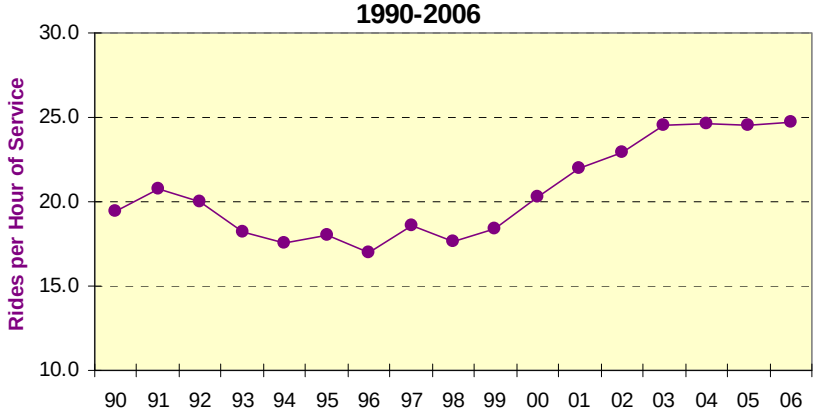
Exhibit 5-5 Nanaimo Regional Conventional Transit Service Hours & Ridership 1990-2006



- Service levels increased gradually during the early 1990s, increasing from about 50,000 hours in 1990 to 66,000 hours in 1995. This represents an annual growth of approximately 5%.
- Service levels increased sharply from 66,000 hours in 1995 to 89,000 hours in 1997, with the introduction of 15-minute commuter service on some routes.
- Service levels increased gradually between 1997 and 2001, rising to about 94,000 hours. Since 2001, service levels have remained relatively stable.
- Ridership has generally responded to the changes in service levels, with steady growth from less than 1 million passengers in 1990 to over 2 million passengers in 2001. Since 2001, with little change in service levels, there has been more gradual growth in ridership, reaching 2.3 million in 2006.

As shown in Exhibit 5-6, passenger productivity in Nanaimo dipped slightly during the mid-1990s, as growth in ridership did not completely match the service level increases. From 1997 to 2003, there was a steady increase in productivity as modest ridership growth continued even as the service levels remained relatively constant. Since 2003, productivity has been relatively stable at about 25 rides per hour.

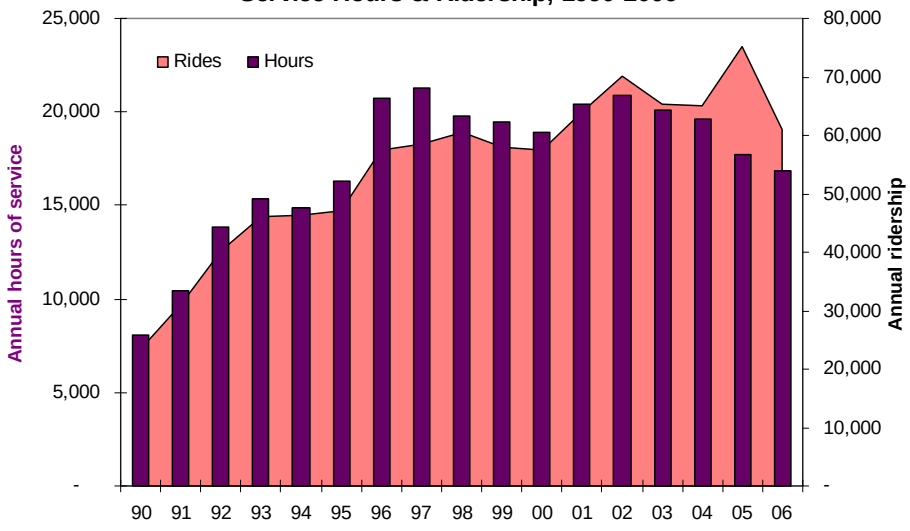
Exhibit 5-6 Nanaimo Conventional Transit Productivity 1990-2006



Custom Transit

Exhibit 5-7 shows the trend in annual service hours and ridership for the Nanaimo Regional Custom Transit System.

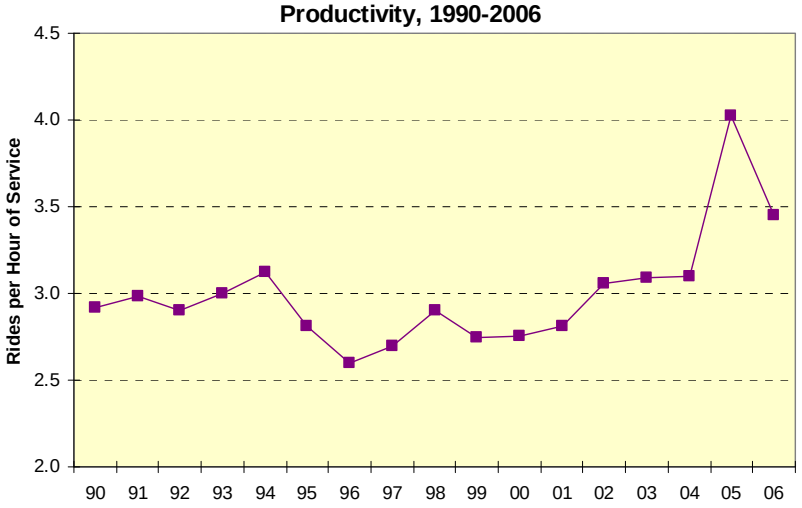
Exhibit 5-7 Nanaimo Regional Custom Transit System Service Hours & Ridership, 1990-2006



- The period 1990 to 1997 saw a steady increase in service levels from 8,100 to 21,300 annual hours of service. Since 1997, there has been an overall decline in the annual service hours to the current level of 16,800 hours.
- Taxi supplement was introduced in 1999 and Taxi Saver in 2001. Both programs have also declined steadily since their introduction.
- Over the period 1990 to 2002, ridership has followed a similar pattern to service levels, increasing from 24,000 to more than 70,000. Since 2002, ridership has generally declined, reaching 61,000 in 2006.

Exhibit 5-8 depicts productivity of the Nanaimo Regional Custom Transit System.

Exhibit 5-8 Nanaimo Regional Custom Transit System Productivity, 1990-2006



- Productivity averaged approximately 3 rides per hour of service between 1990 and 2004. Productivity increased to 3.5 in 2006 (the 2005 number included community bus).
- Productivity is a function of several factors including the density of demand, scheduling efficiency, fleet makeup, and proportion of group trips.

5.3 Existing Transit Service

The Nanaimo Regional Transit System operates from approximately 6:30 am to midnight on weekdays, 7:00 am to midnight on Saturdays, and 9:30 am to 7:30 pm on Sundays. However, operating hours vary significantly for different routes.

The transit system is radial, using timed transfers at a series of transit exchanges. Downtown Nanaimo is the main focus of the transit system, with a number of secondary exchanges.

Appendix 1 provides detailed profiles for the individual routes.

5.4 Trip Profile

According to the most recent fall two-week passenger count undertaken in October 2007, the Nanaimo Regional Transit System carried an average of 9,500 passengers on a typical weekday. Ridership averaged 5,600 on Saturdays and 2,200 on Sundays.

Exhibit 5-9 shows the trend in average weekday ridership over the past five years. Ridership has generally fluctuated between 9,000 and 9,500 daily.

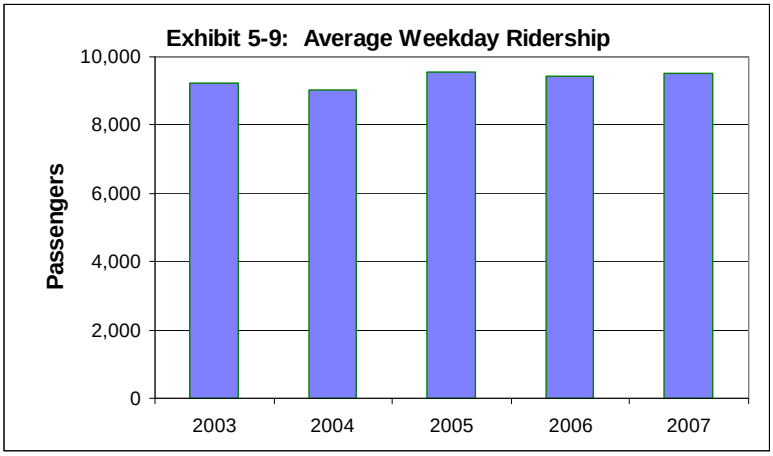
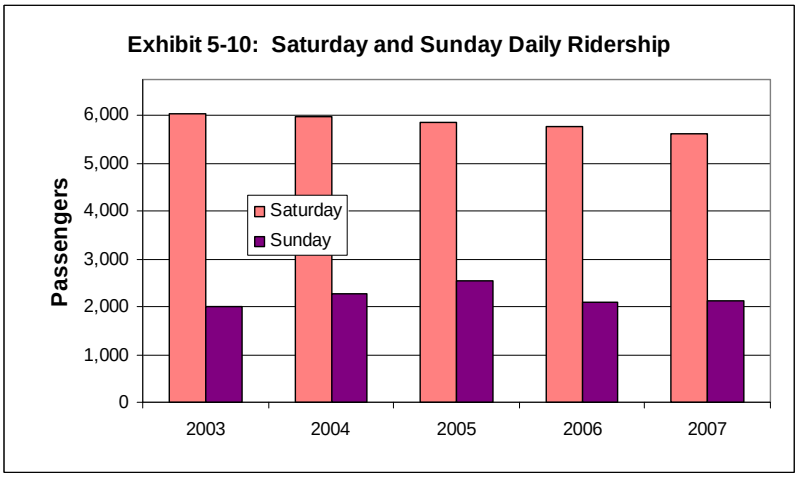


Exhibit 5-10 shows the trend in average Saturday and Sunday ridership over the past five years. Saturday ridership shows a gradual decline, from 6,000 rides in 2003 to 5,600 rides in 2007. Sunday ridership has fluctuated between 2,000 and 2,500 daily rides.



Rides per hour of service is a key measure of transit product-ivity. Overall, productivity in the Nanaimo region is highest on weekdays (32 rides per hour) due to strong ridership from the commuter market. Productivity is lowest on Saturdays (23 rides per hour), while it is 28 rides per hour on Sundays. These values are somewhat higher than the annual productivity numbers noted earlier, as they are based on the fall 2007 passenger count, which covers a short period of relatively high ridership.

Exhibit 5-11 shows weekday productivity by time period, with the PM peak having the highest productivity, again due to the strong commuter market at this time. The evening period has the lowest productivity, which is fairly typical for most transit systems.

Exhibit 5-11: Weekday Productivity by Time Period

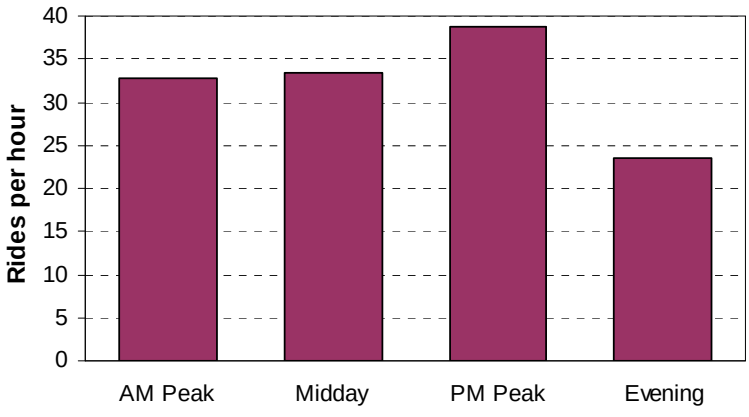


Exhibit 5-12 shows hourly transit ridership on the Nanaimo Regional Transit System.

- The weekday ridership pattern is typical of commuter oriented transit systems, with sharp peaks in ridership during the morning and afternoon peak periods.
- The morning peak, which is made up almost entirely of school and work commuter trips, occurs between 7 and 9 am, with the highest hourly ridership (1,200 passengers) between 7 and 8 am.
- Due to a greater mix of trip types, the afternoon peak period is less pronounced, occurring between 2 and 4 pm. Along with return school and work commuter trips, the afternoon peak also includes shopping, medical and recreational trips. Due to the importance of the student market in the Nanaimo region, the afternoon peak begins earlier than in transit systems where work trips predominate. The highest hourly ridership (1,000) occurs between 3 and 4 pm.
- In comparison, Saturdays and Sundays do not have display ridership peaks since there are far fewer commuter and school trips. Typically, ridership is highest in the afternoon.

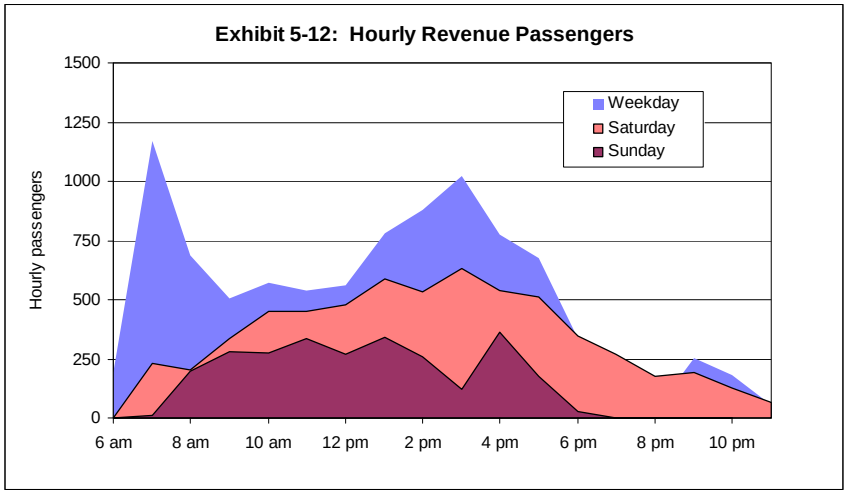
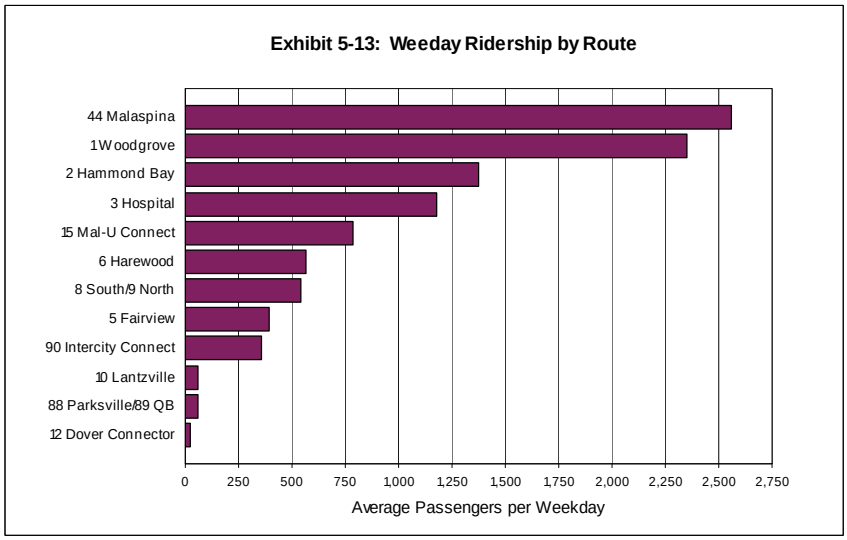


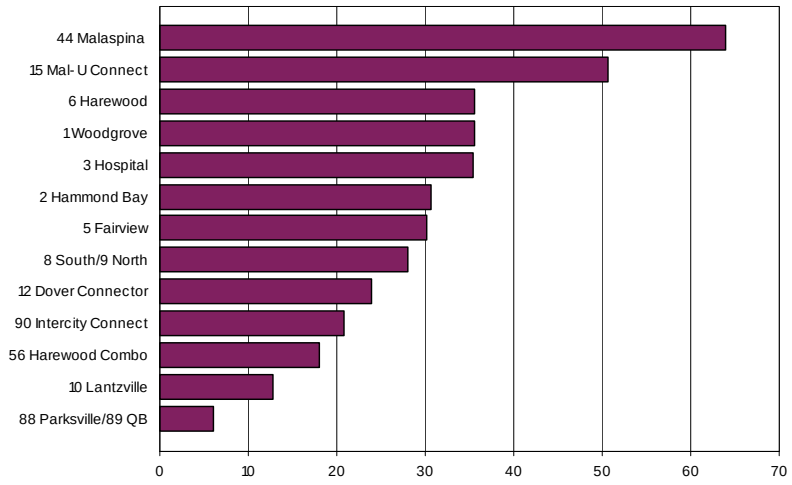
Exhibit 5-13 shows weekday ridership by route.



- The 44-Malaspina and the 1-Woodgrove/Downtown routes account for the largest share of ridership, carrying approximately 25% of the total weekday passengers. Each of these routes carry more than 2,000 passengers per weekday.
- These two routes together with 2-Hammond Bay, 3-Hospital, 15-Mal-U Connector and 6-Harewood account for almost half of total system ridership.
- Very low ridership is evident on the routes serving Dover, Parksville, Qualicum Beach, and Lantzville, with less than 100 passengers each.

Exhibit 5-14 below shows the range in weekday productivity by route. System-wide, average weekday productivity was about 32 rides per hour.

Exhibit 5-14: Weeday Productivity by Route

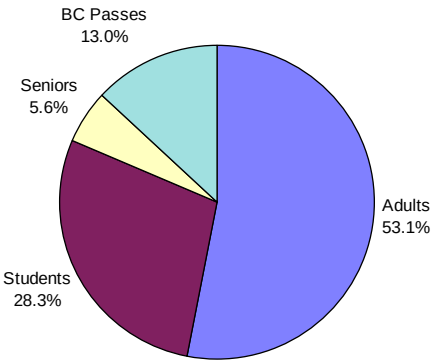


- Two routes serving Malaspina University College - the 44-Malaspina and 15-Mal-U Connector – have by far the highest productivity. The 6-Harewood, 1-Woodgrove, and 3-Hospital also have above average productivity.
- The remaining routes have below average productivity, with the 10-Lantzville and the 88-Parksville/89-Qualicum Beach routes having the lowest productivity in the system.

5.5 Passenger Profile

Exhibit 5-15 shows weekday ridership by passenger group.

Exhibit 5-15 Weekday Rides by Passenger Group



- Adults (which includes Malaspina University College students) account for just over half of ridership in the Nanaimo Regional Transit System.
- This is followed by high school students (28%).
- Seniors and BC Bus Pass holders make up the remaining passengers.
- This data highlights the importance of school and work commuter market segments. The proposed implementation of U-PASS at Malaspina UC would reinforce this.

Age & Sex

Exhibits 5-16 and 5-17 show the distribution of Nanaimo region transit riders by age and sex, based on an on-board passenger survey conducted in September 2007.

- The age distribution aligns fairly closely with the passenger groups shown in the previous chart.
- Young adults aged 18-24 make up the largest group, accounting for 41% of transit riders. Students likely account for a large proportion of this group. The next largest groups are 25-44 year olds (24%) and those 17 and under (15%).
- Females make up just over half of the transit ridership in the Nanaimo region, which is typical of most similar sized transit systems. The higher proportion of female passengers does however highlight the need to consider issues such as personal safety at bus stops, especially at night.

Exhibit 5-16: Passengers by Age

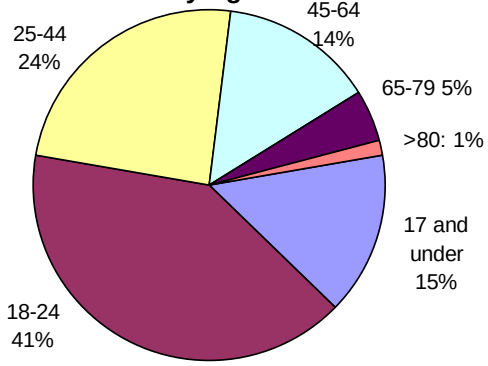
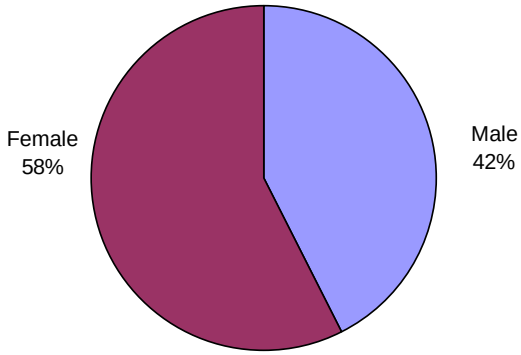
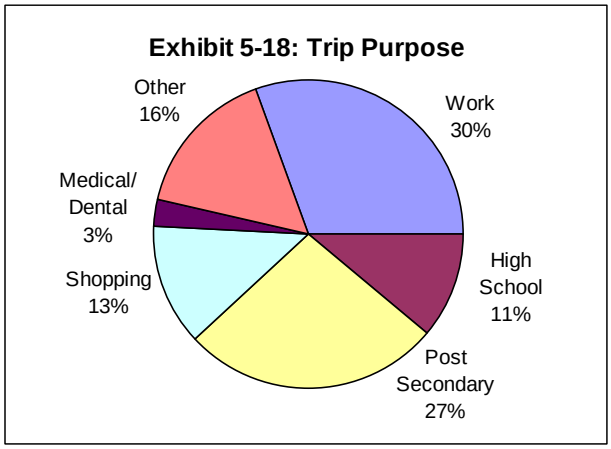


Exhibit 5-17: Passengers by Sex



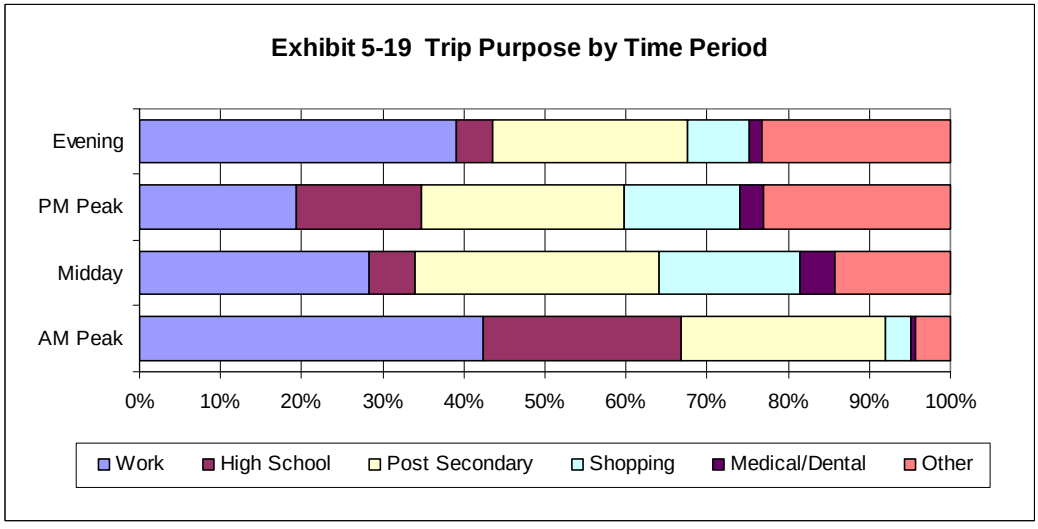
Trip Purpose

Figure 5-18 shows trip purpose, based on the on-board passenger survey.



- Work trips and post-secondary trips make up the majority of trips, with each accounting for approximately 30% of the total.
- Shopping (13%) and high school (11%) account for most of the remaining trips.
- In comparison to the 2003 on-board survey, the percentage of shopping trips has declined significantly. This may partly be due to different survey methodologies, but it may well illustrate the evolution of the transit system. Systems typically evolve from "shopper-oriented systems" to commuter systems as the community and the transit system grows.
- These numbers highlight the importance of work and school commuting, which make up two thirds of transit trips in the Nanaimo region.

As depicted in Exhibit 5-19, trip purpose varies significantly by time of day.



- During the AM peak period (6-9 am), commuting trips dominate, accounting for about 92% of the total. The majority of these trips are work trips.
- Shopping trips are most common during the midday period.
- The PM peak period (3-6 pm) has a most balanced mix of trip purposes, with commuting trips making up 55% of the total.
- The evening period is dominated by work and post-secondary trips.

Transfers

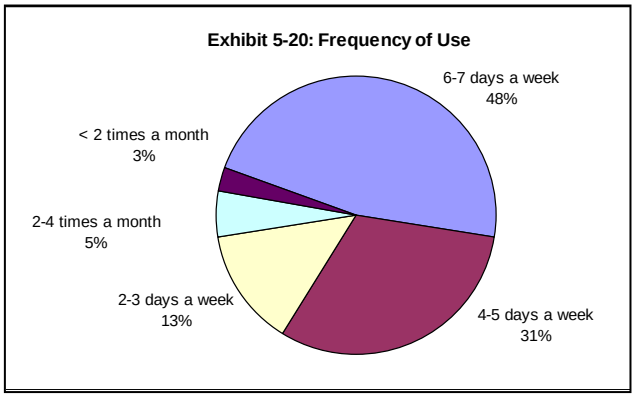
Nearly half of respondents in the passenger survey (46%) reported that their trips involved a transfer.

- The most frequent transfer location was Country Club Centre (40% of all transfers) followed by the Prideaux Street Exchange (23%) and Woodgrove Centre (19%).
- In comparison to the previous passenger survey done in 2003, downtown transfer activity has declined. This may be due to in part to the relocation of the transit exchange.

Frequency of use

Exhibit 5-20 shows the frequency of transit use. Nearly four in five survey respondents (78%) are regular transit riders, using the system 4 or more days per week. This is up from 62% in 2003 and again indicates a trend to increased commuter orientation.

Exhibit 5-20: Frequency of Use



5.6 Transit Mode Share

Transit mode share gives an indication of the market share for transit within the overall transportation system. Exhibit 5-21 shows the mode share for work trips in the Nanaimo region, based on the 2006 Census. Clearly, automobile trips dominate commuting in the region, with transit accounting for just 2.7% of work trips.

Exhibit 5-21: Mode of Transportation to Work

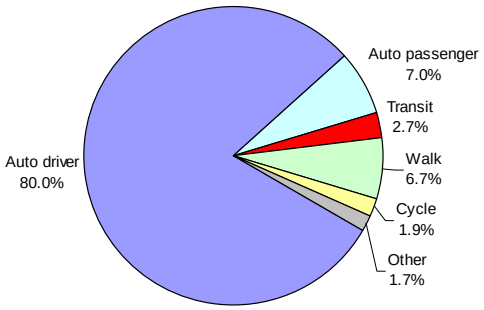
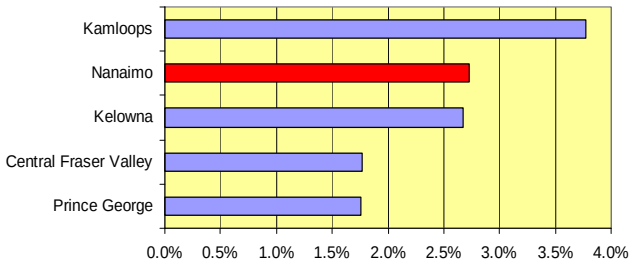


Exhibit 5-22: Transit Mode Share by Community



While transit's share of work travel in the Nanaimo region is relatively small, it is growing. The number of transit commuters in Nanaimo increased 39% between 2001 and 2006, with the transit mode share increasing from 2.3% in 2001 to 2.7% in 2006.

The transit mode share for work trips in the Nanaimo region is compared with other similar sized communities in Exhibit 5-22. Nanaimo has the second highest transit mode share among this group, after, Kamloops and very similar to the level in Kelowna.

Transit use for commuting also varies considerably by sex, age, and location of residence.

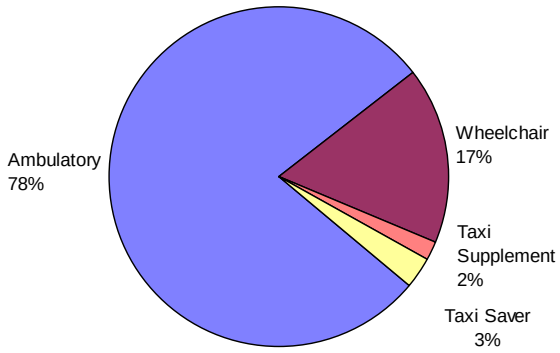
- The transit mode share was higher for female commuters (3.3%) than for male commuters (2.2%). Looking at this another way, nearly 60% of transit commuters in the Nanaimo region were female.
- Transit use was also much higher among younger commuters: 6.6% of commuters aged 15-24 used transit compared with just 1.7% of those aged 45-64. While the 15-24 year old group accounted for just 17% of all commuters, they made up more than 40% of transit commuters.
- Transit mode share is also significantly higher for residents of District 68 - Nanaimo (3.0%) than for residents of District 69 - Oceanside (1.3%).

5.7 Custom Transit Passenger & Trip Profile:

The Nanaimo Regional Custom Transit System consists of handyDART service, which is provided by minibuses, as well as two taxi programs:

- a **Taxi Supplement** program that allows handyDART trips to be dispatched to taxis at times when there is no capacity on handyDART vehicles.
- a **Taxi Saver** program that provides subsidized taxi trips to registered users, who can then arrange for trips directly with the taxi company.

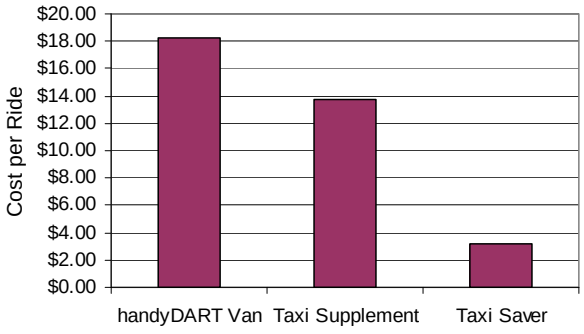
Exhibit 5-23: Custom Transit Passenger Categories (2006/07)



In 2006/07, the custom transit system provided 61,100 rides to the approximately 1,700 registered users.
The breakdown of passenger categories in Exhibit 5-23 shows that the vast majority of passengers were ambulatory and wheelchair passengers. The two Taxi programs provided only 5% of all rides.

As shown in Exhibit 5-24, taxi programs, especially Taxi Saver, have a much lower cost per ride than handyDART. However, comparisons of the cost per ride have to be reviewed with some caution since Taxi Saver trips tend to be shorter than handyDART trips, and taxi costs exclude administration and overhead costs.

Exhibit 5-24: Custom Transit Cost per Ride



Taxi Supplement trips cost about three quarters as much as handyDART rides. The lower costs for Taxi Supplement are partly offset due to less ridesharing on taxis than on handyDART, and because taxis tend to be used for longer-distance trips.

The Taxi Saver cost per ride is very similar to costs in other communities. This is a popular program that provides an affordable option for spontaneous travel and during times when handyDART does not operate. However, one of the common complaints is that despite a 50% subsidy, not all registered handyDART users can afford this service.

Future Market

The 2001 Participation and Activity Limitation Survey (PALS) provides data on the incidence of disability in Canada, as well as the type and severity of these disabilities. This data can be used to estimate the current and future incidence of disability in the Nanaimo region.

Based on the PALS data, the number of persons with disabilities was calculated by age group (since the incidence of disability increases with age), after which the number of persons specifically with mobility disabilities, was derived. It is estimated that of the RDN's total population of 145,000 about 16% or 23,000 people have some form of disability. Out of this group, it is estimated that 70% or 16,000 RDN residents have disabilities relating to mobility.

Despite an aging population, it is forecast that the total number of people in the RDN with disabilities who register for handyDART service will grow at a relatively low rate over the next ten years. While the number of seniors is forecast to grow strongly, a smaller proportion are expected to face mobility difficulties due to advances in medical technology, improved health, and increasing affluence.

There are approximately 1,700 registered handyDART users in the Nanaimo region. This represents approximately 11% of the estimated population of persons with mobility disabilities. Clearly, a significant number of those classified as persons with a mobility disability are not registered for handyDART, and many may not even be eligible for handyDART. A significant number of this group may have access to alternate means of transportation.

5.8 Passenger and Public Consultation Results

The Transit Business Plan process included a number of opportunities for public consultation, allowing transit users, stakeholders, and the general public to provide input into the plan. The consultation process involved four components:

1. Stakeholder meetings to provide initial input on goals and priorities
2. On-board passenger survey to gather input from transit users
3. Public meetings to gather feedback on the draft plan
4. On-line survey to gather feedback on the draft plan

More details on the results from the public consultation process are included in Appendix 2.

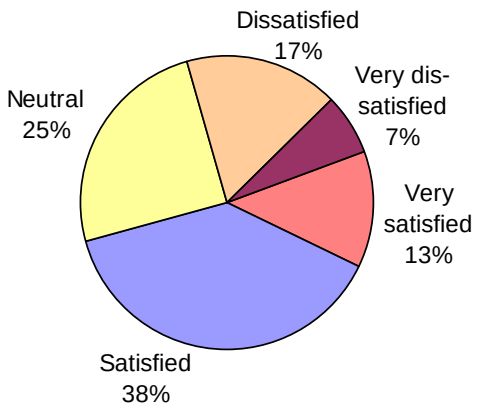
Stakeholder Meetings

A series of meeting were held with key stakeholder groups, including groups representing seniors and persons with disabilities, the school district, Malaspina University College, business groups, transit operators, and municipal planning staff. These groups had a wide range of transit issues and suggested improvements, which are detailed in Appendix 2.

On Board Passenger Survey Comments

The on-board passenger survey asked riders to rate the overall satisfaction with the transit service. The results are shown in Exhibit 5-25. The majority of riders indicated satisfaction (38%) or a neutral (25%) position.

Exhibit 5-25: Overall Satisfaction



A summary of the most frequent responses to the question on how the transit system could be improved, is provided in Exhibit 5-26. More frequent service was, by a wide margin, the most commonly requested service improvement. There were also many requests for more Sunday, holiday, and evening service.

Exhibit 5-26: Suggested Transit Improvements

More frequent service	44%
More Sunday and/or Holiday service	29%
More evening service	16%
Fares/fare products	7%
Improved service coverage	6%
Buses on time	6%
More early morning service	5%
Improved transfers	5%

Public Meetings

A series of public meetings were held to provide the general public with an opportunity to provide feedback on the draft service options and proposals developed for the Transit Business Plan. There were two meetings in the City of Nanaimo, and one meeting each in Parksville, Qualicum Beach, Lantzville, Cedar, Nanoose, and French Creek. Comments and discussion from these meetings are summarized in Appendix 2. Some key themes in the comments from the public included the following:

- There were many comments and questions regarding the current downtown transit exchange at Prideaux and Fitzwilliam, and the need to relocate this closer to downtown and/or improve service to Port Place Shopping Centre.
- A number of people also suggested that improvements to bus shelters and transit exchanges were required.
- There was strong interest among Qualicum Beach residents for a direct bus to the Departure Bay ferry terminal. There was also interest among other residents in the region for improved service to Departure Bay.

- There was also interest in improved service to the south end of the region, including the Airport and a potential connection to Ladysmith.
- Several people attending the meetings commented on the need to use smaller vehicles to more closely match the level of demand in some neighborhoods.

On-line Survey

The public was also invited to provide comments through an on-line survey posted at the transit website. Approximately 50 comments were received, with about 60% of these from current transit users and the remainder from non-users. Nearly three-quarters of the responses came from City of Nanaimo residents. Most respondents liked the changes that were being proposed. Suggested key improvements included the following:

- More frequent service, especially adding trips to make it more convenient for commuters
- Improve transfers and connections
- Move the downtown exchange closer to downtown
- Improve service to the south end, Duke Point, and the Airport

Public Consultation Summary

Public input from all these sources was considered when developing the service proposals. It is important to take a comprehensive approach when developing the Transit Business Plan, so that priority is given to those service proposals which best meet the overall goals and objectives for the transit system. Chapter 10 includes a service expansion evaluation process that should help the RDN to identify its transit priorities.

6. KEY PERFORMANCE INDICATORS AND SERVICE DESIGN GUIDELINES

Key performance indicators can be used to both monitor transit service and to set performance targets. Transit service design guidelines can be used to set targets for transit service level and quality. Both key performance indicators and transit service design guidelines will be important decision-making tools in prioritizing service expansion proposals and determining the timing for implementation.

6.1 Key Performance Indicators

As part of the Transit Business Plan implementation, a regular monitoring program will be established to track progress in achieving the desired outcomes of the plan. This is discussed further in Chapter 10. The measurements proposed for assessing implementation success are discussed below.

Key performance indicators (KPIs) will be used to monitor performance of the Nanaimo Regional Transit System over time, and to benchmark against other transit systems. Using these indicators is valuable when reviewing service levels and service quality, and in measuring progress against established performance targets.

KPIs can be applied to the transit system as a whole, or the performance of a specific route; they can be used to compare performance by defined time periods; and they can help in assessing the viability of existing as well as proposed new services. Exhibit 6-1 outlines the KPIs which will be used for the Nanaimo region.

Exhibit 6-1 Summary of Nanaimo Regional Transit KPIs

KPI	Description
Service level	
Population served	Estimate the resident population within 400 m walking distance of a bus stop.
Service hours per capita	This measures overall service levels.
Transit mode share for work trips	This is gathered from census data and measures the market share for transit among all transportation modes.
Ridership and Financial Performance	
Passengers per hour	This is the key measure of ridership performance and productivity
Cost per passenger	This measure is dependent on both cost efficiency and ridership performance.
Cost recovery	This measure of passenger revenue as a percent of total costs is dependent on cost efficiency and ridership performance, but also measures the impact of fare levels and revenue.
Operating cost per hour	This is a key measure of cost efficiency.
Operational Performance	
Schedule adherence	This measures the on time performance of the transit system, which is a key aspect for passenger satisfaction.
Environmental Performance	
Greenhouse gas (GHG) emissions per passenger-km	Total CO_2 production by the Nanaimo Regional fleet would be estimated based on fuel consumed, and emissions per passenger-km can then be calculated.

Uses of KPIs in Plan Implementation

In monitoring the results achieved in plan implementation against business plan goals, KPIs will be used to compare Nanaimo Regional Transit performance in a number of ways. KPIs will also be used when necessary to help guide service level, service quality or performance target decisions.

KPIs will be used to compare Nanaimo's performance with transit performance in other benchmark communities, including other Municipal Systems Tier 1 communities and other peer communities from across Canada.

KPIs can also be used to set service level, service quality, or performance targets. Once the target is set, the KPI is measured periodically to track the progress being made towards achieving the target. Annual KPI targets are developed as part of the annual operating agreement budget development process.

KPIs will be used as needed to assess and prioritize new service proposals. This will require that KPIs be chosen which can be measured for a specific route or service. It will then be possible to compare KPIs for the new service with the KPIs of the existing service, and with the target KPIs. A new service proposal would receive a positive score in cases where it would lead to improvements to relevant KPIs – such as passengers per hour, a key measure - and a negative score where it would lead to reductions.

Although KPIs are a very useful decision-making tool, other more qualitative factors will also need to be considered in making service decisions. These factors will likely include how well the service proposal meets other goals relating to service quality, markets served or community objectives.

6.2 Transit Service Design Guidelines

Transit service design guidelines form a critical planning tool for identifying and prioritizing the service expansion proposals. These guidelines will be used to help establish service level and service quality goals for the transit system. They will ensure that an appropriate level of service is provided during each time period and in each area of the region. They can also be used to evaluate the service expansion options in an impartial manner.

The following transit service design guidelines have been identified:

Service coverage:

- Ensure that at least 90% of residents and employees within the RDN's urban containment boundary are within 400 m walking distance of a transit route.
- Bus stops for local service in the urbanized area should be spaced 400 to 800 m apart. Outside the urbanized area, bus stops should be limited to major destinations, points of interest, and residential concentrations.

Direct service and transfers

- Timed transfers should be provided at major exchange points, except where the service frequency is every 15 minutes or greater.
- Ensure that 90% of transit trips between major nodes can be made without transferring.
- Ensure that at least 90% of all transit trips can be made with not more than one transfer.

Service frequency

- Service on Bus Rapid Transit routes should be at least every 15 minutes during the day on weekdays and every 30 minutes evenings and weekends.
- Service on major urban routes should be at least every 15 minutes during morning and afternoon peak periods, every 30 minutes midday and Saturdays, and every 60 minutes Sundays and evenings.
- Service on suburban or rural routes should be at least every 60 minutes during the day, including weekends.

Span of service

- Service should be available 7 days per week and 365 days per year.
- Service should start early enough to allow for a 7 am arrival in downtown Nanaimo on weekdays, and an 8 am arrival on weekends using all major routes.
- Service should start early enough to allow for an 8 am arrival at other major nodes on weekdays, and a 9 am arrival on weekends using all major routes.
- Outbound service from downtown should be provided until at least 12 midnight, Monday to Saturday, on all major routes.
- Outbound service from other major nodes should be provided until at least 11:30 pm, Monday to Saturday, on all major routes.

Service reliability

- 90% of trips on each route should depart the terminus not more than 2 minutes late and not early.
- 85% of trips on each route should depart each mid-route scheduling point not more than 2 minutes late and not early.
- 90% of trips on each route should arrive at the terminus not more than 3 minutes late.

Ease of use

- In order to make the transit system easy to understand and use for passengers, service frequencies and schedules should be consistent on each route and during each time period, where possible.

Passenger loads

- Maximum loads on buses travelling short distances at low speeds should not exceed 150% of seated capacity on a continual basis. For example, on a bus with a seated capacity of 36, the load should not exceed 54 on a continual basis.
- Maximum loads on buses exceeding 60 km/hr should not exceed the seated capacity on a continual basis. That is, there should be no standees on a continual basis.

Service efficiency

- Each route should carry a minimum average of 20 passengers per hour of service during the daytime and 15 passengers per hour during the evening.

7. SERVICE PLAN

This section of the plan outlines the proposed service options to improve the Nanaimo Regional Transit System over the next ten years. The service plan is divided into two time frames. The Short Range period covers the next two years, 2009 and 2010. The Medium Range period covers years three to ten (2011-18).

Each service option outlined below includes the rationale for the service change, a description of the proposed change, and a summary of the required service hours, vehicles, costs, ridership, and revenue. Costs for the service proposals have been calculated using the RDN's actual costs (as opposed to the costs which are cost-shared with BC Transit in the Annual Operating Agreement). The net RDN cost shown assumes the Provincial contribution will follow the historic cost-sharing formula and will be based on the cost-shared amounts in the A.O.A. Detailed planning work, including specific schedules and routing, will be completed once the RDN Board has approved these proposals.

7.1 Conventional Transit

Short Range Service Options (2009 & 2010)

March 2009:

Proposal S1: 5-Fairview / 6-Harewood 30-minute service

Rationale

The 5-Fairview and 6-Harewood routes serve downtown Nanaimo, Malaspina UC, and neighborhoods primarily in the south end of Nanaimo and out to Westwood Lake. In total, the two routes serve about 12,000 residents. Much of this area consists of older neighborhoods with relatively high population densities, and along with their proximity to both downtown Nanaimo and Malaspina, this makes the area a strong potential transit market. However, service on these routes is quite low. While most other routes within the core area of Nanaimo have 30-minute service, these routes generally have hourly service during the day from Monday to Saturday. The exception is the 6-Harewood which has roughly 30-minute service during most of the morning peak period. During evenings and Sundays, the routes are combined and service is hourly. This combined routing is quite circuitous.

Proposed Option

It is proposed to introduce 30-minute service on these routes. Initially, the 30-minute service would be provided during weekday peak periods only, from 6 to 9 AM and from 3 to 6 PM. Midday and Saturday service would remain at 60 minutes until the medium term period (see Proposal M5 below). In addition, separate 60-minute service would be provided on each route during evenings and Sundays. This would provide residents with increased trip options and improved transfers with other routes during peak periods. This would require 2 additional buses and approximately 4,200 hours of service annually.

Proposal S1: 5-Fairview / 6-Harewood 30-minute weekday peak period service			
Service hours:	4,200	Total cost:	$388,000
Additional vehicles:	2	Revenue	$147,000
Additional ridership	105,000	Provincial share	$129,000
		Net RDN cost	$112,000

Proposal S2: Additional 90-Intercity Connector & 10-Lantzville peak period service

Rationale

Service levels between Woodgrove and both Parksville/Qualicum Beach and Lantzville are currently quite limited. Increased peak period service frequencies are required in order to attract more commuters to these services. In addition, connections to Departure Bay and Nanoose will be reviewed and improvements made where possible.

Proposed Option

It is proposed to provide one additional inbound trip during the AM peak and one additional outbound trip during the PM peak on the 90-Intercity Connector. It is also proposed to provide one additional trip on the 10-Lantzville route in order to improve service frequencies. This will require roughly 800 hours of service annually.

Proposal S2: 90-Intercity Connector &10-Lantzville additional peak period trips			
Service hours:	800	Total cost:	$64,000
Additional vehicles:	0	Revenue	$17,000
Additional ridership	12,000	Provincial share	$24,000
		Net local cost	$23,000

September 2009:

Proposal S3: 8-South / 9-North 30-minute service

Rationale

The 8-South and 9-North routes serve the Highway 19a corridor, providing a direct connection between Woodgrove, Country Club, downtown Nanaimo, and South Parkway Plaza. These routes serve several of the urban nodes identified in sustainNanaimo, and there is good potential to develop this into the main trunk route for Nanaimo, with a limited-stop, Bus Rapid Transit (BRT) style service. While the residential and commercial development in the south end of this route is currently much less than in the north end, there is strong growth potential for the area around South Parkway Plaza.

Proposed Option

As a first step, it is proposed to provide consistent 30-minute service on this route between Woodgrove and Downtown during peak periods on weekdays (6 AM to 9 AM and 3 PM to 6 PM). Service during the midday period would remain at every 30-60 minutes, while evening, Saturday and Sunday would be roughly every 60 minutes. Service frequencies between Downtown and South Parkway Plaza would be 60-minutes at all times. This will provide increased trip options and make the route more appealing for commuters. This will require 1 additional bus and approximately 1,600 hours of service annually.

Proposal S3: 8-South / 9-North 30 minute peak period service			
Service hours:	1,600	Total cost:	$154,000
Additional vehicles:	1	Revenue	$56,000
Additional ridership	40,000	Provincial share	$49,000
		Net RDN cost	$49,000

Proposal S4: Earlier morning start times on main routes

Rationale

Currently, the earliest arrival time in downtown Nanaimo for most main routes is around 7 am, which is too late for a 7 am work start. An earlier morning start on key routes (1-Woodgrove, 2-Hammond Bay, 3-Hospital, 44-Malaspina UC, 5-Fairview, 6-Harewood, 8-South, and 9-North) would make the service more attractive to commuters.

Proposed Option

It is proposed to add one additional trip on each of these routes 30 minutes earlier, with an arrival time around 6:30 am. This would require 2,300 hours of service annually, but no additional vehicles.

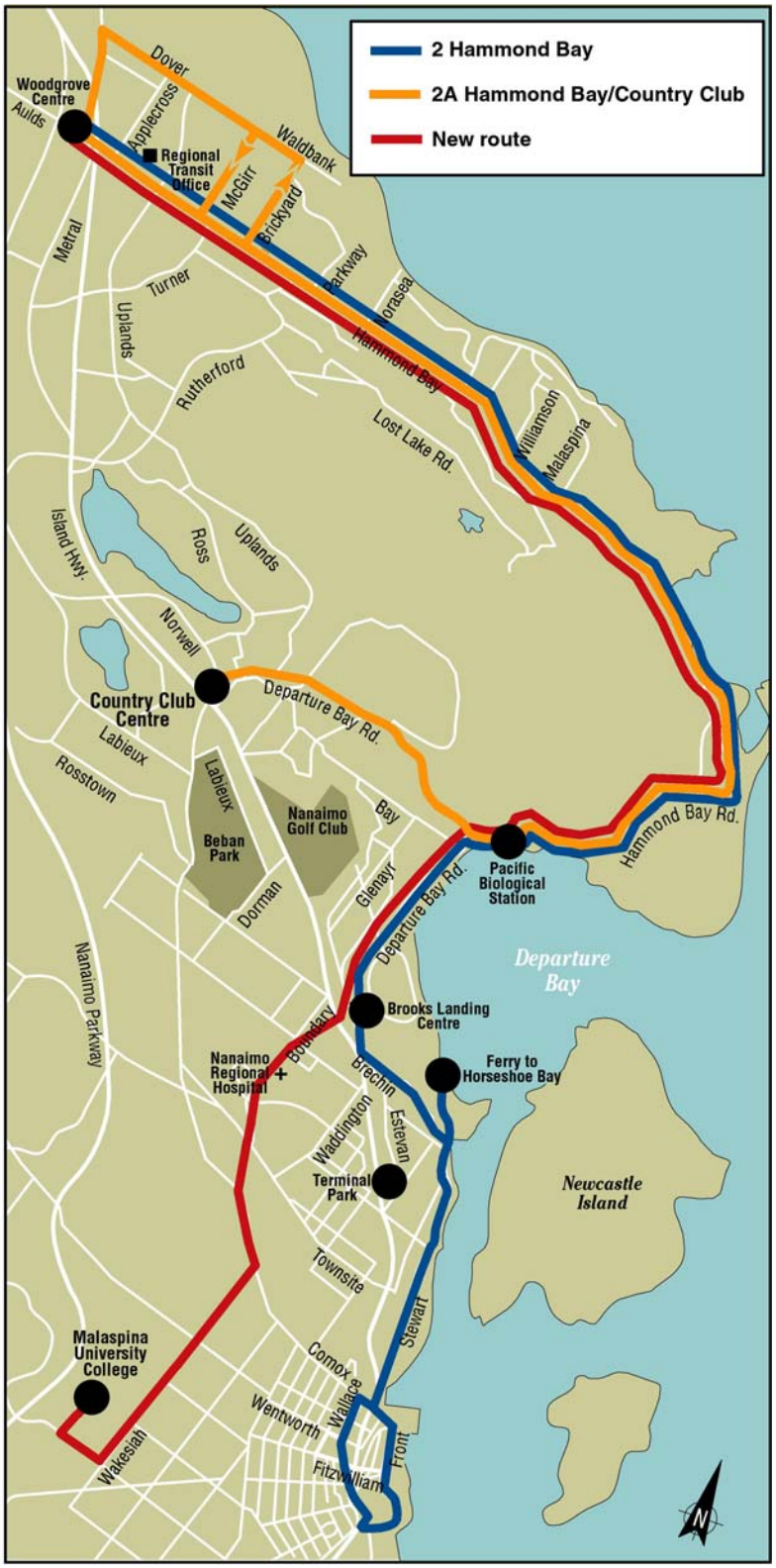
Proposal S4: Earlier Morning Start			
Service hours:	2,300	Total cost:	$183,000
Additional vehicles:	none	Revenue	$81,000
Additional ridership	57,500	Provincial share	$68,000
		Net RDN cost	$34,000

Proposal S5: 2-Hammond Bay route restructuring

Rationale

Currently, the 2-Hammond Bay route has several alternate routings. Some trips travel directly between Woodgrove and downtown Nanaimo via Hammond Bay Road while others stop at Country Club. In addition, some routes provide service along Waldbank while others do not. This is confusing for passengers and there is no consistent service from Hammond Bay to Country Club during the daytime.

Exhibit 7-1: Hammond Bay Route Restructuring (S-5 & S-6)



Proposed Option

It is proposed that all 2-Hammond Bay trips operate on the more direct routing from Woodgrove to downtown Nanaimo via Hammond Bay Road and the Departure Bay ferry terminal. These would operate every 30 minutes during the day, Monday to Saturday, and 60 minutes evenings and Sundays. This would provide more consistent and direct service to the ferry terminal. The evening and Sunday service would continue to serve Country Club.

A second route would be introduced to provide increased neighborhood coverage as well as a direct link to Country Club. This route would go from Woodgrove to Country Club via Dover, Waldbank, Hammond Bay Road, and Departure Bay Road. This route would operate every 60 minutes during the day, Monday to Saturday. This would require 1 additional vehicle and 3,300 hours of service annually.

Proposal S5: 2-Hammond Bay route restructuring			
Service hours:	3,300	Total cost:	$289,000
Additional vehicles:	1	Revenue	$92,000
Additional ridership	66,000	Provincial share	$100,000
		Net RDN cost	$97,000

Proposal S6: New Route Hammond Bay to Hospital & Malaspina

Rationale

Currently, there is no direct service between Hammond Bay, Nanaimo Regional Hospital, and Malaspina. Passengers have to transfer at Country Club or downtown.

Proposed Option

It is proposed to provide direct service between Hammond Bay, the Nanaimo Regional Hospital, and Malaspina UC during the peak periods. This route would start at Woodgrove, following Hammond Bay Road, Departure Bay Road, to the hospital, then to Malaspina. This would provide faster, more direct service for residents in the Hammond Bay corridor who work at the hospital or who work or attend classes at Malaspina. Initially, there would be 3 inbound trips during the morning peak period and 3 outbound trips during the afternoon peak period. As ridership grows, service on this route might be expanded to include non-peak times and service in the non-peak direction. The initial service proposal will require 1 additional bus and 1,500 hours of service annually.

Proposal S6: New route Hammond Bay to Hospital and Malaspina			
Service hours:	1,500	Total cost:	$146,000
Additional vehicles:	1	Revenue	$53,000
Additional ridership	37,500	Provincial share	$47,000
		Net RDN cost	$46,000

Proposal S7: 7-Cinnabar/Cedar 3 additional trips per day

Rationale

The 7-Cinnabar/Cedar route provides service between South Parkway Plaza and both Cinnabar and Cedar. Typically, trips alternate between these two destinations, although some trips serve both. Service to Cinnabar is roughly every 60-120 minutes, while service to Cedar is more limited with 6 trips per day. In the recent on-board passenger survey, requests for increased service frequency were particularly numerous from residents of these areas.

Proposed Option

It is proposed to provide three additional trips per day (Monday to Saturday) on this route. This will provide residents with additional travel choices and help make the service more attractive for commuters. This service will require an additional 700 service hours annually.

Proposal S7: 7-Cinnabar/Cedar 3 additional trips per day			
Service hours:	700	Total cost:	$56,000
Additional vehicles:	0	Revenue	$20,000
Additional ridership	14,000	Provincial share	$21,000
		Net local cost	$15,000

September 2010

Proposal S8: 15-Mal U Connector improved service

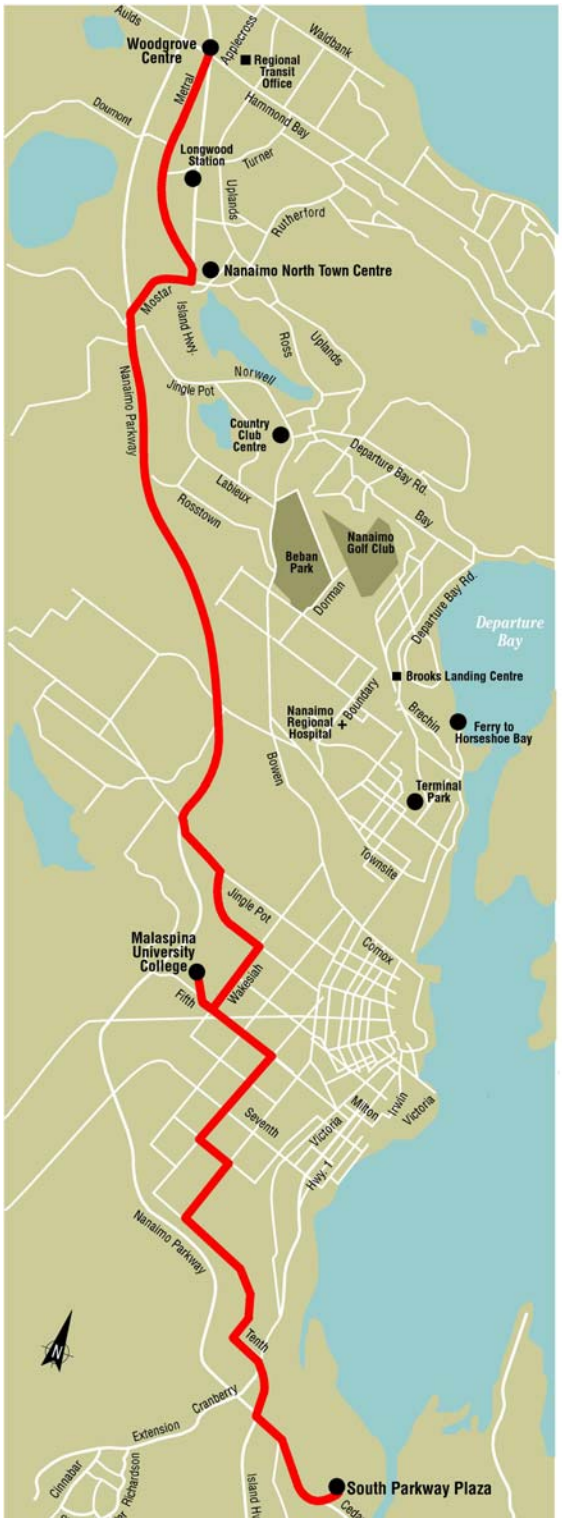
Rationale

The 15-Mal U Connector operates between Woodgrove and Malaspina via the Parkway. This provides north Nanaimo residents with a fast and direct way of getting to Malaspina, and via transfers, to other areas in south Nanaimo. The service currently operates approximately every 30 minutes during the day on weekdays only, with some additional peak period trips. This route is very well used, with the second highest productivity (50 rides per hour) among all transit routes in the system.

Proposed Option

It is proposed to extend this route from Malaspina to South Parkway Plaza. This would provide south Nanaimo residents with a fast and direct way to get to Woodgrove. At least initially, only every other trip would be extended, providing 60-minute service throughout the day. With further growth in south Nanaimo, this may be increased in the future to extend every trip and provide a 30-minute service frequency. With the extension to South Parkway Plaza, this route is less exclusively focused on the Malaspina student market, with shoppers and commuters also important. It is also proposed to provide 60-minute service on Saturdays and Sundays. This will require 1 additional vehicle and 2,500 hours of service annually.

Exhibit 7-2: Extend 15-Mal-U Connector (S-8)



Proposal S8: 15-Mal U Connector - extend to South Parkway Plaza (60-minute frequency)			
Service hours:	2,500	Total cost:	$225,000
Additional vehicles:	1	Revenue	$88,000
Additional ridership	62,500	Provincial share	$76,000
		Net RDN cost	$61,000

Proposal S9: Extend 3-Hospital from Country Club to Woodgrove

Rationale

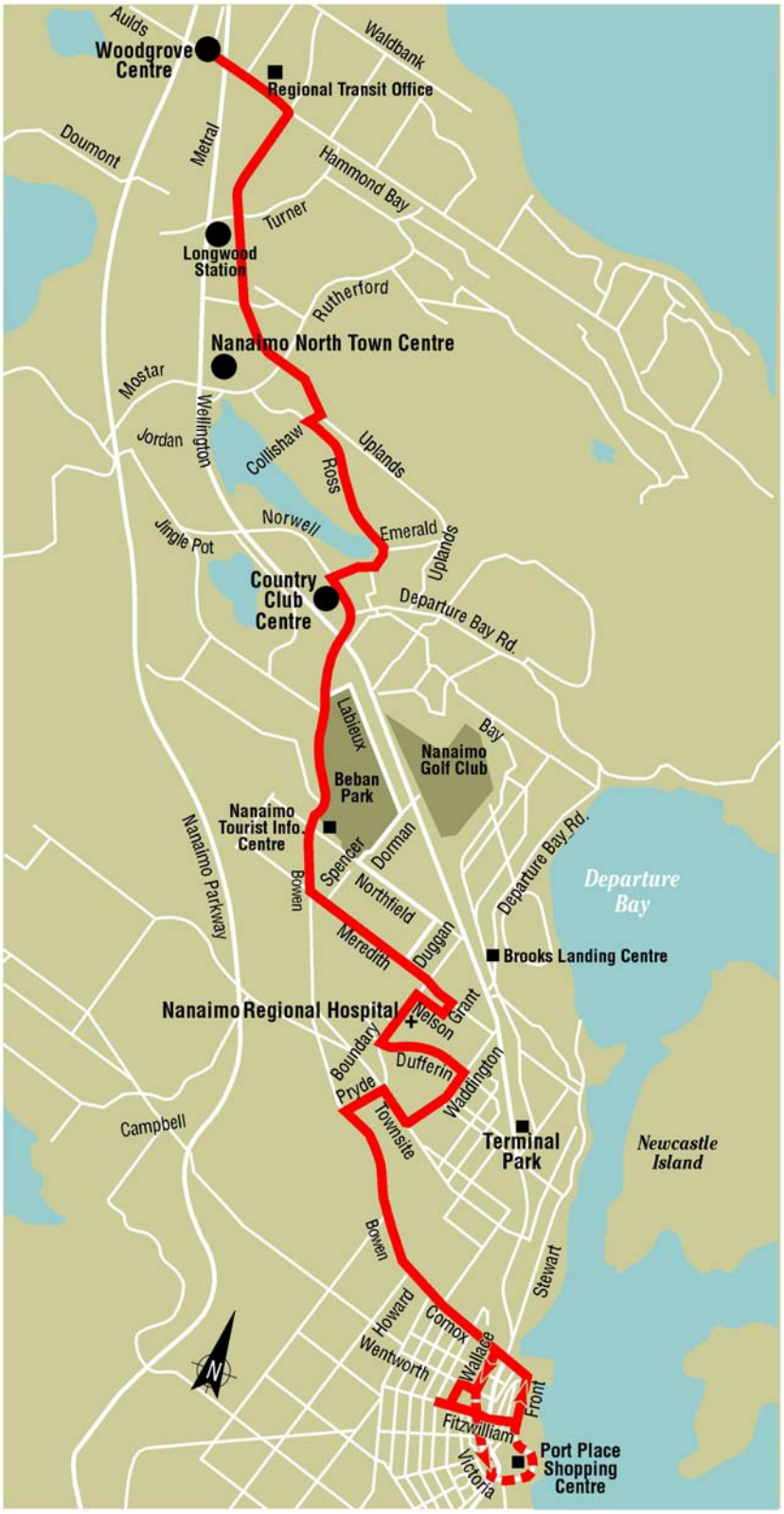
Currently, the 3-Hospital route provides service between Downtown and Country Club via the Nanaimo Regional Hospital. However, there is no direct link from the Hospital north of Country Club.

Proposed Option

It is proposed to extend this route from Country Club to Woodgrove via Ross Road and Uplands Drive. This will allow for continued local service along this corridor when the 8-Express route becomes limited stop service and it would also allow the 1-Woodgrove route to operate consistently on Uplands, eliminating the 1A routing. This will also provide a direct link between the hospital and Woodgrove, providing improved transit access to the hospital for north Nanaimo residents, who currently have to transfer at Country Club. This service will require 2 additional buses and 3,800 hours of service annually.

Proposal S9: Extend 3-Hospital to Woodgrove			
Service hours:	3,800	Total cost:	$356,000
Additional vehicles:	2	Revenue	$117,000
Additional ridership	83,600	Provincial share	$117,000
		Net RDN cost	$122,000

Exhibit 7-3: Extend 3-Hospital route to Woodgrove (S-9)



Proposal S10: 90-Intercity Connector 60-minute service

Rationale

The 90-Intercity Connector operates between Woodgrove and Wembley Mall in Parksville, with some trips extended to Ravensong Pool in Qualicum Beach. Currently, there are 8 trips per day. There is also a successful evening trip on Fridays, which is targeted for residents going to movie theatres at Woodgrove. Even with the improvements proposed in Proposal S2, there are some gaps of more than two hours between trips, making the service inconvenient for many passengers. Additional service frequency would attract additional passengers by making the service more attractive and convenient.

Proposed Option

It is proposed to increase the frequency on this route to every 60 minutes from 7 AM to 7 PM on weekdays, 8 AM to 7 PM on Saturdays, and 9 AM to 7 PM on Sundays. This will provide increased travel options for Oceanside residents. Some trips would extend to Ravensong Pool. Three trips in the morning would also extend to Nanaimo Regional Hospital and Malaspina, with three trips in the afternoon starting from these destinations. This will provide fast, direct service to from Oceanside to these key destinations. The current Friday evening service would be expanded to two evening trips from Monday to Saturday. This would give Oceanside residents improved transportation options for getting to Woodgrove and other parts of Nanaimo for shopping, theatres, and evening classes. It would also provide better options for service industry and other shift workers. This service will require 2 additional buses and 3,800 hours of service annually.

Proposal S10: 90-Intercity Connector 60-minute daytime service & increased evening service			
Service hours:	3,800	Total cost:	$356,000
Additional vehicles:	2	Revenue	$106,000
Additional ridership	76,000	Provincial share	$117,000
		Net RDN cost	$133,000

Issue: Impact of U-PASS on service implementation

The RDN, BC Transit, and the Malaspina University College administration and students society have discussed the potential implementation of U-PASS for several years. It is expected that a decision will be made later in 2008 on whether to proceed with a student referendum on U-PASS in spring 2009. A successful referendum would allow for implementation of U-PASS in September 2009. While all of the service improvements proposed for the Short Term period will benefit Malaspina students by providing increased travel options and improved convenience throughout the system, some of these improvements specifically target service to Malaspina:

- Proposal S1: 30-minute peak service on the 5-Fairview/6-Harewood
- Proposal S4: earlier morning service start on key routes including the 44-Malaspina UC, 5-Fairview, and 6-Harewood
- Proposal S6: new route between Hammond Bay, Nanaimo Regional Hospital, and Malaspina
- Proposal S8: extending the 15-Mal U Connector to South Parkway Plaza

Implementation or no implementation of U-PASS will impact the demand for transit service throughout the system, and specifically for service to Malaspina. As a result, the timing and priority of the Short Term service proposals may change if U-PASS is not implemented. It is likely that without U-PASS, some of these service proposals will be scaled back or delayed into the Medium Range period.

On the other hand, if U-PASS is implemented in September 2009, the resulting increase in transit demand from Malaspina students may require additional service improvements, beyond what is proposed above. Specifically, additional overload trips on the heavily used 44-Malaspina UC will need to be considered. The potential introduction of double decker buses into the Nanaimo Regional transit fleet (see chapter 8 below) should also help to address the need for increased capacity on routes serving Malaspina. With the introduction of U-PASS, the proposed double decker buses would be used almost exclusively for Malaspina service.

Medium Range Service Options (2011-2018)

The following service improvements are planned for years three to ten of the plan. As with the Short Range Service Options, further planning work will be required to fully develop these service proposals. Specific implementation dates have not been shown for the Medium Range Period. This allows for flexibility as market demand and local priorities may shift over the next few years.

Proposal M1: Introduction of Bus Rapid Transit (8-Express)

Rationale

The Highway 19A corridor links a number of key destinations in the Nanaimo region. In the short term period, Proposal S3 would increase the 8-South/9-North service along this corridor to every 30-minutes during the peak periods between Woodgrove and Downtown, with 30-60 minute service during the midday and 60-minute service at other times. In this next phase, these routes would be upgraded to Bus Rapid Transit (BRT). This would involve both increased service frequency and faster service. In order to reduce travel times for passengers, the service would have limited stops between Woodgrove and downtown Nanaimo. The section from downtown to South Parkway Plaza would continue to provide local service. Transit signal priority will also be used along this corridor in order to increase the speed. The introduction of BRT creates a backbone for the transit system, providing convenient and reliable service which allows passengers to travel quickly along this corridor.

Proposed Option

Service between Woodgrove and Downtown would be increased to every 15 minutes during the weekday peak periods (6:30 to 9:30 am and 3:00 to 6:00 pm) and every 30 minutes at all other times, including midday, evenings, Saturday, and Sunday. Between Downtown and South Parkway Plaza, service would be every 30 minutes during the day and every 60 minutes in the evening. This will require 5 buses and 13,800 hours of service annually.

Proposal M1: Bus Rapid Transit 15-minute peak/30-minute midday, evening, & weekend service			
Service hours:	13,800	Total cost:	$1,233,000
Additional vehicles:	5	Revenue	$580,000
Additional ridership	414,000	Provincial share	$420,000
		Net local cost	$233,000

Proposal M2: Extend BRT Service to Malaspina UC

Rationale

Malaspina is a key transit destination, and the proposed introduction of U-PASS will reinforce this. Direct service between Downtown and Malaspina is provided by the 44-Malaspina UC route. The 5-Fairview and 6-Harewood provide additional, less direct, service on this corridor. These services are heavily used, and additional service will be required on this corridor if U-PASS is implemented.

Exhibit 7-4: Introduction of Bus Rapid Transit (M-1 & M-2)

Proposed Option

It is proposed that the BRT route be extended between downtown Nanaimo and Malaspina. During the daytime on weekdays, when the Woodgrove to Downtown section of the BRT is operating at higher frequencies than the Downtown to South Parkway Plaza section, alternate trips would be extended directly to Malaspina. Operated as an express, this section would take less than 10 minutes in each direction, and would provide 30-minute service frequency throughout the day on weekdays. This through service would mean that BRT passengers would not have to transfer downtown to get to Malaspina during weekdays when demand for travel to Malaspina is highest. The service would not operate evenings or weekends, when the existing service provided by routes 44, 5, and 6 should be sufficient. This service will require 2 additional buses and 2,000 hours of service annually.

Proposal M2: Extend BRT to Malaspina UC			
Service hours:	2,000	Total cost:	$213,000
Additional vehicles:	2	Revenue	$84,000
Additional ridership	60,000	Provincial share	$63,000
		Net RDN cost	$66,000

Exhibit 7-5 below summarizes the service frequencies on the 8-Express route following the implementation of Proposals S3, M1, & M2.

Exhibit 7-5: Summary of Service Levels for BRT

	AM Peak	Midday	PM Peak	Evening	Saturday	Sunday
Proposal S3						
Woodgrove to Downtown	30 min	30-60 min	30 min	60 min	60 min	60 min
Downtown to S. Parkway Plaza	60 min	60 min	60 min	60 min	60 min	60 min
Proposals M1 & M2						
Woodgrove to Downtown	15 min	30 min	15 min	30 min	30 min	30 min
Downtown to S. Parkway Plaza	30 min	30 min	30 min	60 min	30 min	30 min
Downtown to Malaspina	30 min	--	30 min	--	--	--

Proposal M3: Parksville Qualicum Beach 60-minute local service

Rationale

Currently there are 6 trips on the 88-Parksville and 4 trips on the 89-Qualicum Beach providing local service in Oceanside. These routes supplement the service frequency provided by the 90-Intercity Connector and, in the case of the 88-Parksville route, provide increased local service coverage. However, service is still quite limited, making it difficult to attract riders. More than one third of Oceanside's population is over age 65. While many of these seniors are still relatively young and mobile, as the population ages there will be increased demand for local transit in the area.

Proposed Option

It is proposed to add a second bus to provide increased local service frequency and improved service coverage, particularly in Qualicum Beach. This will allow for roughly 60-minute service between 8 am and 6 pm. Local service would also be introduced on Sundays. This will require one bus and about 3,500 hours of service annually.

Proposal M3: Parksville Qualicum Beach 60-minute local service			
Service hours:	3,500	Total cost:	$305,000
Additional vehicles:	1	Revenue	$98,000
Additional ridership	70,000	Provincial share	$106,000
		Net RDN cost	$101,000

Proposal M4: New Downtown-Departure Bay-Country Club shuttle

Rationale

Improved service to the Departure Bay Ferry Terminal was one of the most requested service improvements during the public consultation that accompanied the development of the Transit Business Plan. When ferries are running late, the bus often cannot wait since that will affect the rest of the scheduled connections. The best way to address this problem is to provide increased frequency and travel options. Proposals S5 and S6 would restructure the Hammond Bay service so that the 2-Hammond Bay route would consistently travel between downtown, Departure Bay, and Woodgrove via Hammond Bay Road while a second route would operate between Country Club and Woodgrove, also via the Hammond Bay Road corridor.

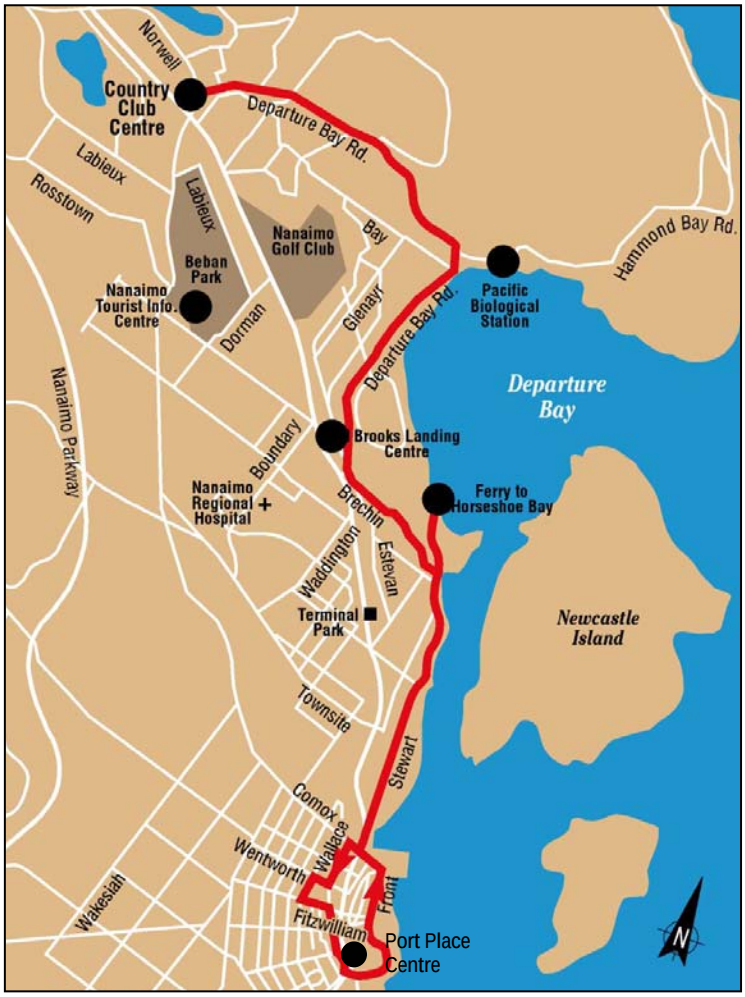
This proposed new route would complement this service by connecting downtown, Departure Bay, and Country Club. There would thus be two routes connecting Departure Bay with downtown, providing increased frequency, as well as direct service between Departure Bay and the key transit exchange at Country Club.

Proposed Option

It is proposed to introduce a new shuttle route between Downtown, Departure Bay, Brooks Landing, and Country Club. This route would operate with eight trips per day, Monday to Sunday. This will require one bus and 4,600 annual hours of service.

Proposal M4: Downtown-Departure Bay-Country Club Shuttle			
Service hours:	4,600	Total cost:	$393,000
Additional vehicles:	1	Revenue	$129,000
Additional ridership	92,000	Provincial share	$139,000
		Net local cost	$125,000

Exhibit 7-6: New Departure Bay Shuttle Route (M-4)



Proposal M5: 5-Fairview/6-Harewood 30-minute midday & Saturday Service

Rationale

Proposal S1 (above) included the introduction of 30-minute service on the 5-Fairview/6-Harewood during the weekday peak periods. If U-PASS is implemented, increased transit demand in this area will be able to support 30-minute service throughout the day and on Saturdays. These routes serve an area with strong transit markets and this service increase would bring service levels on the 5-Fairview/6-Harewood up to the level of other major routes.

Proposed Option

This proposal would extend the 30-minute service throughout the day from Monday to Saturday (roughly from 6 AM to 6 PM on weekdays and 7 AM to 6 PM on Saturdays). Service would remain at 60-minutes on each route during evenings and Sundays. This proposal would provide residents with increased trip options and improved transfers with other routes throughout the day. No additional buses are required to provide approximately 3,800 hours of service annually.

Proposal M5: 5-Fairview/6-Harewood 30-minute midday & Saturdays			
Service hours:	3,800	Total cost:	$303,000
Additional vehicles:	0	Revenue	$133,000
Additional ridership	95,000	Provincial share	$113,000
		Net RDN cost	$57,000

Proposal M6: 1-Woodgrove, 2-Hammond Bay, 3-Hospital 15-minute peak period service

Rationale

Currently, these routes – which provide service between downtown Nanaimo and north Nanaimo – generally operate with a 30-minute service frequency during the day and roughly 20-30 minute frequency during the peak periods. While the 8-Express route will be providing 15-minute service on this corridor, these routes provide local service. Prior to service reallocation in the past 5 years, these routes had 15-minute service during the peak times. In order to attract more commuters to these routes, increased peak period service frequencies are required.

Proposed Option

With increased demand for transit, it is proposed to re-introduce 15-minute peak period service on these routes from 6:30 to 9:00 AM and from 3:00 to 6:00 PM. Some restructuring of the 1-Woodgrove and 3-Hospital will also be undertaken. Because this is all peak period service, this will require 6 additional vehicles and 6,800 hours of service.

Proposal M6: 1-Woodgrove, 2-Hammond Bay, & 3-Hospital 15-minute peak period service			
Service hours:	7,500	Total cost:	$757,000
Additional vehicles:	6	Revenue	$263,000
Additional ridership	187,500	Provincial share	$234,000
		Net RDN cost	$260,000

Proposal M7: 10-Lantzville 60-minute service

Rationale

Service on the 10-Lantzville route, even with the improvements outlined in Proposal S2, would remain quite limited, with 9 trips on weekdays, 7 trips on Saturdays, and 6 tips on Sundays. Service frequency is roughly every 2 hours, which is inconvenient for many passengers and makes it difficult to attract new riders.

Proposed Option

It is proposed to increase this to hourly service from 7 am to 7 pm on weekdays, from 8 am to 7 pm on Saturdays, and from 9 am to 7 pm on Sundays. This will require 1 additional bus and 1,100 hours of service annually.

Proposal M7: 10-Lantzville 60-minute service			
Service hours:	1,100	Total cost:	$114,000
Additional vehicles:	1	Revenue	$31,000
Additional ridership	22,000	Provincial share	$35,000
		Net RDN cost	$48,000

Proposal M8: 7-Cinnabar/Cedar increased service frequency

Rationale

The 7-Cinnabar/Cedar route provides service between South Parkway Plaza and both Cinnabar and Cedar. Typically, trips alternate between these two destinations, although some trips serve both. Proposal S7 included 3 additional daily trips, but the service frequency would remain inconsistent, varying between 60 and 120 minutes to Cinnabar, and less frequent to Cedar.

Proposed Option

It is proposed to provide consistent 60-minute service to Cinnabar and roughly 120-minute service to Cedar during the day. It is also proposed that 3 inbound trips in the morning peak period and 3 outbound trips in the afternoon peak period be extended to downtown Nanaimo in order to provide direct service for commuters. Combined service to both destinations would operate every 120 minutes in the evening, Monday to Saturday. This will require 1 additional bus and 2,600 hours of service annually.

Proposal M8: 7-Cinnabar/Cedar increased service frequency			
Service hours:	2,600	Total cost:	$233,000
Additional vehicles:	1	Revenue	$73,000
Additional ridership	52,000	Provincial share	$79,000
		Net local cost	$81,000

Proposal M9: Increased evening service on major routes

Rationale

Currently, most major routes operate with a roughly 60-minute frequency in the evenings between about 6 pm and midnight. Particularly in the early evening, there is a sharp drop in service levels, from 15-minute service frequencies prior to 6 pm to 60-minute service after 6 pm. Post-secondary students in particular create strong demand for evening transit service, and this will increase if U-PASS is implemented. Increased evening service was one of the most requested service improvements in the recent on-board passenger survey.

Proposed Option

It is proposed to increase service frequency to every 30 minutes during the early evening, from 6 pm to 9 pm on the following major routes: 1-Woodgrove, 2-Hammond Bay, 3-Hospital, 4-Malaspina UC. One additional trip would also be added in the late evening to these routes plus the BRT line in order to extend service to approximately 1 am. This will require 7,900 hours of service annually, but will not require any additional vehicles.

Proposal M9: Increased Evening Service			
Service hours:	7,900	Total cost:	$630,000
Additional vehicles:	0	Revenue	$221,000
Additional ridership	158,000	Provincial share	$235,000
		Net RDN cost	$174,000

Proposal M10: 15 Mal U Connector increased service frequency

Rationale

Proposal S3 in the short range service options includes 30-minute weekday service and 60-minute Saturday service on the 15-Mal U Connector. With continued growth of the post-secondary market, along with increased usage of this route by other transit markets with the extension to south Nanaimo, there will be increased demand on this route both at peak times and in the evenings.

Proposed Option

It is proposed to increase this service, with 15-minute service during the
peak periods. It is also proposed to add hourly service on Monday to Saturday evenings, and to increase Saturday daytime service frequency to every 30 minutes. This will require 2 additional vehicles and 4,700 hours of service annually.

Proposal M10: 15-Mal U Connector increased service frequency			
Service hours:	4,700	Total cost:	$428,000
Additional vehicles:	2	Revenue	$165,000
Additional ridership	117,500	Provincial share	$144,000
		Net RDN cost	$119,000

Proposal M11: 90-Intercity Connector 30-minute peak period and 60-minute evening service

Rationale

Proposal M4 would provide 60-minute service on the 90-Intercity route between Oceanside and Woodgrove. In order to attract more commuters to this route, higher peak period service frequencies would be required.

Proposed Option

It is proposed to add 3 additional inbound trips during the morning peak period and 3 additional outbound trips during the afternoon peak period. This will result in 30-minute service frequency in the peak direction during peak times. It is also proposed to add 1 additional outbound trip during the morning peak period and 1 additional inbound trip during the afternoon peak period. The short term proposal S4 included 2 evening trips, Monday to Saturday. This will be increased to 60-minute service from 7 pm to 11 pm. In total, this will require 2 additional buses and 3,800 hours of service annually.

Proposal M11: 90-Intercity Connector 30-minute peak period & 60-minute evening service			
Service hours:	3,800	Total cost:	$356,000
Additional vehicles:	2	Revenue	$106,000
Additional ridership	76,000	Provincial share	$117,000
		Net RDN cost	$133,000

Proposal M12: 44-Malaspina UC 10-minute peak period service

Rationale

The 4-Malaspina route has the highest ridership among all routes in the transit system, primarily due to strong demand among Malaspina students. Service frequency currently varies between 10 and 30 minutes during peak periods. The student market is forecast to continue to grow, particularly if U-PASS is implemented. This will result in increased demand on this route which is already at or close to capacity at peak times. Increased peak period service frequencies would help to meet this increased demand from students, and would also help to attract more work commuters to this service.

Proposed Option

It is proposed to increase service to every 10-15 minutes during the peak periods. This will require 2 additional buses and 2,800 hours of service annually.

Proposal M9: 44-Malaspina UC 10-minute peak period frequency			
Service hours:	2,800	Total cost:	$277,000
Additional vehicles:	2	Revenue	$98,000
Additional ridership	70,000	Provincial share	$87,000
		Net RDN cost	$92,000

Proposal M13: Bus Rapid Transit 15-minute weekday service

Rationale

Proposal M1 outlined the introduction of Bus Rapid Transit in Nanaimo, with 15-minute peak service and 30-minute service at other times. As demand for transit continues to grow, service frequencies can be improved.

Proposed Option

Service between Woodgrove and Downtown would be increased to every 15 minutes throughout the day on weekdays and every 30 minutes evenings and weekends. Between Downtown and South Parkway Plaza, service would be every 30 minutes at all times. This proposal also includes 30-minute midday BRT service between downtown and Malaspina. This midday service improvement will require 5,500 hours of service annually, but will not require any additional vehicles.

Proposal M13: Bus Rapid Transit Phase 2 15-minute weekday service			
Service hours:	5,500	Total cost:	$439,000
Additional vehicles:	0	Revenue	$231,000
Additional ridership	165,000	Provincial share	$163,000
		Net local cost	$45,000

The table below summarizes the service frequency improvements in Proposal M13 compared with M1 & M2.

Exhibit 7-7: Summary of Service Levels for BRT (Phase 2)

	AM Peak	Midday	PM Peak	Evening	Saturday	Sunday
M1 & M2						
Woodgrove to Downtown	15 min	30 min	15 min	30 min	30 min	30 min
Downtown to S. Parkway Plaza	30 min	30 min	30 min	60 min	30 min	30 min
Downtown to Malaspina	30 min	--	30 min	--	--	--
M13						
Woodgrove to Downtown	15 min	15 min	15 min	30 min	30 min	30 min
Downtown to S. Parkway Plaza	30 min	30 min	30 min	30 min	30 min	30 min
Downtown to Malaspina	30 min	30 min	30 min	--	--	--

Proposal M14: 7-Cinnabar/Cedar 30-minute peak period and 60-minute evening service

Rationale

The short range proposal S7 provides for 60-minute daytime service to Cinnabar and roughly 120-minute daytime service to Cedar, along with 120-minute combined evening service Monday to Saturday. As these areas south of Nanaimo continue to grow, they will be able to support more frequent service. Increased peak period service frequencies should also encourage more commuters to use this service.

Proposed Option

It is proposed to increase the service frequency to Cinnabar from 60 minutes to 30 minutes during peak periods and from 120 minutes to 60 minutes during the evening. Midday service frequency would remain at 60 minutes. Service to Cedar would increase to 60 minutes during the peak periods and 120 minutes at other times. This will require 1 additional bus and 2,300 hours of service annually.

Proposal M14: 7-Cinnabar/Cedar 30-minute peak period service			
Service hours:	2,300	Total cost:	$210,000
Additional vehicles:	1	Revenue	$64,000
Additional ridership	46,000	Provincial share	$71,000
		Net RDN cost	$75,000

Expanded service coverage south of Nanaimo

There is potential to extend service to several areas south of Nanaimo:

- Duke Point Ferry Terminal – this was served for a short time in the 1990s and there have been requests for service. This is a major transportation node in the region, although it tends to have much fewer foot passengers than the Departure Bay Terminal.
- Cassidy, Nanaimo Airport and the Timberlands Road area – there have been requests for service to the Nanaimo Airport and to the Timberlands Road area, which has about 1,000 residents. A study 5 years ago found a modest level of transit demand, but no service was implemented due to lack of funding. The recently announced expansion of the Nanaimo Airport will result in increased passenger traffic, which could lead to sufficient demand to support a limited transit service.
- Ladysmith – There is strong interest in Ladysmith for a transit connection to Nanaimo. Since this is in the Cowichan Valley Regional District there would be some jurisdictional issues to be resolved, including how the costs are shared and who operates the service. The CVRD transit service is contracted to a private operating company. Service between Ladysmith and Duncan is planned for implementation in 2008, so the introduction of a Ladysmith to Nanaimo link would allow the possibility of travel by transit from Qualicum Beach in the north to Mill Bay in the south.

Issue: Impact of New Downtown Transit Exchange:

In the medium range period, it is assumed that a new downtown transit exchange will be developed. The current location is not ideal since it is on the outer edge of downtown. A major transit exchange should be located close to where people want to go in order to reduce the need to transfer. This will lead to some route restructuring in the downtown Nanaimo area.

Summary of Conventional Transit Service Changes:

Exhibits 7-8 and 7-9 summarize the service proposals for the short and medium range periods. Exhibit 7-10 summarizes in map form some of the key conventional transit service changes included in the plan. The plan includes 24,500 annual hours of expanded service in the short range period (2009-10) and a further 65,900 annual hours of expanded service in the medium range period (2011-18). The projected addition of more than 90,000 annual service hours would result in nearly doubling the conventional transit service level in the Nanaimo region over the next decade. This is clearly an aggressive increase in transit service, although it does fall in line with the Provincial Transit Plan, which looks to double transit ridership by 2020. Actual implementation of these service expansions will be subject to local and Provincial approval as part of the annual budget development process, so there will be an opportunity to adjust the timing for implementation depending on the level of transit demand, local priorities, and funding availability.

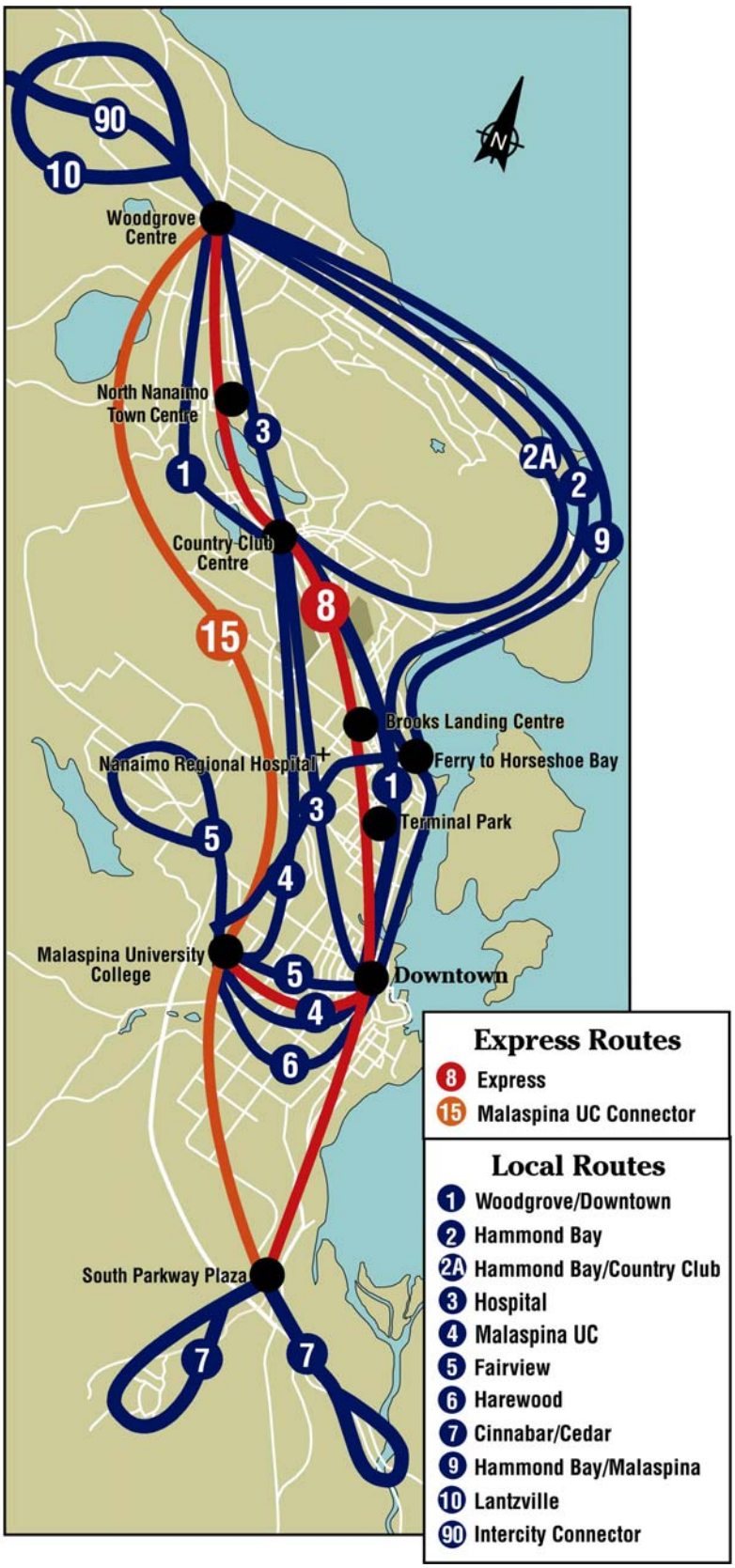
Exhibit 7-8: Summary of Proposed Short Range Service Options (2009 & 2010)

	Service Description	Service hours	Additional vehicles	Additional rides	Total cost	Net RDN cost
2009 - March		**5,000**	**2**	**117,000**	**$452,000**	**$135,000**
S1	5-Fairview/6-Harewood 30-minute peak period service	4,200	2	105,000	$388,000	$112,000
S2	90-Intercity Connector &10-Lantzville additional peak period trips (includes review of connections to Departure Bay and Nanoose)	800	0	12,000	$64,000	$23,000
2009 - September		**9,400**	**3**	**215,000**	**$828,000**	**$241,000**
S3	8-South/9-North 30 minute peak period service	1,600	1	40,000	$154,000	$49,000
S4	Earlier Morning Start	2,300	0	57,500	$183,000	$34,000
S5	2-Hammond Bay route restructuring	3,300	1	66,000	$289,000	$97,000
S6	New route Hammond Bay to Hospital and Malaspina	1,500	1	37,500	$146,000	$46,000
S7	7-Cinnabar/Cedar 3 additional trips per day	700	0	14,000	$56,000	$15,000
2010 - September		**10,100**	**5**	**222,100**	**$937,000**	**$316,000**
S8	15-Mal U Connector - extend to South Parkway Plaza (60-minute service)	2,500	1	62,500	$225,000	$61,000
S9	Extend 3-Hospital to Woodgrove	3,800	2	83,600	$356,000	$122,000
S10	90-Intercity Connector 60-minute daytime service & increased evening service	3,800	2	76,000	$356,000	$133,000
Total Short Range Service Options		**24,500**	**10**	**554,100**	**$2,217,000**	**$692,000**

Exhibit 7-9: Summary of Proposed Medium Range Service Options (2011-18)

	Service Description	Service hours	Additional vehicles	Additional rides	Total cost	Net RDN cost
M1	Bus Rapid Transit Phase 1 15-minute peak/30-minute midday, evening, & weekend service	13,800	5	414,000	$1,233,000	$233,000
M2	Extend BRT to Malaspina UC	2,000	2	60,000	$213,000	$66,000
M3	Parksville Qualicum Beach 60-minute local service	3,500	1	70,000	$305,000	$101,000
M4	Downtown-Departure Bay-Country Club Shuttle	4,600	1	92,000	$393,000	$125,000
M5	5-Fairview/6-Harewood 30-minute midday & Saturday service	3,800	0	95,000	$303,000	$57,000
M6	1-Woodgrove, 2-Hammond Bay, & 3-Hospital 15-minute peak period service	7,500	6	187,500	$757,000	$260,000
M7	10-Lantzville 60-minute service	1,100	1	22,000	$114,000	$48,000
M8	7-Cinnabar/Cedar increased service frequency	2,600	1	52,000	$233,000	$81,000
M9	Increased Evening Service	7,900	0	158,000	$630,000	$174,000
M10	15-Mal U Connector increased service frequency	4,700	2	117,500	$428,000	$119,000
M11	90-Intercity Connector 30-minute peak period & 60-minute evening service	3,800	2	76,000	$356,000	$133,000
M12	44-Malaspina UC 10-minute peak period frequency	2,800	2	70,000	$277,000	$92,000
M13	Bus Rapid Transit Phase 2 15-minute weekday service	5,500	0	165,000	$439,000	$45,000
M14	7-Cinnabar/Cedar 30-minute peak period service	2,300	1	46,000	$210,000	$75,000
Total Medium Range Service Options		**65,900**	**24**	**1,625,000**	**$5,891,000**	**$1,609,000**

Exhibit 7-10 Proposed Route Structure



7.2 Custom Transit

Service levels for custom transit in the Nanaimo Region are below the levels in other similar transit systems, as was outlined in the transit service review section. At the same time, the RDN has an aging population and demand for custom transit is likely to increase.

Short Range 2009 & 2010

Proposal CS1: Increased handyDART service

Three additional vehicles and 7,200 annual hours of handyDART service are proposed for the short range period. Implementation of this service would be phased.

One vehicle and 2,400 hours of service are planned for implementation in 2009, which will provide increased handyDART capacity in both District 68 (Nanaimo) and District 69 (Oceanside).

One vehicle and 2,400 hours of handyDART service are planned for District 68 (Nanaimo) in 2010. Combined with the 2009 expansion, this will bring handyDART service back up to the previous peak level it reached ten years ago.

One vehicle and 2,400 hours of handyDART service are also proposed for District 69 (Oceanside) in 2010. This will roughly double the existing level of service in Oceanside, allowing for the introduction of Saturday handyDART service and increased peak weekday service.

The total cost for all the handyDART service proposed for the short range period is $490,000, with the net RDN cost estimated at $220,000.

Proposal CS1: Increased handyDART service			
Service hours:	7,200	Total cost:	$490,000
Additional vehicles:	3	Revenue	$64,000
Additional ridership	23,400	Provincial share	$206,000
		Net local cost	$220,000

Proposal CS2: Increased Taxi Supplement

The Taxi Supplement program allows trips to be dispatched to taxis when the existing handyDART vehicles are not available. This provides both flexibility and a lower cost option to adding more handyDART service. The RDN has an agreement with the union to restrict the use of Taxi Supplement, with the number of allowable trips limited to 10% of the previous year's handyDART trips. Based on current handyDART ridership, that translates into a limit of about 5,000 Taxi Supplement trips. Taxi Supplement usage is currently well below that limit, with about 1,100 rides in 2006/07.

An additional $35,000 in Taxi Supplement funding is planned for implementation in 2009, bringing the total to $55,000. This will allow for roughly 3,500 additional Taxi Supplement trips, bringing the amount closer to the allowable maximum under the RDN's agreement.

Proposal CS2: Increased Taxi Supplement			
Service hours:	-	Total cost:	$35,000
Additional vehicles:	-	Revenue	$10,000
Additional ridership	3,500	Provincial share	$23,000
		Net RDN cost	$2,000

Proposal CS3: Increased Taxi Saver

Taxi Saver is a program that provides subsidized taxi scrip to handyDART clients and allows them to book travel directly with participating taxi companies. The client pays $30 for $60 worth of taxi scrip, resulting in a 50% subsidy. On a per trip basis, this subsidy is significantly lower than for a comparable handyDART trip ($3.15 for Taxi Saver versus $14.15 for handyDART). Taxi Saver also provides flexibility and allows clients to make trips during evenings and weekends when handyDART may not be operating.

Usage of Taxi Saver in the RDN is limited by rules that are more restrictive than in other Tier 1 communities. For example, in the RDN clients are limited to just $60 worth of taxi coupons every three months. In other Tier 1 communities, clients are allowed $60 worth of taxi coupons each month. It is recommended that the RDN allow clients to purchase $60 every month, bringing it into line with other communities.

Currently in Nanaimo, clients must use handyDART at least once per month in order to be eligible to purchase Taxi Saver coupons. Other communities either have no such restriction, or clients need only use handyDART once every twelve months in order to be eligible for Taxi Saver. It is recommended that the RDN maintain Taxi Saver as a program linked to handyDART, but the current requirement to use handyDART at least once per month should be relaxed. Two options for Taxi Saver eligibility are presented for consideration:

1. Clients are required to use handyDART once every **six** months in order to be eligible for Taxi Saver.
2. Clients are required to use handyDART once every **three** months in order to be eligible for Taxi Saver.

There is currently $20,000 in Taxi Saver program funding in Nanaimo ($10,000 net cost). In the short range period, it is proposed to double this to $40,000 ($20,000 net). This additional funding would coincide with the relaxation in the restrictions on handyDART use, as described above, allowing for the increased demand that would likely result. It is estimated that this increase will provide for roughly 2,000 additional Taxi Saver trips annually. There is a risk that demand for Taxi Saver could exceed the amount included in the budget, so this will need to be monitored closely. As clients respond to the relaxation of Taxi Saver restrictions, further increases in demand for Taxi Saver are likely over the following one to two years. In order to meet this demand, additional funding for Taxi Saver is included in the medium range proposals described below.

Proposal CS3: Increased Taxi Saver			
Service hours:	-	Total cost:	$10,000
Additional vehicles:	-	Revenue	$0
Additional ridership	2,000	Provincial share	$7,000
		Net RDN cost	$3,000

Travel Training

The Travel Training program provides people with the necessary skills to use the conventional transit system independently. This can encourage existing handyDART clients to make some or all of their trips on conventional transit, which has about one eighth of the public subsidy per trip compared with handyDART. It also provides people with greater independence and the ability to make more spontaneous trips. The program typically teaches people how to do the following:

- plan a route
- identify and access the most convenient and safest bus stops and bus routes
- identify landmarks
- utilize personal safety strategies
- enter and exit the bus and transfer safely
- take charge if they become lost
- ensure they are seated safely in priority seating
- secure a mobility aid

This program has been in Victoria for several years and most recently was implemented in Kelowna. The program is based on handyDART referrals. In Kelowna, there were 111 referrals resulting in 52 clients receiving training sessions in 2006. Evaluations of those participants who received training indicated that 95% are riding the conventional buses following their training. The feedback from participants was that the program made them much more comfortable and confident about using the conventional transit service. This in turn provided them with much greater independence.

It is suggested that the RDN partner with a community based organization to provide travel training services. This program is intended to ensure that anyone who has the potential to use the fixed route service is able to do so. It is estimated that $15,000 would provide for an introductory level of training for 75 to 100 people. Depending on demand and success of the program, this amount could be increased to $25,000 in the second year.

Medium Range (2011-15)

Proposal CM1: Increased handyDART Service

Service expansions planned for the short range period will bring handyDART service in the RDN to a level that should be sufficient to meet the current level of demand. Further service expansion is planned for the medium range period in order to meet the increased demand that will result from a growing and aging population in the region.

An additional three vehicles and 7,200 hours of service are planned for implementation during the medium range period. For Nanaimo, it is proposed to add one vehicle and 2,400 hours of handyDART service every other year (2012 and 2014) to meet the growing demand. It is also forecast that by the end of the medium range period one additional vehicle and 2,400 hours of service will be required in Oceanside, resulting in a total of three vehicles serving that area. The total cost of this additional service is $490,000, with a net cost to the RDN of approximately $230,000.

Proposal CM1: Increased handyDART service			
Service hours:	7,200	Total cost:	$490,000
Additional vehicles:	3	Revenue	$64,000
Additional ridership	23,400	Provincial share	$206,000
		Net local cost	$220,000

Proposal CM2: Increased Taxi Supplement

It is recommended the Taxi Supplement funding be increased by an additional $40,000 in the medium-range period, phased in over 2-3 years. This will provide approximately 4,000 additional Taxi Supplement rides annually. This expansion will bring the total Taxi Supplement budget to $95,000. With the increase in service hours and anticipated growth in ridership, this amount will be in accordance with the collective agreement between the RDN and their union

Proposal CM2: Increased Taxi Supplement			
Service hours:	-	Total cost:	$40,000
Additional vehicles:	-	Revenue	$11,000
Additional ridership	4,000	Provincial share	$27,000
		Net RDN cost	$2,000

Proposal CM3: Increased Taxi Saver

It is recommended the Taxi Saver funding be increased by an additional $50,000 ($25,000 net) in the medium range period, phased in over 2-3 years. As part of this increase, it is also recommended that the allowable Taxi Saver amounts be increased from $60 to $80 per month, providing more flexibility for clients. This increase would also help to address higher taxi meter costs and the expected growth in the demand for Taxi Saver during this period. It is estimated this increase would provide approximately 4,000 additional Taxi Saver rides annually. This expansion will bring the total Taxi Saver budget to $90,000 ($45,000 net).

Proposal CM3: Increased Taxi Saver			
Service hours:	-	Total cost:	$25,000
Additional vehicles:	-	Revenue	$0
Additional ridership	4,000	Provincial share	$17,000
		Net RDN cost	$8,000

Mobile Data Terminals & Passenger Notification

Mobile Data Terminals (MDTs) report the vehicle's location and allow for real time communication between the driver and dispatcher, while permitting the driver to operate the vehicle. The MDTs use the existing radio communications system to transfer trip and client data to the driver. The dispatch software is linked to the MDT software so that trips can be dispatched, in real time, without voice communication, allowing for dynamic schedules to be created and transmitted to the vehicles. There are numerous benefits to MDTs including increased reliability, speed, and productivity. The system saves dispatch time, improving productivity of office staff and freeing them up to more effectively maintain the client database and for other administrative duties. The system will also produces better data collection for reporting, planning, and analysis. Equipping all handyDART vehicles in the Nanaimo region with MDTs, along with the required software, is estimated to cost up to $100,000. BC Transit has budgeted for its share of this project in its Long Term Capital Plan.

The implementation of MDTs in the Nanaimo region would also allow for the introduction of a handyDART passenger notification or paging system. This is a system that automatically calls passengers prior to their pick-up. This system benefits both clients, who get a more accurate picture of when the vehicle will arrive, and the handyDART system, which operates more efficiently when clients are prepared for their pick up. This system has been successfully implemented in Victoria.

Low floor accessible handyDART vehicles

The minibuses currently used for handyDART service in the RDN are not low-floor accessible, and instead use a lift for clients with wheelchairs or other mobility aids. Low floor vehicles are generally faster and easier to load for passengers with mobility aids, and they are more accessible for clients who are ambulatory, but who may have difficulty climbing the stairs into the vehicle. In the past, there have been few options available on the market for low-floor minibuses, but this is changing. It is expected that new and replacement vehicles in the medium range period and beyond will be low floor.

Summary of Custom Transit Service Changes

Exhibit 7-11 below shows the phased implementation of handyDART service and taxi program funding in the Nanaimo region during the short and medium range periods. This includes 14,400 annual hours of expanded service, $75,000 annually in additional taxi supplement funding, and $70,000 annually in additional taxi saver funding. Note that the dates are approximate and are subject to changes depending on the level of demand, local priorities, and funding availability.

Exhibit 7-11: Implementation Summary for Custom Transit

	Vehicles	Hours	Taxi Supp.	Taxi Saver	Description
Short range period					
2009	1	2,400	$35,000		Increased handyDART in Nanaimo & increased Taxi Supplement.
2010	2	4,800		$20,000	Increased handyDART in Nanaimo & Oceanside. Increased Taxi Saver.
Medium range period					
2011			$20,000	$30,000	Increased Taxi Supplement & Taxi Saver.
2012	1	2,400			Increased handyDART in Nanaimo.
2013			$20,000	$20,000	Increased Taxi Supplement & Taxi Saver.
2014	1	2,400			Increased handyDART in Nanaimo.
2015	1	2,400			Increased handyDART in Oceanside.

8. FLEET AND FACILITY REQUIREMENTS

This section outlines the fleet and facilities which are required to support the service plan.

8.1 Conventional Vehicle Requirements

The RDN's conventional transit fleet currently consists of 38 conventional buses, including 32 in-service vehicles and 6 spare vehicles. All but two of vehicles are low-floor accessible, and it is expected that the fleet will become 100% accessible in the near future.

Replacement vehicles

Most of the existing fleet (24 of 38 vehicles) will reach the end of their 20-year life cycle during the medium range period of this plan, and will require replacement.

Expansion vehicles

In order to implement the service improvements outlined in Chapter 7, 34 additional in-service vehicles will be required. In order to maintain spare ratios, 6 additional spare vehicles will also be required, bringing the total number of expansion vehicles to 40. This is projected to result in a total conventional fleet of 78 vehicles in 2018, consisting of 66 in-service vehicles and 12 spares.

Exhibit 8-1: Expansion Vehicle Requirements, 2009-2018

	In Service	Spares	Total fleet
Current fleet (2008)	32	6	38
Short range expansion	10	2	12
Total fleet (2010)	42	8	50
Medium range expansion	24	4	28
Total fleet (2018)	**66**	**12**	**78**

Exhibit 8-2 below summarizes total conventional transit vehicle requirements (replacement and expansion) during the plan period. A total of 64 vehicles will be required during this period, consisting of 24 replacement and 40 expansion vehicles.

Exhibit 8-2: Total vehicle requirements, 2009-2018

	Replacement vehicles	Expansion vehicles	Total vehicles
Short range period	2	12	14
Medium range period	22	28	50
Total	**24**	**40**	**64**

Double decker buses

BC Transit currently deploys double decker buses in both Victoria and Kelowna. The table below compares the most recent model of double decker bus used by BC Transit with a standard 40' conventional bus. The double deckers cost nearly twice as much as a standard conventional bus, but they have more than double the seated capacity. The difference in total capacity is less since the double decker buses can accommodate fewer standing passengers (on the lower deck only). The double decker buses use about 28% more fuel. While the initial capital cost and the fuel costs for a double decker bus are higher, the greater passenger capacity means that one double decker trip can often replace two trips by a regular bus. In a case such as this, the most significant cost savings result from the reduced labour costs (which make up the largest component of overall transit costs).

Exhibit 8-3: Comparison of Standard Conventional & Double Decker Bus

	Nova Bus LFS	Dennis Enviro 500 Double Decker
Fuel efficiency	53 L/100 km	68 L/100 km
Seated/total capacity	36/79	82/100
Total capital cost	$475,000	$900,000

Double decker buses are best suited to high-demand routes with strong peaks in demand and frequent service. Given their high seated capacity and the time it takes passengers to get up and down from the second level, double deckers are generally more suited to longer routes going to a major destination rather than routes where passengers make short trips and are frequently getting on and off.

In the Nanaimo region, double deckers would be best suited to routes serving Malaspina University College, particularly the 44-Malaspina UC (using a modified express routing on select trips), 15-Mal-U Connector, and 90-Intercity Connector. These routes have very high passenger loads, and overload buses are often required at peak times. At these peak times, most passengers are students who do not get off until the bus reaches Malaspina or other commuters, so this also works well for using double deckers. It is proposed to introduce 3 double deckers serving these routes in 2009, subject to availability of the vehicles. With the introduction of Bus Rapid Transit in Nanaimo in 2011, additional double decker buses could be considered. The high-capacity express service offered by BRT would likely make it an ideal candidate for double deckers.

Electronic Fare Payment Technology

The RDN transit fleet currently has older mechanical Duncan fareboxes, which do not support electronic fare products. Passengers pay either with cash or tickets, or they flash a paper fare product such as a monthly pass. There are plans to upgrade to a new electronic fare payment system in short range period. BC Transit has contracted a consultant to examine the available fare payment technologies and recommend a strategy for the Tier 1 Municipal Systems.

Electronic fare payment could use either a smart cards (which contain a microchip) or magnetic strip technology. Passengers swipe or hold the card close to a reader as they enter the bus. The cards can be used in different ways. Stored value cards can be loaded with money and the fare can then be deducted for each trip, replacing cash or tickets. Cards can also be programmed to act as an unlimited ride pass valid for a specific time period such as a day, a month, or a semester. These can thus replace the current flash passes.

Electronic fare payment has a number of advantages over the existing system:

- It will allow for much greater flexibility to introduce new fare products in the future. It will be particularly useful for longer term pass products such as semester passes, U-PASS, and employer passes. A greater choice of prepaid fare products should encourage greater use by passengers, and this in turn can lead to long term growth in transit ridership.
- It is more secure than the current paper fare products. Electronic fare products are much more difficult to counterfeit, so there is less fare fraud. If a pass is lost or stolen, it can be deactivated.
- Electronic fare payment will allow much more information to be collected on the use of prepaid fare products such as passes. This will allow us to better understand our customers.

The cost to upgrade to electronic fareboxes in Nanaimo is estimated at roughly $600,000. This is very approximate since the exact technology is yet to be determined. BC Transit has included this project in its Long Term Capital Plan and would cost share with the RDN. The RDN has applied to use Public Transit Agreement/Public Transit Infrastructure Program funding to cover its share of this project (see section 8.4).

8.2 Custom Transit Vehicle Requirements

The RDN's custom transit fleet currently consists of 14 minibuses, including 11 vehicles in service and 3 spares.

Replacement vehicles

Custom transit minibuses are typically amortized over 5 years, although a life cycle of 7 years is reasonable. Based on this, all of the existing custom transit fleet will require replacement during the 10-year time frame of this plan. In addition, the replacement and expansion vehicles implemented during the short range period will require replacement by the end of the medium range period. It is forecast that a total of 24 replacement vehicles will be required during the time frame of this plan.

Expansion vehicles

In order to implement the service outlined in Chapter 7, 6 additional minibuses will be required. One additional spare vehicle will also be required, bringing the total number of expansion vehicles to 7. This will result in a total custom transit fleet of 21 vehicles by 2018, consisting of 17 vehicles in service and 4 spares.

Exhibit 8-4: Custom Expansion Vehicle Requirements, 2009-2018

	In Service	Spares	Total fleet
Current fleet (2008)	11	3	14
Short range expansion	3	--	3
Total fleet (2010)	14	3	17
Medium range expansion	3	1	4
Total fleet (2018)	**17**	**4**	**21**

The table below summarizes total custom transit vehicle requirements (replacement and expansion) during the plan period. A total of 31 vehicles will be required during this period, consisting of 24 replacement and 7 expansion vehicles.

Exhibit 8-5: Custom Total Vehicle Requirements, 2009-2018

	Replacement vehicles	Expansion vehicles	Total vehicles
Short range period	7	3	10
Medium range period	17	4	21
Total	**24**	**7**	**31**

8.3 Transit Facility

The current RDN transit facility has developed over many years, and it no longer meets the functional requirements of the transit system. With the projected growth in the transit fleet over the next 10 years from 52 to nearly 100 vehicles, this problem will become more severe. The RDN is planning to upgrade the existing transit facility so that it is more functional and to create additional capacity for fleet expansion over the next 20 years. This project will include expanded and reorganized bus parking, expanded office space, and new servicing facilities. Construction is planned to begin later in 2008, with completion in 2009. The RDN and BC Transit have agreed to cost share on this facility upgrade.

8.4 Funding Programs for Capital Projects

The Public Transit Agreement (PTA) and the Public Transit Infrastructure Program (PTIP) both involve agreements between UBCM, the Federal and Provincial governments to transfer funding to local governments for public transit infrastructure. The RDN's share of this funding is nearly $1.8 million. The RDN has identified several projects to which this funding will be applied:

- Biodiesel pool vehicles – purchase two biodiesel Smart cars to be used by transit operators to travel between the transit facility and the start or end points for their shifts.
- Malaspina UC exchange – replace the existing transit exchange at Malaspina UC with a new 4-bus exchange.
- Prideaux Street exchange upgrade – upgrade the temporary transit exchange at Prideaux Street to extend its life by 3-5 years.
- Upgraded transit shelters – replace or add new transit shelters at exchanges and other key locations to improve passenger comfort.
- Transit signal priority – implement transit signal priority at key intersections in downtown Nanaimo and along the Highway 19A corridor to improve travel times for transit vehicles.
- Automatic Vehicle Location (AVL) – explore the use of this technology for transit signal priority, improved real-time customer information, and other applications.
- Electronic fare payment technology – upgrade the existing fareboxes to allow the use of a range of electronic fare payment options.

The transit exchange projects and transit signal priority will be discussed in more detail in Chapter 9. Electronic fare payment technology was discussed in section 8.1.

9. SUPPORTING STRATEGIES

While the service plan is critical for a successful transit system, it cannot stand alone. Supporting strategies are used to encourage greater ridership and improve transit system performance. Fares, on-street facilities, marketing, and transportation demand management (TDM) strategies can all be a very effective means of promoting greater transit use and supporting the service plan.

9.1 Fare Strategies

There are a number of strategies which can be used when setting transit fares to encourage greater ridership, target key market groups, and meet cost recovery targets. The development of fare products which are convenient for passengers is also important. The use of prepaid fares, particularly passes, is a key component of the fare strategy. Monthly passes are a convenient option for passengers and they are sold at a discount compared with the price of individual cash fares, giving commuters and other regular transit users a price break and encouraging more frequent transit use. High school students represent a critical market that can be targeted with further discounts using special monthly or semester passes. Post secondary students also form a critical market, and there have been discussions on implementation of U-PASS as a means of greatly expanding this market. Adult commuters and seniors are other potential target markets.

Prepaid fares currently account for about 80% of transit ridership in the Nanaimo region, which is among the highest proportion in the Municipal Systems. Use of prepaid fares should be encouraged since it provides a number of advantages for both passengers and the transit system:

- prepaid fares are convenient since exact change is not required each time the passenger boards the bus;
- there are no direct, out of pocket costs to use the bus which puts transit on more equal footing with the private automobile;
- regular users receive a price break which encourages greater commuter travel on transit
- since prepaid fares are paid up front they encourage passengers, who typically buy passes for commuting, to use transit for other non-commuting trips as well

Use of prepaid fares can be encouraged by discounting the cost compared with the equivalent cash fare. In Nanaimo, books of 10 tickets are sold at a 10% discount compared with the cash fare. Monthly passes are priced at 19-27 times the cash fare in order to provide regular users with a discount and provide an incentive for using the pass. This can have very positive impacts on ridership. In many communities, reductions in the cost of monthly passes relative to the cash fare over the past decade have resulted in increased pass use accompanied by large increases in overall ridership.

Fare Structure:

The table to the right shows the current fare structure for Nanaimo Regional Transit. The fare structure follows guidelines which have been developed to encourage ridership and target key markets. This fare structure encourages the use of prepaid fares and should increase ridership among target markets including students, adult commuters, and seniors. It is recommended that any future fare changes continue to follow the fare structure, along with the enhancements outlined below.

Exhibit 9-1 Nanaimo Regional Transit Fare Structure

	Current Fares
Cash Fares	
Adult/College Student	$2.25
Youth/Senior	$2.00
Monthly Passes	
Adult	$60.75
Senior	$37.00
Youth	$37.00
College Student	$49.50
Day Pass	
Adult/College Student	$5.75
Youth/Senior	$4.50
Tickets (books of 10)	
Adult/College Student	$20.25
Youth/Senior	$18.00

U-PASS is a mandatory universal pass for post secondary students. Typically, all fee-paying students residing within the transit service area are required to pay a fee each semester in return for unlimited use of the transit system. The fee is usually designed to be revenue neutral, and is set to cover the revenue currently being collected from students along with enough additional revenue to cover part of the cost of any service expansion planned to coincide with U-PASS. Because the costs are spread over all students, U-PASS tends to be heavily discounted; typically students pay the equivalent of one adult monthly pass for a four month semester. Students must first approve the U-PASS through a referendum. U-PASS has been very successful in building transit ridership in other communities, including Kamloops and Kelowna. The RDN and BC Transit have been in discussion with Malaspina University College and the student's society for several years and it is hoped that a decision will be made on whether to proceed with U-PASS later in 2008.

High School Semester Passes (or **Youth Passes**) are bundles of 4 monthly student passes which are sold at the school and typically provide a further 20% discount over individual monthly passes. In Nanaimo, this would be about $118 for a 4-month pass. For maximum flexibility, some communities allow these passes to be purchased for any 4-month period. These passes encourage high school students to make a longer term commitment to using transit. Semester passes have been very successful in building ridership among key student markets. In some communities, these passes have been subsidized by the school district.

Employer Passes are targeted at work-trip commuters and are designed to complement employer based programs to reduce vehicle trips. These passes can be purchased from one's employer and paid for through payroll deduction. Ideally, these are photo ID passes, but they can be bundles of monthly passes, as with the high school semester passes discussed above. Employees have to sign onto the program for a minimum of one year, and the cost is typically reduced to take into account vacation time, etc. Employer passes were introduced in Nanaimo in 2007 with employees at Malaspina University College. There are plans to expand this program to other employers in 2008.

Flexible Transfer Policy Currently, transfers are valid for travel in only one direction. Transfers can only be used at designated transfer points and travel must be on the next connecting bus. It is proposed to introduce a more flexible transfer policy in the Nanaimo region which would allow for travel on any bus in any direction for a 90 minute period. This would allow passengers to use a transfer to make a return trip or for a stopover, as long as the second trip is within the 90 minute period.

A survey done by the Transit Research Board in 1996 found that 45% of transit systems allowed round trips on transfers. Translink in Greater Vancouver has allowed two way transfers for many years. More recently, the Central Fraser Valley and Kelowna Regional Transit Systems have implemented a 90-minute two way transfer policy.

This flexible transfer policy does allow for the possibility of fare fraud: passengers might give or sell transfers to other passengers to use as a fare payment. This would require on-going monitoring to ensure this doesn't become a significant problem. There is no indication that this has become a problem in the Central Fraser Valley or the Kelowna Region since the flexible transfer was introduced there.

This flexible transfer policy could impact revenue since some passengers who previously paid for a return fare would now be able to use a transfer. However, this impact is likely to be small. Cash and tickets account for about 25% of riders and about 40% of revenue for Nanaimo Regional Transit. According to the most recent on-board survey, nearly 70% of Nanaimo region transit passengers are travelling to work, school, or university, so it is unlikely they would be able to take advantage of a return trip within 90 minutes.

The remaining 30% of passengers are making mostly shopping, medical/dental, and social/ recreation trips which could potentially be short enough to take advantage of a 90 minute transfer on a round trip. It is estimated that only about 10-15% of all transit trips in the Nanaimo region involve passengers paying with cash or tickets and making trips with potentially short stopovers. Any negative revenue impact would be partly offset by increased ridership as a result of the more flexible policy. Some people might be more likely to use transit for making a short errand given the perceived value of being able to make the round trip on one cash fare.

In the Central Fraser Valley, cash and ticket revenue during the first two months under the new transfer policy increased compared with the same two months in the previous year, although the growth in cash and ticket revenue did slow slightly. Feedback from transit users and drivers has been positive.

Many of the fare policies implemented in the Nanaimo region in recent years have targeted school, university, and work commuters through heavier discounting and promotion of monthly and long term pass products. This flexible transfer policy would likely be most attractive to irregular transit users who do not use transit frequently enough to make purchasing a monthly pass worthwhile. While commuters form a critical transit market, it is beneficial for the transit system to encourage all market segments to use transit more frequently. The flexible transfer policy is a good way to target occasional transit users, a market segment which may have been somewhat neglected by past fare policies.

Outlets for Prepaid Fares

Convenience is key in encouraging greater use of prepaid fares. This means that they should be available for purchase at a variety of outlets including municipal run facilities, corner stores, pharmacies, postal/lottery outlets, banks, and colleges.

9.2 On-street Facilities

On-street facilities include bus stop signs, benches, shelters, and transit exchanges. These facilities play a key role in the transit system. They are highly visible and are usually the first points of contact that people have with the system. For both users and non-users, on-street facilities help to project the overall image of the transit system, and the community's level of commitment and support for transit.

Good on-street facilities help to make the overall experience of using transit safer, more convenient, and more comfortable. Transit stops or exchanges that are perceived as unsafe or uncomfortable (for example, unlit at night or no shelter from the rain) can be barriers that prevent potential customers from using transit, so developing good quality facilities can encourage greater use of the system.

Under the partnership agreement with BC Transit, the local government partner is responsible for on-street facilities. Ensuring a safe environment at all transit stops is a priority. Improving comfort for transit passengers through the addition of benches and shelters, particularly at well-used stops, should also be pursued. The main transit exchanges at Downtown, Malaspina U.C., Country Club, and Woodgrove are hubs for the transit system, and require special attention. The RDN has a three year plan for replacing bus stops, installing on-street information signs, and improving the overall look and feel of the transit exchanges as part of improving the overall transit experience customers have when using the transit system.

Bus stops

There are 664 bus stops and 71 bus shelters in District 68 (Nanaimo) and there are 163 bus stops in District 69 (Oceanside). These facilities are primarily the responsibility of the local municipalities.

In some communities, private companies are contracted to provide the shelters and benches in return for being allowed to advertise on them. However, this sometimes means that benches and shelters are located where they have the greatest chance of being viewed by passing motorists, rather than where they will be used by the most transit riders. If the RDN chooses to pursue this option, it is suggested that a provision should be negotiated to guarantee that the companies will provide transit shelters and benches at certain key locations.

Stop specific schedule information makes it very easy for passengers to know when the next bus will be arriving. Schedules are developed that show the departure times for a specific transit exchange or bus stop, and the schedule is posted at that location. Typically, they are placed in a weather- and vandalism-resistant case or tube which is attached to the bus stop sign post. When a passengers arrive at a bus stop, they can see at a glance when the next bus will be arriving without having to consult the full transit schedule. The RDN currently has 120 of these signs in various locations.

Bus Rapid Transit (BRT) stops

When Bus Rapid Transit service is introduced in Nanaimo, this will require upgrading of certain bus stops. BRT is a limited-stop service, typically with stops every 800-1,500 meters. These BRT stops would need to be clearly distinguished from regular bus stops, likely by using distinctive colors and signage to create a distinct brand. All BRT stops would have shelters, benches, and stop-specific schedule information.

Transit exchanges

The radial route structure and the use of timed transfers means that transit exchanges are an important component of the Nanaimo Regional Transit System.

- ***Downtown Transit Exchange*** – This is one the transit system's busiest exchanges. It is served by 9 routes which account for nearly 90% of transit system ridership. Roughly 10-15% of transit trips in the Nanaimo Region involve transferring downtown. In addition, downtown Nanaimo accounts for about 17% of all origins and destinations for transit trips. Due to development at the previous location, the downtown transit exchange is currently in a temporary location at Prideaux and Fitzwilliam. This location is not ideal since it is located about 800 m west of the downtown core and Port Place Shopping Centre, where many transit riders want to go. The RDN has been working with the City of Nanaimo to identify a permanent downtown location.
- ***Country Club*** – Along with downtown, Country Club is one of the busiest transit exchanges in the system. It is served by 6 routes that account for about 80% of system ridership. About 18% of passengers transfer at Country Club Exchange. This is more than at downtown, although Country Club itself is a less popular destination than downtown. Currently, the exchange is located on-street behind the mall. The exchange extends roughly 100 meters along west side of Norwell Drive, and also includes a bus stop for the 9-North route on the east side of Norwell Drive. The current configuration is inconvenient for some transferring passengers, and it has also resulted in some safety issues. The RDN is reviewing the siting of this exchange to determine if a more pronounced pull-out can be accommodated.

- ***Malaspina University College*** – Although this is not a major transfer point, it is a key destination for transit riders (about 15% of origins and destinations). It is served by 5 routes, and will become even more important if U-PASS is implemented. The RDN and BC Transit have been working with Malaspina administration to identify a site for a new transit exchange at the campus to replace the existing site. It is hoped that this will be completed in 2009.
- ***Woodgrove*** – This exchange is served by 8 routes and is an important exchange point for service to Parksville-Qualicum Beach and other areas north of Nanaimo, as well as Malaspina via the 15-Malaspina UC route. About 9% of transit trips involve transfers at Woodgrove Exchange, while a further 9% of trips begin or end at Woodgrove. Increased service on the 15-Malaspina UC route will result in more transfers at Woodgrove.

It is recommended that the RDN develop an on-street facility plan. Bus stops, transit exchanges, and other facilities should be reviewed on a regular basis to ensure that they are properly maintained and to identify needed upgrades. Improvements might include adding benches or shelters, upgrading signage, and improving accessibility. If stop-specific schedules are installed at exchanges and some bus stops, it is critical that this schedule information is kept current.

9.3 TDM Strategies

Transportation Demand Management (TDM) measures are used to encourage people to make more efficient use of the transportation system. This is achieved by reducing the number of trips, shifting the time of travel, and (most relevant to the discussion here) shifting the demand to other modes of travel by making these other modes more attractive relative to the automobile. By encouraging greater transit ridership, TDM could be a very effective means of improving transit performance in the Nanaimo region. Promotion of TDM is a key way that transit can broaden its role in the region's transportation system, which is one of the community objectives of the Business Plan.

While TDM measures can play an important role in reducing dependence on single occupant private vehicles and increasing transit use in the Nanaimo region, implementation can often be difficult. TDM can involve a large number of players, including different levels of government and government agencies, along with institutions, major employers, and major property owners. There are no clearly defined roles concerning which of these groups provides the different components of a TDM strategy and who pays for these components. This requires discussion among these groups to determine how the various strategies should be administered. Although many TDM strategies can be implemented with little or no cost, the issue of funding for those strategies, where it is required, must also be addressed. Funding should be pursued with a number of public and private sector groups in the region with an interest in efficient transportation system use.

Inventory of Common TDM Measures

TDM measures can be either punitive "sticks" that discourage automobile use or "carrots" which encourage use of alternative transportation modes. Examples of common TDM measures are listed in the table below.

Exhibit 9-2 Transportation Demand Management Measures	
HOV Priority Measures	***Facilities to encourage the use of high occupancy vehicles***
Signal priority measures	Priority for transit vehicles at signalized intersections.
Queue jumper lanes	Allow HOV's to bypass congestion at traffic bottlenecks.
HOV lanes	Highway or arterial lanes that are dedicated for HOV use only.
HOV toll exemption	Exemption from tolls for HOV's.
Ridesharing	***Measures to increase average vehicle occupancy***
Car pools	Ridesharing in private vehicles.
Van pools	Ridesharing in van provided by employer or agency.
Intermodal Trips	***Provide flexibility to use transit for part of trip***
Park-and-Ride	People drive and park at transit stops at key feeder locations.
Bike-and-Ride	People cycle to transit stops provided with bicycle storage.
Parking Management	***Measures to manage supply and demand for parking***
Reduced requirements	Reduces the supply of parking in town centres.
Increased parking costs	Reduce current subsidy for parking and apply to other modes.
Preferential parking for HOV's	Reserve the most desirable parking spaces for car and van pools.
Promotion of Cycling	***Measures to promote cycling as an alternative to driving***
Bicycle facilities at destination	Provide secure storage, showers, and changing facilities.
Bicycle racks on buses	Gives cyclists the choice of taking bikes on the bus.
Employer Programs	***Measures administrated by employers or institutions***
Employee Transportation Administrator	Coordinates all TDM programs to reduce single occupant vehicle trips to the work site or institution.
Employee transportation allowance	Employer provides transportation allowance (for any mode) to all employees to replace free parking.
Employer bus passes	Annual bus passes purchased through payroll deduction.
Guaranteed ride home	Employee is guaranteed a ride home when leaving early or late.
Flexible work hours	Allows employees to adjust schedule to car pool or transit.
Telecommuting	Allows employees to work at home one or more days per week.

TDM Measures for the Nanaimo Region

Not all TDM measures are suitable for the Nanaimo region. For example, many strategies such as HOV lanes require a high level of traffic congestion in the region as an incentive for drivers to abandon their cars. Currently, there is relatively little traffic congestion in the Nanaimo region. The following measures are most likely to succeed given the conditions in the Nanaimo region. Some of these measures, as indicated, will become more viable as Nanaimo Regional Transit System develops.

Transit Signal Priority – Reduced travel times can make transit more attractive relative to driving, and help to increase transit ridership. Transit signal priority allows the transit vehicle to alter traffic signal timings at key intersections. The bus has a GPS unit on board which calculates the vehicle speed and location. As the bus approaches the intersection, it emits a signal. A receiver at the intersection relays this information to the traffic signal control software, which may then extend the green light for the bus, or shorten the red light. The software also takes other traffic activity at the intersection into account in order to minimize the impact on other traffic while reducing the wait times for the transit vehicle. This can significantly improve operating speeds for transit vehicles.

The RDN is planning to implement transit signal priority. Traffic congestion at key intersections in the downtown area and along the Highway 19A corridor is affecting the travel times on some routes at peak times. Transit signal priority would improve schedule reliability and help to reduce travel times, making the service more attractive for customers. This will be particularly important with the introduction of bus rapid transit in the medium range period. Shorter travel times and the ability to compete with the speed and convenience of driving will be critical for the success of this express service. The RDN has applied for funding to implement transit signal priority at 10 major intersections in the downtown area and along the Highway 19A corridor during the short range period. This may be expanded to additional intersections with the implementation of bus rapid transit in the medium range period.

Cycling and Transit – Combining cycling and transit can provide increased flexibility and travel choice for those who choose alternatives to driving. For those who cannot or do not want to cycle all the way to their destination due to excessive distance, topography, or safety concerns, bike and ride allows them to make part of their journey on transit. Bike and ride can also extend transit service coverage, especially in lower density areas that can't support a transit route. While people will usually not walk more than 400 meters to a bus stop, they are often willing to cycle several times that distance. In these areas, people could cycle 2-4 km to the nearest bus stop or transit exchange, where they can either store their bikes or load them onto the bus. They can then use transit for the remainder of the journey. Alternatively, some people may choose to cycle in one direction then take transit the other way (for example if weather conditions change).

The Nanaimo region is well-suited to the promotion of cycling, given its climate and topography. This can be accomplished by providing cyclists with the proper facilities including safe and convenient cycling routes, secure storage areas, and end of trip facilities (such as showers, and changing rooms) at their destinations. Providing secure bicycle storage facilities at transit exchanges can also encourage greater integration of transit and cycling. All Nanaimo Regional Transit vehicles are equipped with bike racks, which can hold up to 2 bikes. As bike and ride becomes increasingly popular, this may create problems in terms of bike capacity on the buses. Some transit systems allow bikes to be brought onto buses when the bike racks are full. Due to safety concerns, this has generally not been allowed on Nanaimo Regional Transit, except in special situations, such as on the last trip in the evening. This issue may need to be further examined.

Park & Ride facilities - Park & Ride is typically best suited to serving low density areas where there is a relatively long commute into a major centre. Since the commuters start their trips in automobiles, there needs to be some disincentive that discourages commuters from completing the trip by car - typically a very long and expensive commute, congestion, or high parking costs at the destination. This situation generally does not exist within the Nanaimo Region: there are no strong disincentives that would discourage commuters from driving all the way into Nanaimo or other employment nodes in the region. However, factors such as increased congestion or higher parking costs may make Park & Ride a more attractive option in the Nanaimo region in the medium to longer range.

Ridesharing – Carpools and vanpools can be a good option for commuters with regular work hours and long commutes, especially if the trip they are making is not served by transit. Jack Bell Rideshare operates a carpool and vanpool program in partnership with BC Transit in several location around the province. Vans are provided to groups of 7-8 commuters, with each passenger paying a flat monthly fee based on distance travelled which is used to cover the operating expenses. Smaller groups of commuters are provided with cars to form car pools. One member of the group is usually designated as the driver, who gets to use the vehicle during the weekend. Currently there is a small number of vanpools operating out of Nanaimo. There are plans to expand this program further in the Nanaimo region. Jack Bell Rideshare also administers a ridematching service that can be used for both the organized car and vanpools, as well as private ridesharing.

Employer/Institution Programs - Employer/institution programs could be an effective means of promoting TDM in the Nanaimo region. The most likely candidates would be large institutions such as the Malaspina and Nanaimo Regional Hospital. The first step would be to designate a Employee Transportation Administrator (ETA) to develop a trip reduction plan to reduce the number of single occupant vehicles generated at the site. BC Transit has developed a certification program for ETAs, which has been held in several communities throughout the province.

9.4 Marketing Strategies

Marketing strategies can be used to identify and target key transit markets, and raise the profile of transit in the region through enhanced public information and promotion. The components of a Marketing Strategy include market research, public information, education, public awareness and promotions.

Market Research:

Market research is a critical component of the marketing strategy that involves gathering information about the market. This information is used to determine who rides the system, how the system is being used, and what can be done to make the system more attractive for non-users. Market research is required to determine how best to position other components of the marketing strategy.

The sources used to gather market information include the following:

- Demographic data from the Census and other sources
- Passenger counts
- On board passenger surveys
- Stakeholder meetings
- Focus groups - potential for future use
- Consumer attitude surveys - potential for future use

Public Information:

This is information required to allow the public to use the transit system. Lack of knowledge about the system and how to use it is often a major barrier that prevents people from using transit, a barrier which public information can help to overcome. Public information is a non-discretionary component of the marketing strategy that must be developed and maintained on an on-going basis. Components of public information include:

- Riders guides - which provide route, schedule, and other information
- Signage for bus stops, kiosks, bus interiors
- Websites (www.busonline.ca and www.rdn.bc.ca) and telephone information

Education:

This involves telling the public about the community benefits of transit, including environmental and accessibility benefits. It is aimed at raising awareness about these issues and changing attitudes so that people are more likely to support and to use transit. The Clean Air Day campaign, which has been used in various parts of the province, is an example of this.

Promotions:

Promotions are used to raise local awareness of the transit system. These can take the form of special events or on-going campaigns. Partnerships with public or private groups can be important in these types of promotions. For example, the event or promotion may focus on a specific partner such as a recreation centre or shopping centre. Examples of special promotions include the following:

- Anniversaries and ridership milestones can be celebrated with special events that involve the public in order to raise awareness.
- Special programs based on customers' needs, such as Pets on Transit.
- Special fare discount promotions such as the Kids Ride Free Program can be used to encourage new users to try out the system.
- Media trades, in which a media outlet advertises on the buses in exchange for promoting transit.
- Holiday promotions such as Santa bus and free New Years Eve service can also encourage new users.

10. IMPLEMENTATION PROCESS

Once the Nanaimo Regional Transit Business Plan has been approved, it becomes the guiding document for making future transit decisions in the Nanaimo region. Transit performance will be monitored and the plan will be updated based current performance, market information and local priorities. Implementation plans will then be developed each year based on the updated plan.

10.1 Updating and Service Implementation Process

The Nanaimo Regional Transit Business Plan is not a static document. The plan will be reviewed and updated as required on an annual basis to reflect actual service implementation to date, and to respond to changes in transit performance levels, markets and demand. Adjustments to future service expansions may be made each year to reflect these changes, as well as changes in local priorities. The order of implementation for the proposed service expansions may also change as part of this adjustment process. In addition, new service request may arise that were not considered in this plan. These will be reviewed through the process described in section 10.3.

Market Research and Monitoring

Many of the service proposals and strategies included in this plan are based on an assessment of key transit markets. On-going research will ensure that these services and strategies continue to meet the demand and will respond to changes in key markets.

Passenger counts, on-board passenger surveys, public opinion surveys and population forecasts will all be used to monitor performance and determine how transit ridership is growing and changing. This information will enable the market profile and the overall market trends for the Nanaimo region to be updated annually. Much of this information will be included in the KPI monitoring program described in section 10.2.

Service Implementation

The specific service proposals outlined in the transit business plan will be reviewed on an annual basis – generally in the spring or summer - in light of performance monitoring, updated market information and local priorities. A service expansion plan would then be developed for the following year, which would be included in BC Transit's program-wide expansion plan, which is typically developed in the late summer and early fall. This service expansion plan would then be further refined through detailed planning work to develop specific routing, schedules, and costs. At the discretion of the RDN, specific service change proposals may be reviewed in a public consultation process. The final detailed service proposals would then be approved by the RDN and BC Transit as part of the annual budget development process.

10.2 KPI Monitoring Program

The use of key performance indicators (KPIs) was discussed in Section 6, and the proposed KPIs were defined for Nanaimo. They will be used to monitor future overall system performance, and to compare Nanaimo Regional Transit with other benchmark transit systems.

Exhibit 10-1 on the following page lists the KPIs which have been identified. For each KPI, the table indicates whether the KPI will be applied to specific routes in addition to the system as a whole. The table also shows how the KPI will be used in assessing the performance of new services, benchmarking and setting five-year targets.

As part of the ongoing monitoring of the transit business plan, BC Transit will provide annual monitoring reports to the RDN. The report, to be provided each spring, will provide annual numbers for all the KPIs.[1] It will also compare these numbers with the annual target and the previous year's actual amount. This annual report will also include benchmarking against other comparable transit systems, using the KPIs indicated in the table.

Using KPIs to Assess New Service

KPIs can also be used to prioritize the service proposals and to monitor the performance of these new services once they have been implemented. This can aid in the decision-making process regarding which new services to implement and when to implement them. KPIs for each new service proposal can be compared with each other and with the existing system-wide KPIs. Only those KPIs which can be measured on a route-specific basis, as indicated in Exhibit 10-1, can be used to assess specific new service proposals. KPIs for the new service proposals can then be compared with each other and with the existing service. The proposals with higher KPIs and those that would lead to improvements in the overall transit system KPIs would be favoured. The transit service design guidelines, as described in Chapter 6, would also be used to evaluate service proposals. Those proposals which help the transit service to meet the design guidelines would generally be given priority over those which do not.

Notwithstanding their importance, the use of KPIs and service design guidelines are not the only criteria in the decision-making process. Other community objectives, such as providing mobility and sustainable transportation choices to residents, will also need to be taken into consideration.

[1] Except for transit mode share, which is only measured every five years in the census.

Exhibit 10-1 Summary of RDN Transit KPIs and Monitoring Program

KPI	System-wide	Route specific	KPI Applications		
			Assessment of New service	Benchmarking	Five-year target
Service Level					
Population served	✓			✓	
Service hours per capita	✓			✓	✓
Transit mode share for work trips (census data)	✓			✓	✓
Passenger and Financial Performance					
Passengers per hour	✓	✓	✓	✓	✓
Cost per passenger	✓	✓	✓		
Cost recovery	✓	✓	✓		✓
Operating cost per hour	✓	✓	✓		
Operational Performance					
Schedule adherence	✓	✓			✓
Environmental Performance					
Greenhouse gas (GHG) emissions per passenger-km	✓				✓

10.3 Service Expansion Request Evaluation Process

The Transit Business Plan examines current and future transit needs in the region in a comprehensive fashion so that service expansion proposals can be developed and prioritized based on what provides the greatest benefit to the region as a whole. However, the RDN sometimes receives requests from individuals and groups for new transit services which may have not been identified in the Transit Business Plan. This may involve extending transit service to areas beyond a reasonable walking distance (400 m) of the existing transit routes, or extending service at times of day when the service currently doesn't operate. Sometimes there can be political pressure to implement these proposals. A well-defined process to evaluate these proposals is required.

When request for new service is received, it will be reviewed by RDN and BC Transit staff.

1. If the request is something that can be accommodated within the current service level with little or no impact on the existing service and existing passengers, it may be considered for implementation either immediately, or with the next planned service change. An example of this might be a minor schedule change to accommodate the new bell times at a school.

2. If the request requires additional service hours or vehicles, or if implementing the request would have a significant impact on the existing service, the request would be added to a list of potential service improvements for consideration. These would then be considered as part of the annual service plan updating process described in section 10.1 above. The service requests would be evaluated against the existing transit service and against other service expansion proposals using the KPIs and service design guidelines as described above.

3. Service requests often involve requests for expanded coverage to new areas which currently do not have transit service. In this case, special consideration is required. Generally, service would only be extended under the following circumstances:

    - The area has a minimum net residential density of 10 dwelling units per hectare or 25 jobs per hectare as measured over a minimum developed area of 10 hectares.
    - It is projected that the area would generate at least 15 transit trips for each hour of bus service that would be required to provide service to the area. Some currently unserved areas may have sufficient density, but they may be located so far from the existing transit service that they would not be efficient to serve.

11. RECOMMENDATIONS

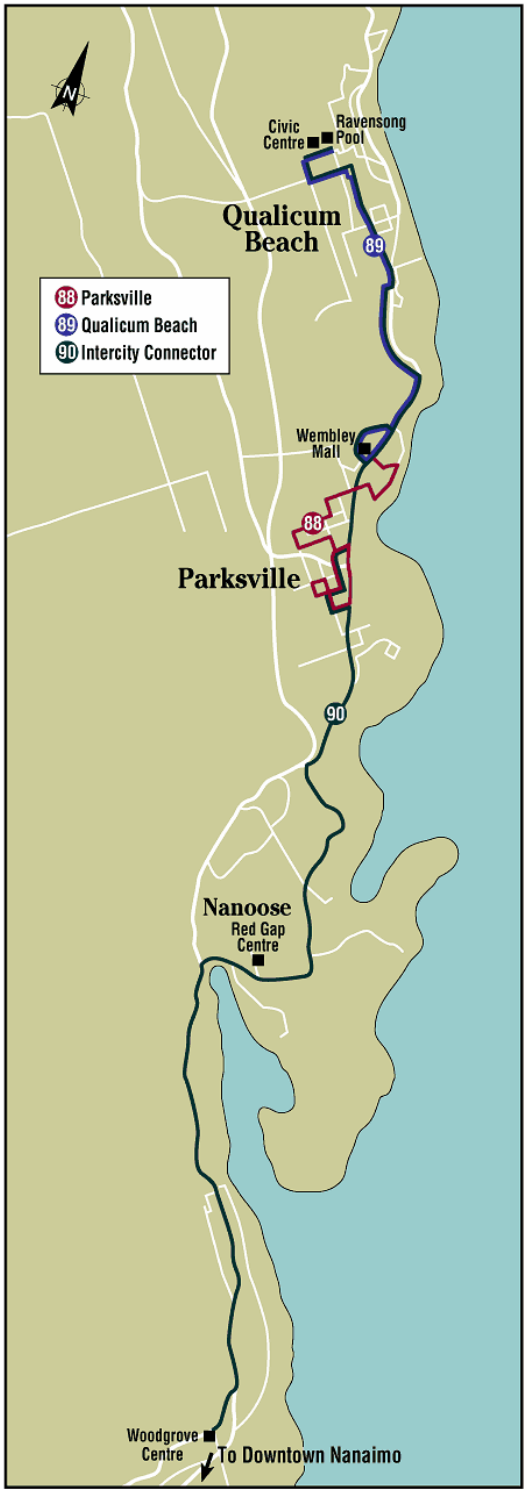
It is recommended that the Regional District of Nanaimo and BC Transit:

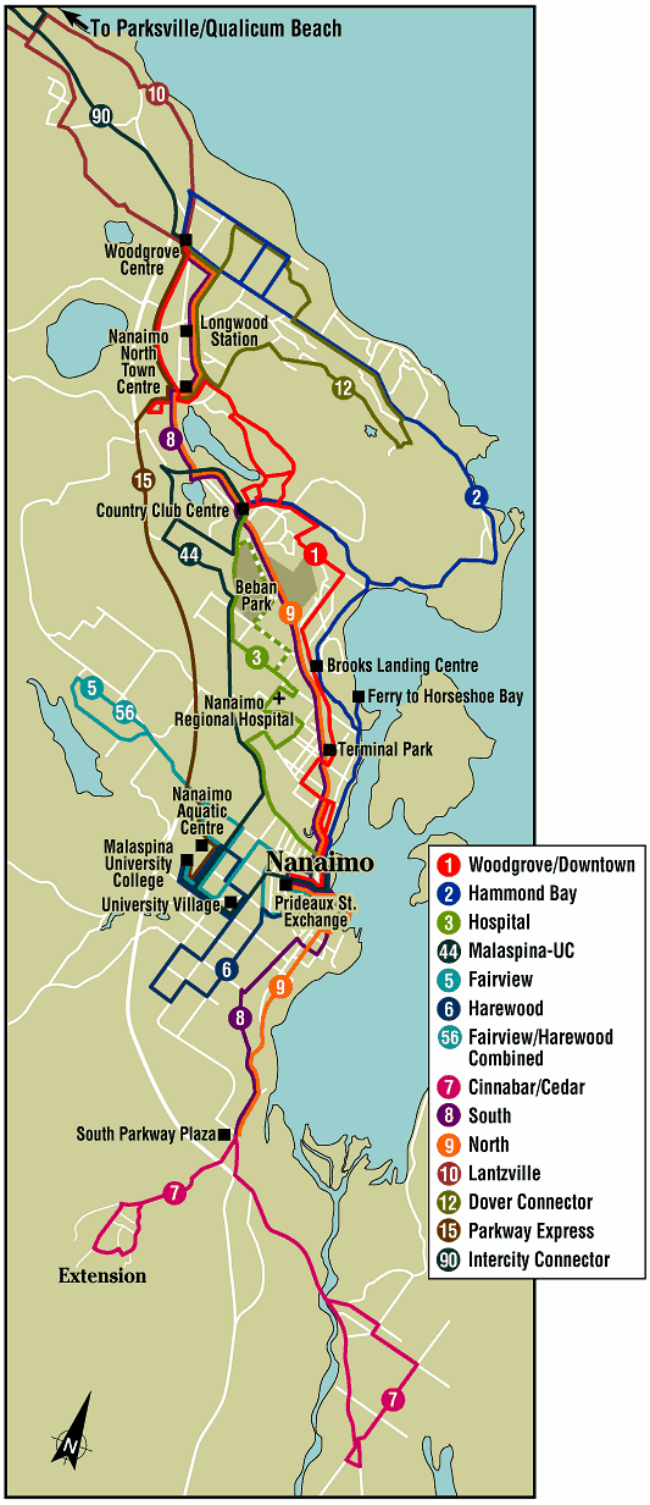
1. **Approve the Nanaimo Regional Transit Business Plan as a guide for transit service planning and delivery in the Nanaimo region.**
2. **Approve the Key Performance Indicators and the Service Design Guidelines, developed by BC Transit and the RDN, as the basis for monitoring and evaluating the transit service.**
3. **Approve in principle the Short and Medium Range Service Proposals and the Supporting Strategies, and direct staff to proceed with more detailed planning work for the proposals scheduled for implementation in March and September 2009. Implementation will be subject to available funding, and final approval will be part of the annual budget process.**

Appendix 1: Route Profiles

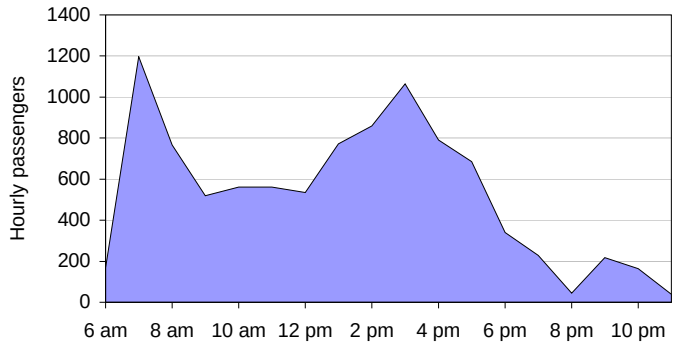
Nanaimo Regional Transit System

The Nanaimo Regional Transit System operates from approximately 6 am to 12 midnight on weekdays, from 7 am to 12 midnight on Saturdays, and from 8 am to 8 pm on Sundays. However, operating hours vary significantly for different routes.



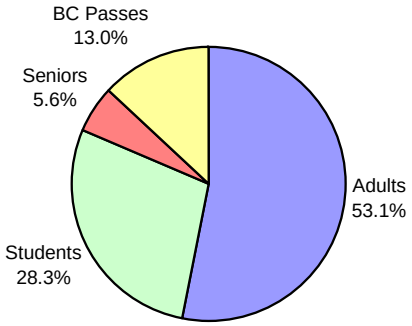


Hourly Passenger Boardings



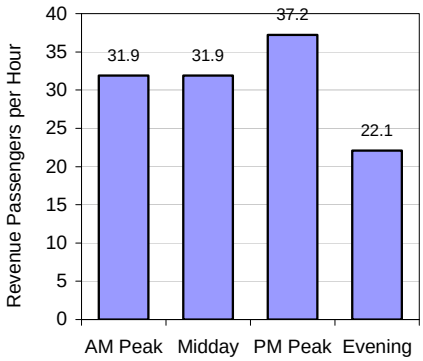
Hourly ridership shows a typical commuter pattern, with morning and afternoon peak periods. The morning peak - which is primarily work and school commuters - is higher and sharper than the afternoon peak - which includes a wider variety of trip types.

Weekday Rides by Passenger Group



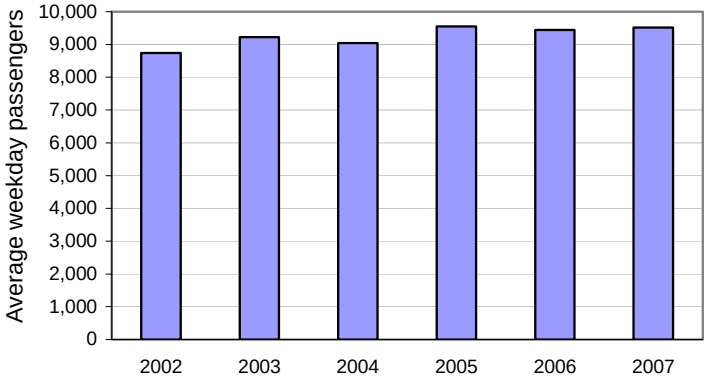
Adults make up more than half of transit riders in Nanaimo, which indicates the relatvely strong commuter market. Students form the second largest group.

Productivity by Time Period



Productivity is highest during the afternoon peak period and lowest in the evening..

Weekday Ridership Trend



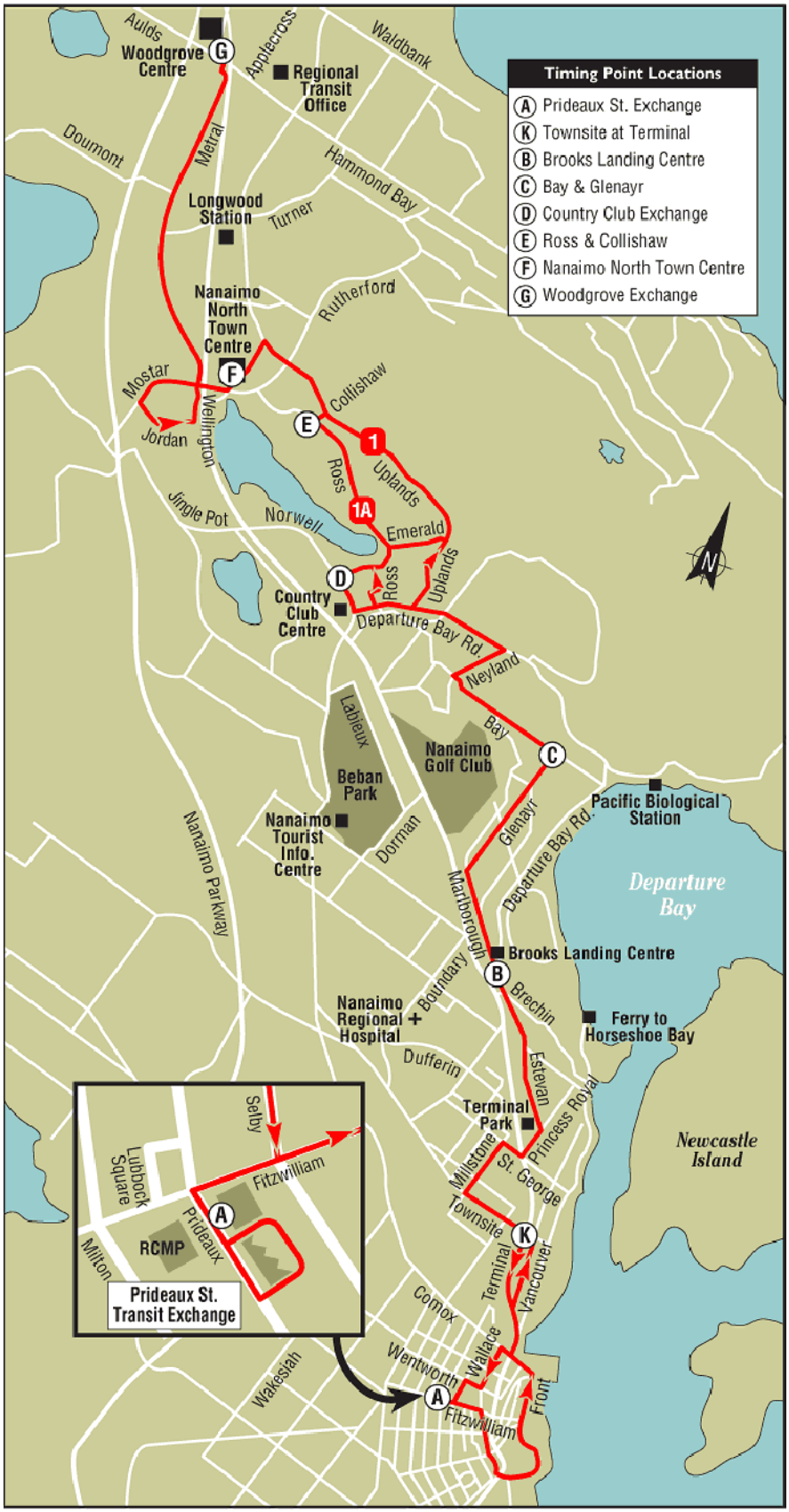
Average daily weekday ridership has increased slightly over the past six years, but generally has been quite flat.

1-Woodgrove

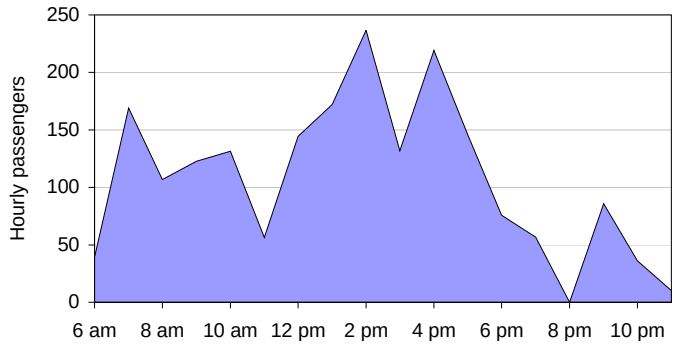
The 1-Woodgrove is a key route serving the North End of Nanaimo. The route provides service between downtown Nanaimo and Woodgrove Mall via Country Club Mall and the Uplands neighborhood.

The route operates from 6:07 am to 12:07 am on weekdays, from 7:13 am to 12:02 am on Saturdays, and from 7:00 am to 8:23 pm on Sundays.

Service is generally every 30 minutes on weekdays and Saturdays, with roughly 20-minute service frequency during peak periods on weekdays. Service is hourly evenings and Sundays.

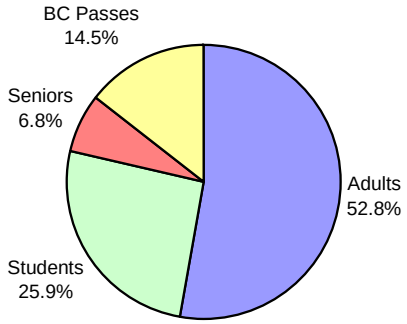


1-Woodgrove Hourly Passenger Boardings



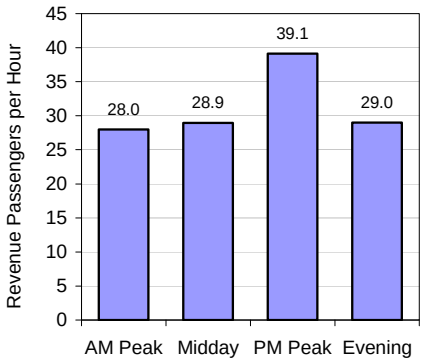
Hourly ridership shows a fairly typical commuter pattern, with morning and afternoon peak periods. The afternoon peak is higher than the morning peak.

Weekday Rides by Passenger Group



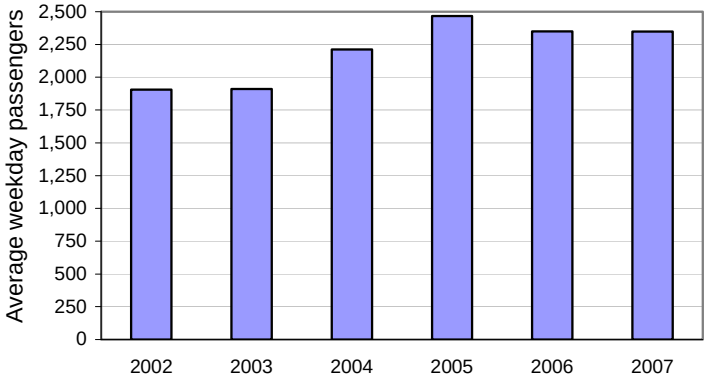
The passenger group breakdown on this route is quite similar to the transit system as whole. Adults form the largest group, followed by students.

1-Woodgrove Productivity by Time Period



Productivity is above average. Evening productivity is significantly higher than the system average

1-Woodgrove Weekday Ridership Trend

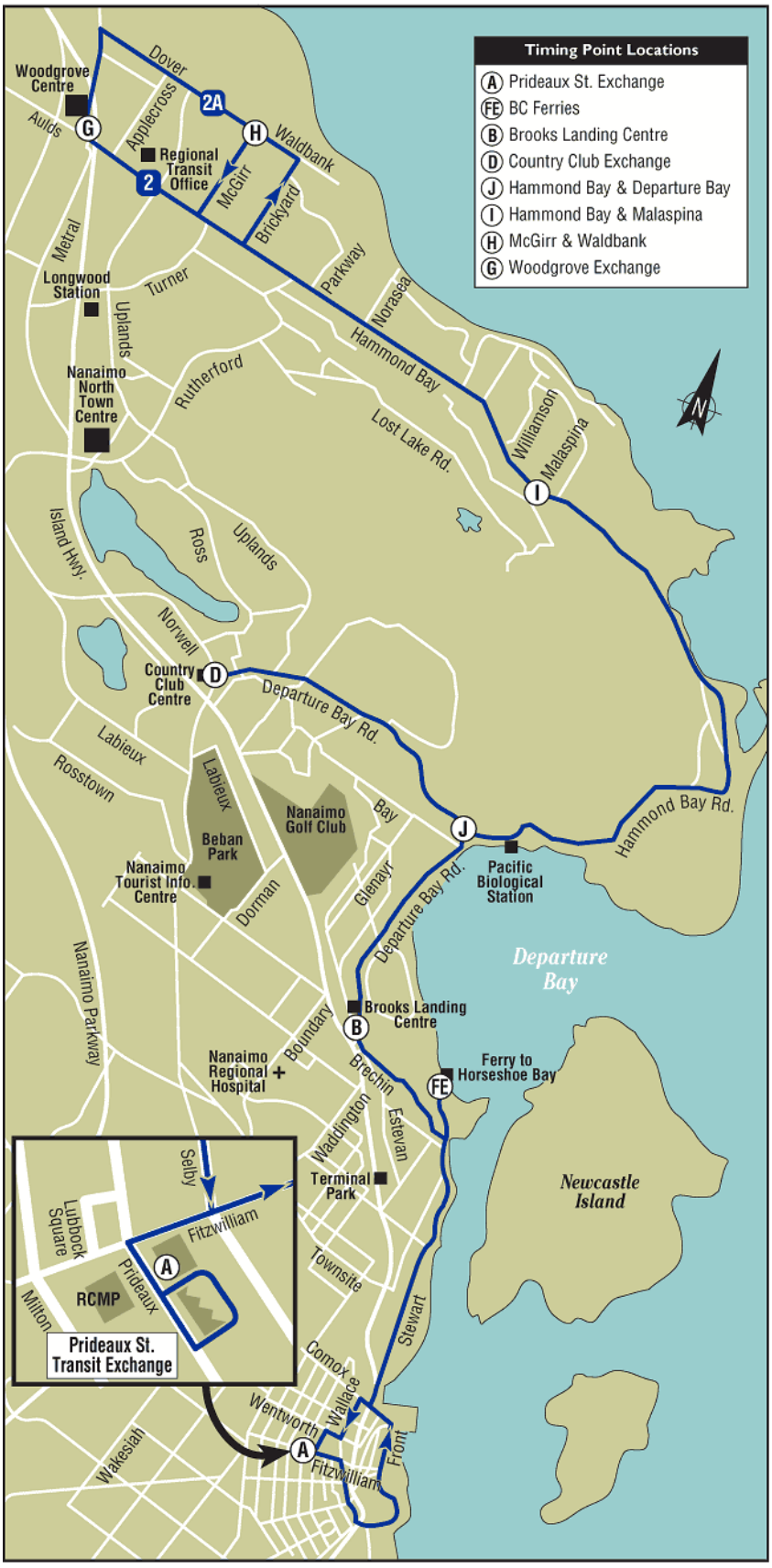


Average daily weekday ridership increased between 2002 and 2005, then decreased slightly between 2005 and 2007.

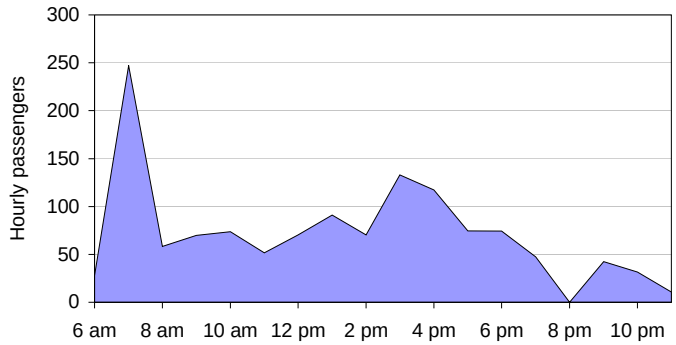
2-Hammond Bay

The 2-Hammond Bay route serves the North End of Nanaimo. It operates between downtown Nanaimo and Woodgrove Mall via the Departure Bay ferry terminal and Hammond Bay Road. A small number of trips provide service to Country Club Mall.

This route operates from 6:20 am to 12:09 am on weekdays, from 7:33 am to 11:43 pm on Saturdays, and from 6:55 am to 7:30 pm on Sundays. Service is generally every 30 minutes on weekdays and Saturdays, with hourly service in the evenings and on Sundays.

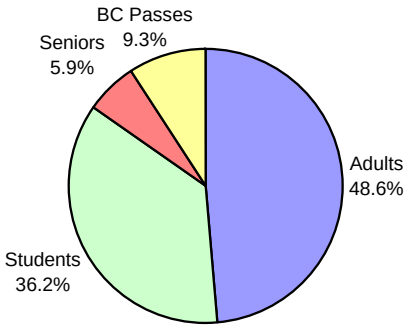


2-Hammond Bay Hourly Passenger Boardings



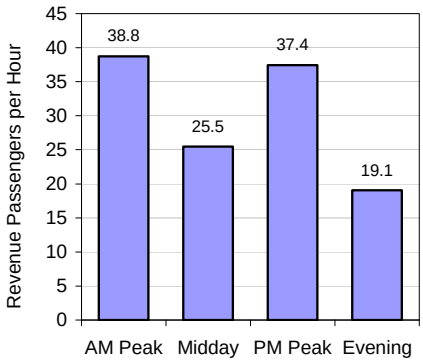
There is a very sharp morning peak on the 2-Hammond Bay route, due to school and work commuters. The afternoon peak is much less well defined. .

Weekday Rides by Passenger Group



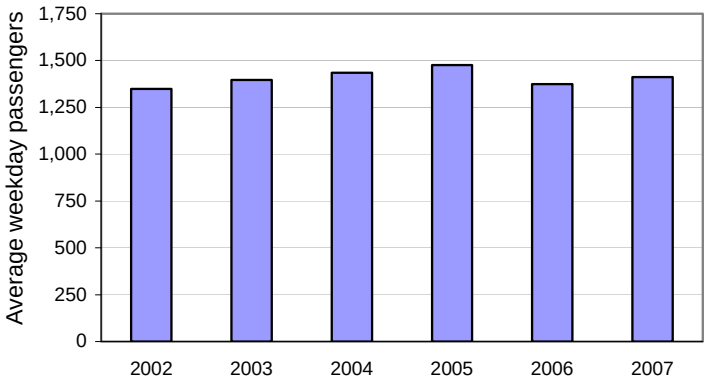
Students make up a higher share of riders on the 2-Hammond Bay route than for the system as a whole.

2-Hammond Bay Productivity by Time Period



Productivity on this route is especially strong the during the peak periods, indicating a strong commuter market.

2-Hammond Bay Weekday Ridership Trend



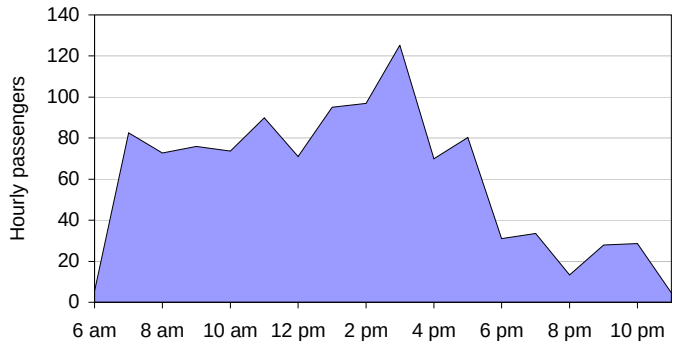
Weekday ridership on this route increased from 2002 to 2005, but then dropped in 2006 and is up slightly in 2007.

3-Hospital

The 3-Hospital route operates between downtown Nanaimo and Country Club Mall, serving the Nanaimo Regional Hospital.

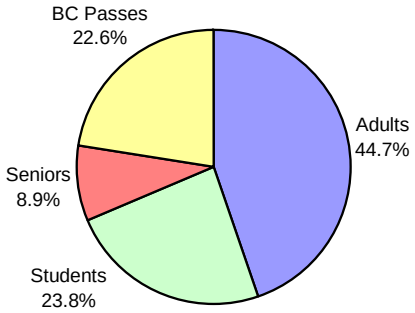
The route operates from 6:34 am to 11:47 pm on weekdays, from 7:13 am to 11:28 pm on Saturdays, and from 7:27 am to 7:56 pm on Sundays. Service is generally every 30 minutes on weekdays and Saturdays, with hourly service on evenings and Sundays.

3-Hospital Hourly Passenger Boardings



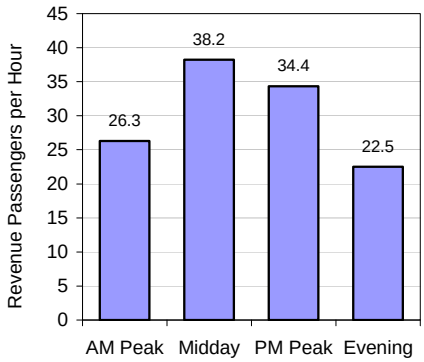
This route has strong midday ridership and very little peaking during the morning. This indicates that it is less dependent on commuters.

Weekday Rides by Passenger Group



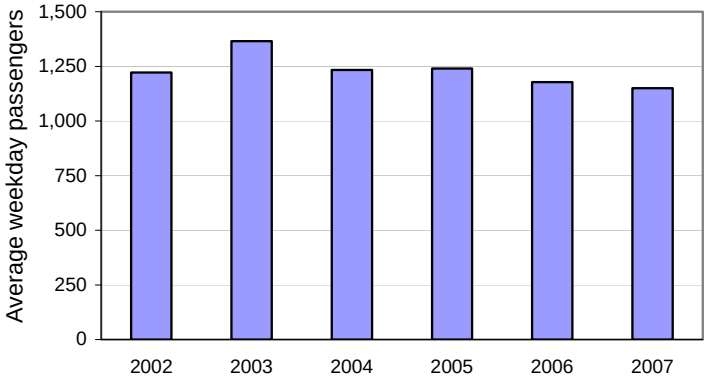
The 3-Hospital route has a much higher proportion of seniors and BC Bus pass users than the system as a whole. The route has fewer commuters and more seniors travelling to the hospital and other medical services.

3-Hospital Productivity by Time Period



Productivity is highest during the midday period, again indicative of the smaller share of commuters on this route.

3-Hospital Weekday Ridership Trend

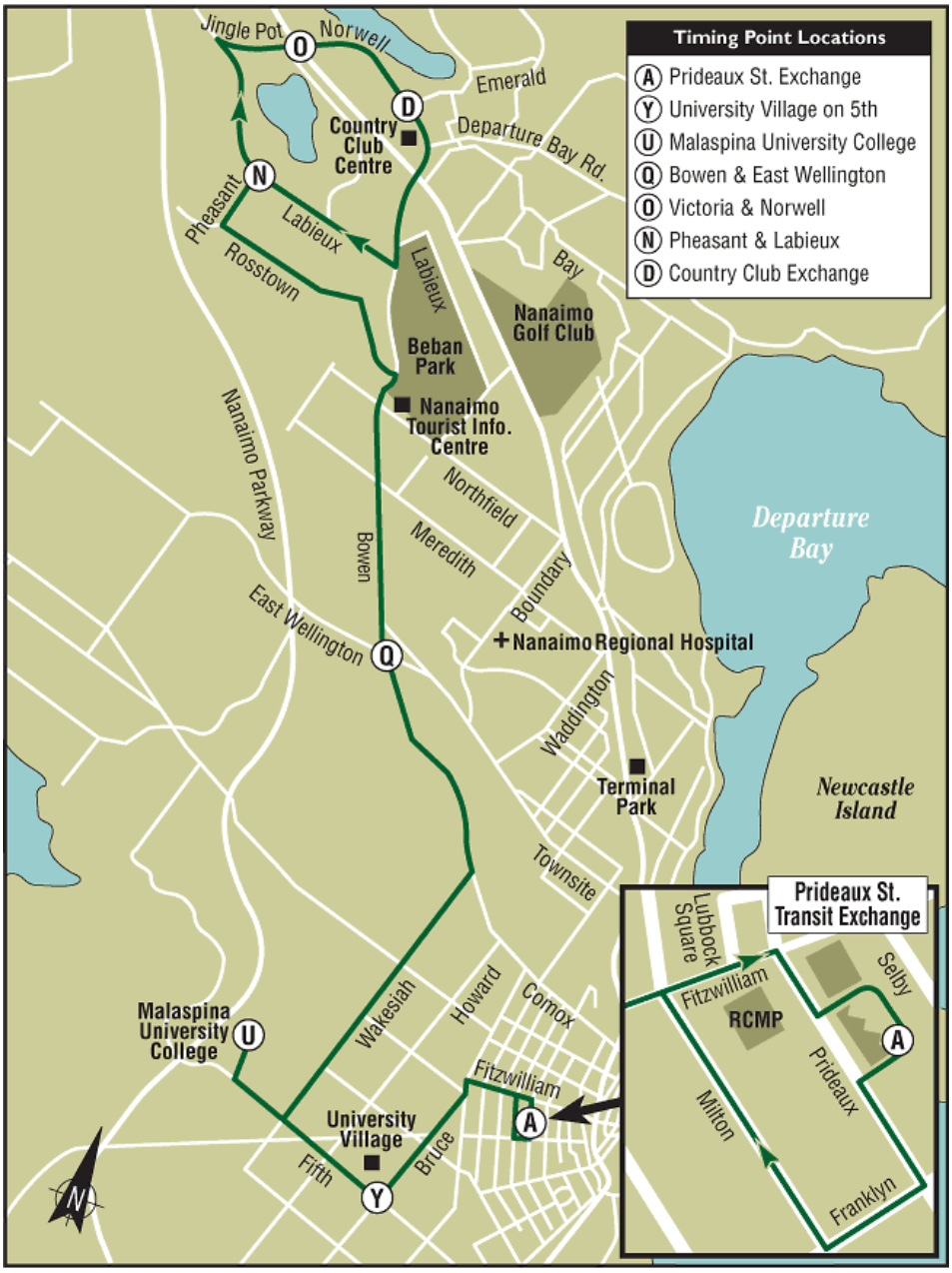


Average daily weekday ridership on this route has generally been declining since 2003.

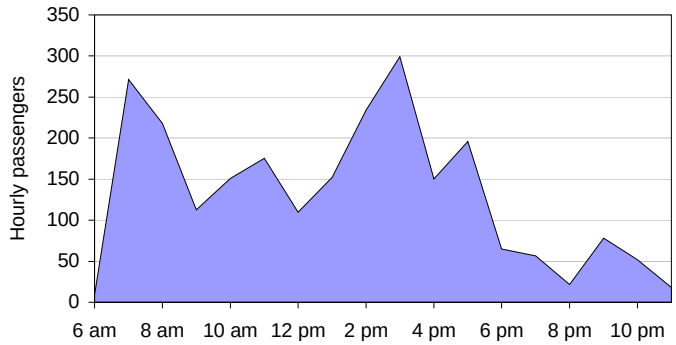
44-Malaspina-UC

The 44-Malaspina-UC route serves Malaspina University College, connecting the campus with both downtown Nanaimo and Country Club Mall, via Bowen Road.

This route operates from 6:34 am to 11:45 pm on weekdays, from 7:45 am to 11:35 pm on Saturdays, and from 7:27 am to 7:59 pm on Sundays. Service is every 30 minutes on weekdays and Saturdays, with 15-minute service during peak periods on weekdays. The service operates every hour on evenings and Sundays.

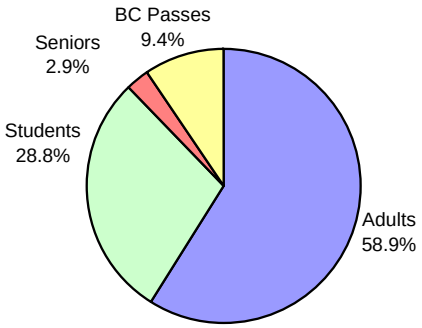


44-Malaspina Hourly Passenger Boardings



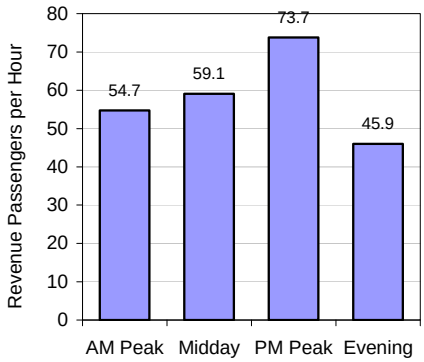
Hourly ridership shows strong morning and afternoon peaks as a result of the strong commuter market, especially for Malaspina students.

Weekday Rides by Passenger Group



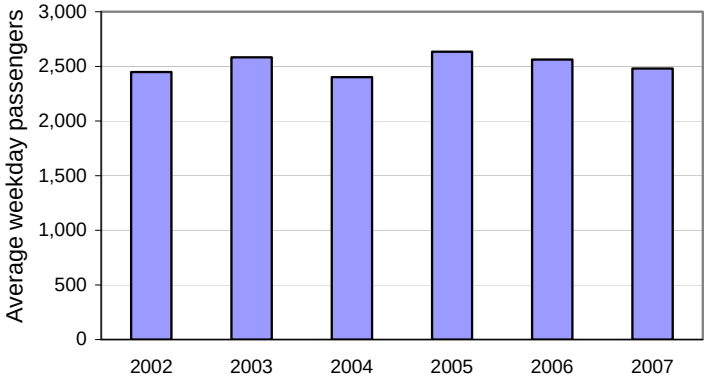
The 44-Malaspina route has a high proportion of adults, which includes Malaspina students.

44-Malaspina Productivity by Time Period



This route has the highest productivity in the system, especially during the afternoon peak period.

44-Malaspina Weekday Ridership Trend

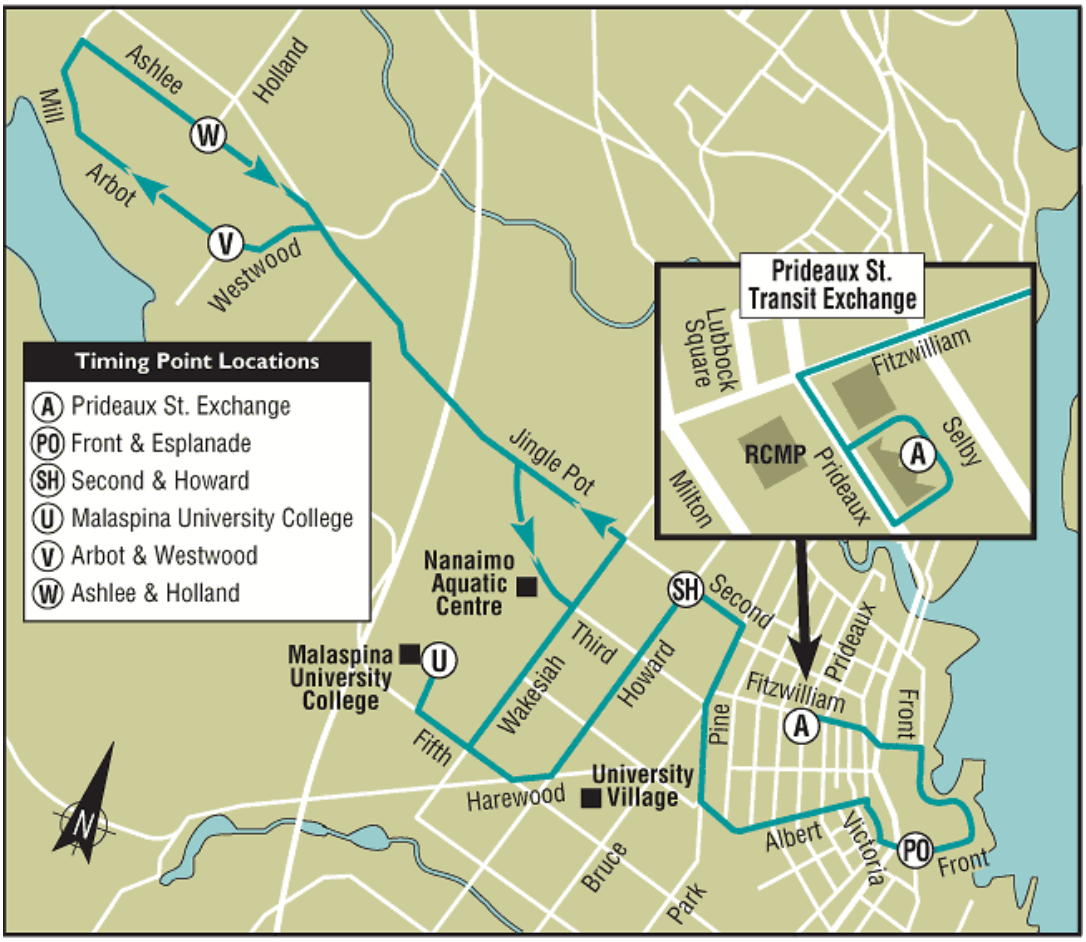


Average daily weekday ridership has been fairly level over the past six years, although there has been a slight decrease since 2005.

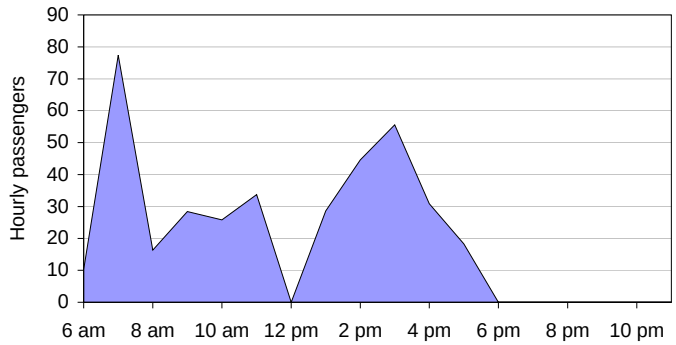
5-Fairview

The 5-Fairview route serves the South End of Nanaimo, with service between downtown, Malaspina University College, and the Westwood neighborhood.

The route operates hourly from 6:36 am to 6:44 pm on weekdays and from 8:08 am to 6:01 pm on Saturdays. During evenings and Sundays, a 5-Fairview/6-Harewood combination route is operated. This is described in more detail under the 6-Harewood route profile.

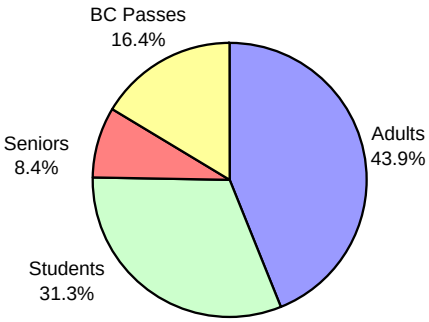


5-Fairview Hourly Passenger Boardings



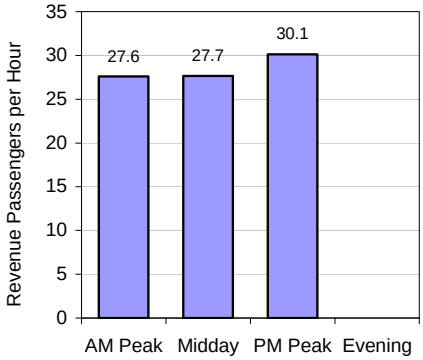
Hourly ridership shows a sharp morning peak as well as an afternoon peak. There are some gaps due to the relatively limited service.

Weekday Rides by Passenger Group



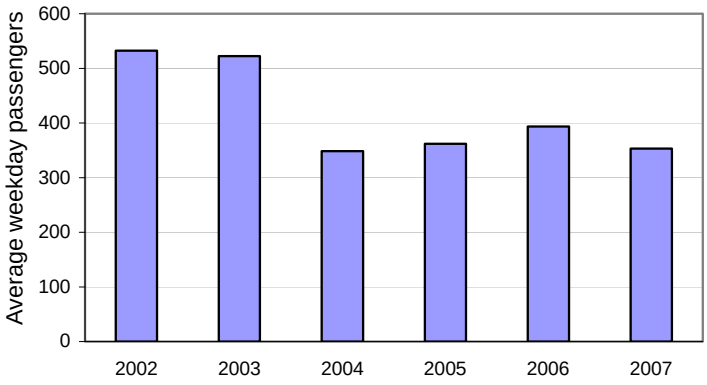
The 5-Fairview route has a higher proportion of seniors and BC Bus pass users than the system as a whole.

5-Fairview Productivity by Time Period



Productivity on this route is close to 30 rides per hour during all time periods.

5-Fairview Weekday Ridership Trend



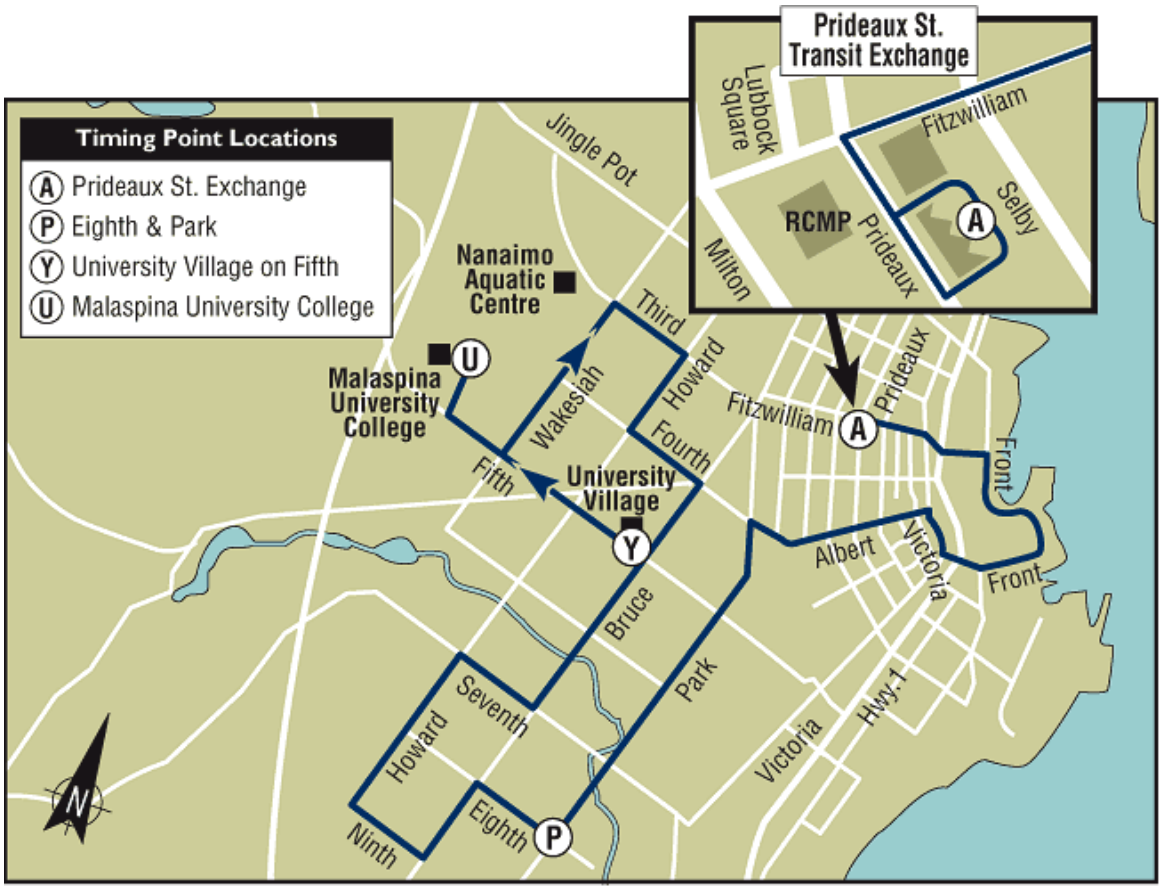
Average daily weekday ridership on this route dropped sharply between 2003 and 2004, due to service changes. Since 2004, the ridership has been quite flat.

6-Harewood

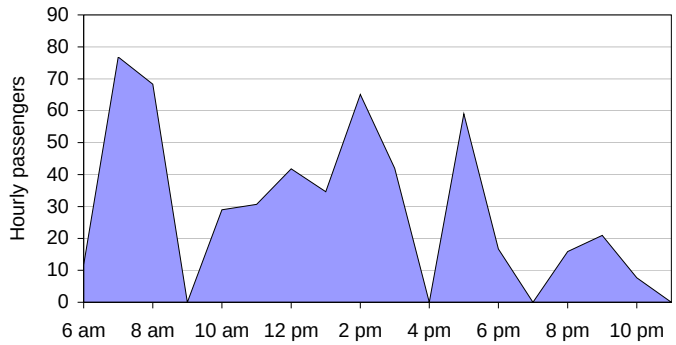
The 6-Harewood route provides service to the South End of Nanaimo, with service between downtown Nanaimo, Harewood Plaza, and Malaspina University College.

The route operates from 6:41 am to 6:40 pm on weekdays and from 8:16 am to 6:23 pm on Saturdays. Service is hourly at most times, with 30-minute service during the morning peak period.

During evenings and Sundays, a 5-Fairview/6-Harewood combination route is operated. This combined route operates from 6:48 pm to 11:42 pm on weekdays, from 6:45 pm to 11:32 pm on Saturdays, and from 7:25 am to 7:56 pm on Sundays. The charts on the opposite page include the combination route in addition to the 6-Harewood.

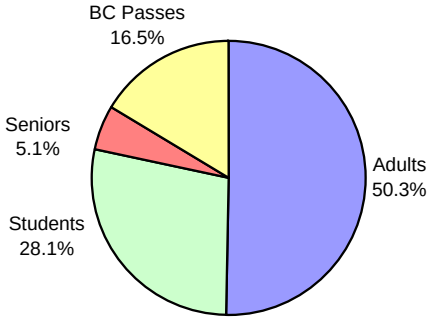


6-Harewood Hourly Passenger Boardings



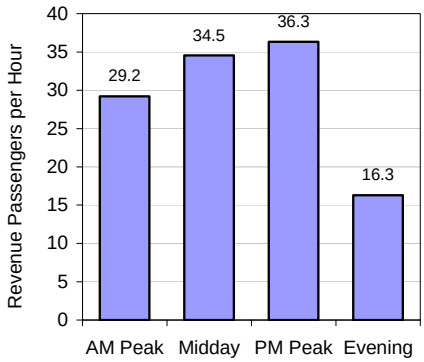
Hourly ridership shows morning and afternoon peaks. There are some gaps due to the relatvely limited service.

Weekday Rides by Passenger Group



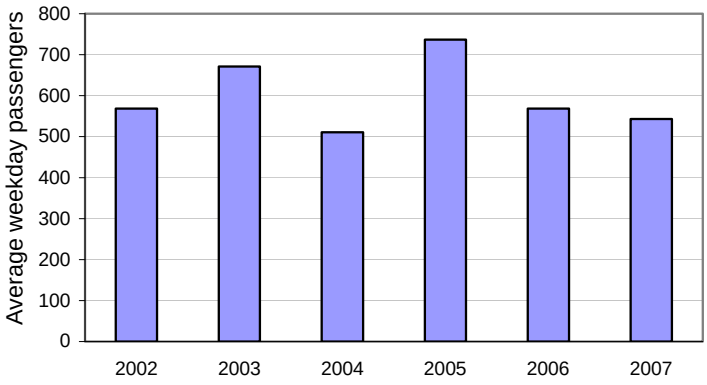
Passenger groups on the 6-Harewood are quite close to the system average, although there are slightly more BC Bus pass users and slightly fewer adults.

6-Harewood Productivity by Time Period



Productivity is highest during the afternoon peak period. Productivity in the evening is quite low.

6-Harewood Weekday Ridership Trend



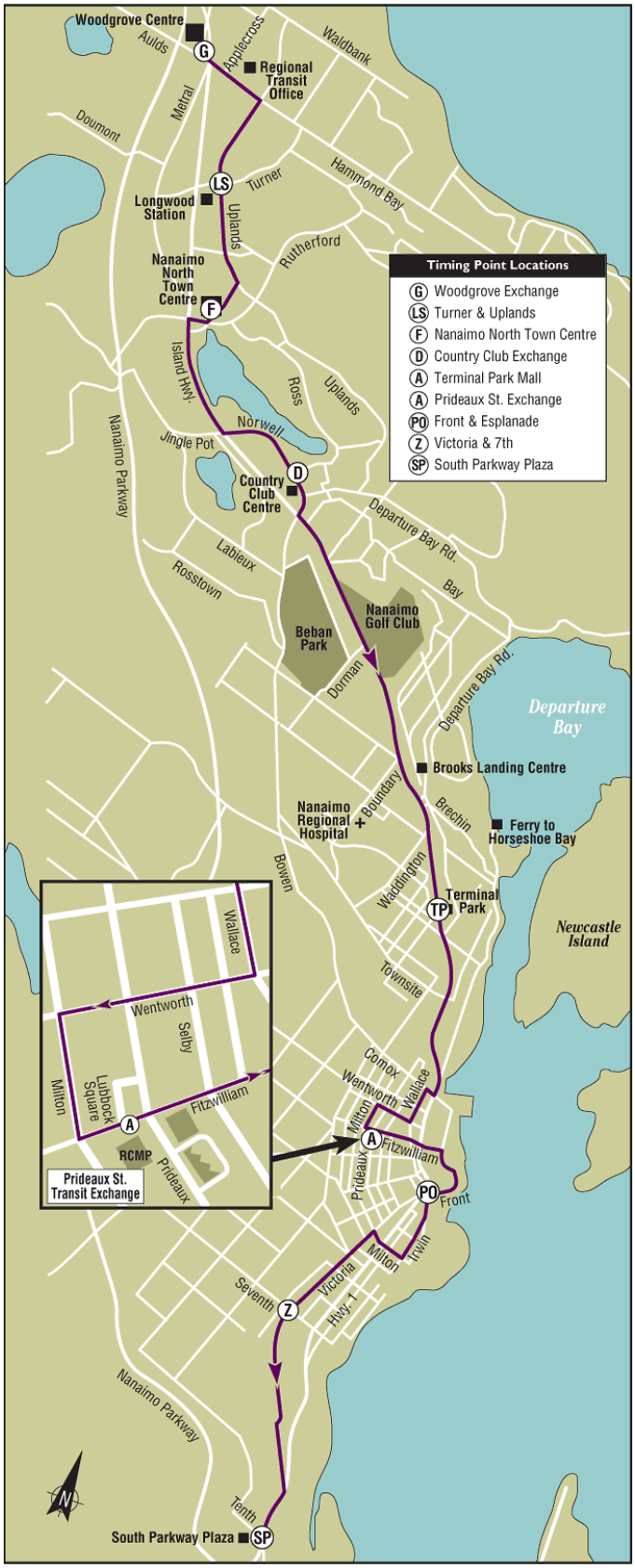
Average daily weekday ridership on this route has fluctuated over the past six years, with a significant drop since 2005.

8-South / 9-North

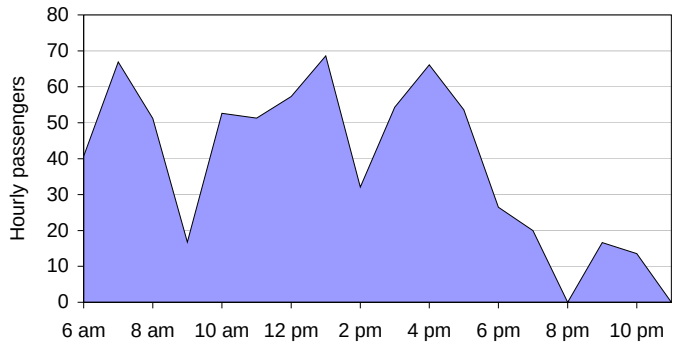
The 8-South and 9-North routes serve the key Highway 19A corridor between South Parkway Plaza and Woodgrove Mall, and including service to downtown Nanaimo, Country Club Mall, and North Nanaimo Town Centre.

Prior to December 2007, these routes also served the Cinnabar and Cedar areas at the south end of the region. This area is now served by a separate route 7-Cinnabar/Cedar, but is included with the 8/9 routes in all the historical data.

This route operates from 6:42 am to 11:48 pm on weekdays, from 7:18 am to 11:41 on Saturdays, and from 8:29 am to 7:03 pm on Sundays. Service frequency is every 30-60 minutes on weekdays, and hourly on Saturdays and Sundays.

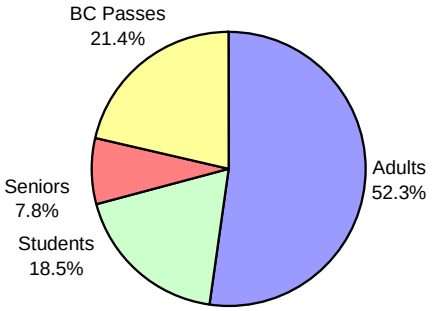


8-South/9-North Hourly Passenger Boardings



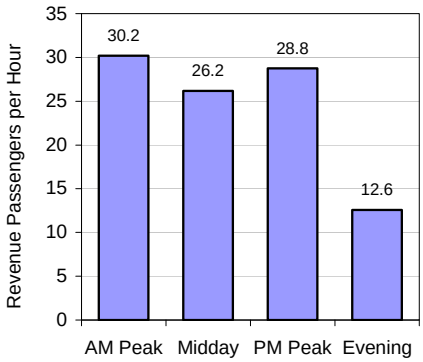
Hourly ridership on the 8-South/9-North does not exhibit any strong peaking pattern. This route carries a higher proportion of shoppers and other non-commuters than the system as a whole.

Weekday Rides by Passenger Group



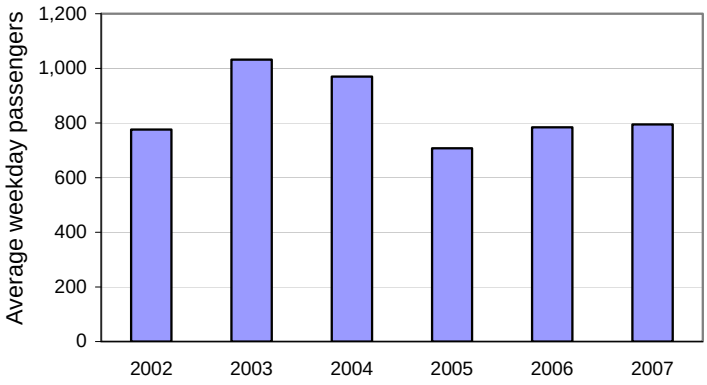
These routes have a much higher share of seniors and especially BC Bus pass users than the system as a whole. They also have a much smaller share of students.

8-South/9-North Productivity by Time Period



This route has lower than average productivity, especially during the evening period.

8-South/9-North Weekday Ridership Trend



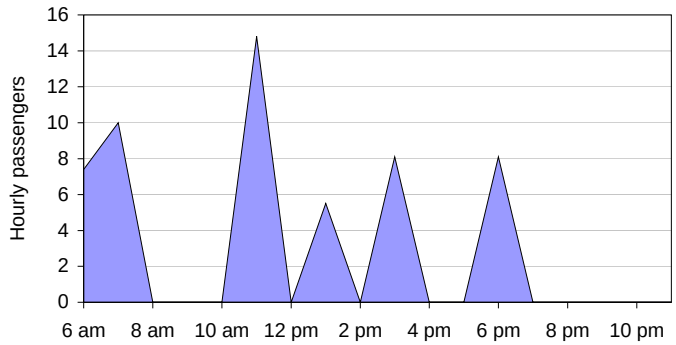
Average daily weekday ridership has fluctuated over the past six years, but it has been increasing since 2005.

10-Lantzville

The 10-Lantzville route provides service in a loop between Woodgrove Mall and Lantzville.

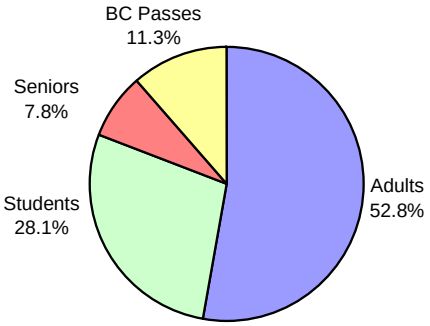
The route operates from 6:48 am to 6:40 pm on weekdays, from 7:16 am to 7:05 pm on Saturdays, and from 7:30 am to 6:50 pm on Sundays. The service operates roughly every two hours.

10-Lantzville Hourly Passenger Boardings



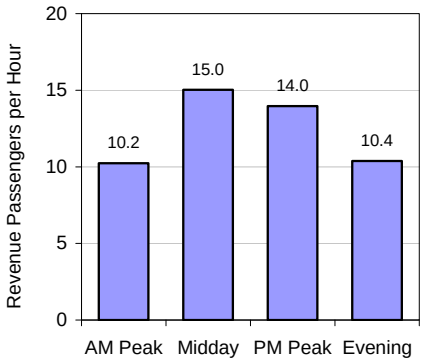
The hourly ridership profile on the 10-Lantzville reflects the limited service on this route. The highest peak is at 11 am.

Weekday Rides by Passenger Group



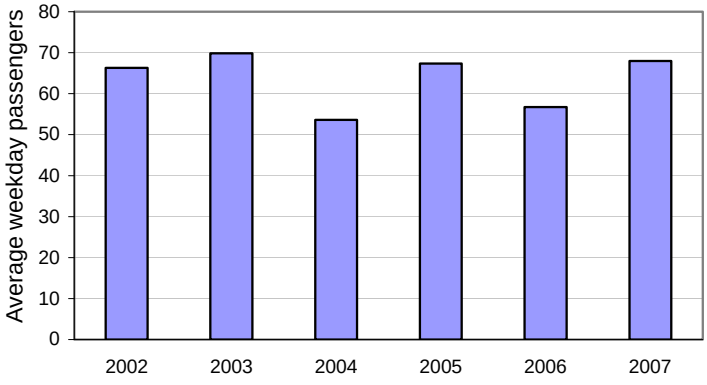
The 10-Lantzville route has a very similar distribution of passenger groups to the system as a whole, with adults accounting for just over half of the total.

10-Lantzville Productivity by Time Period



Productivity is low on this route, especially during the peak periods, indicating the small commuter market.

10-Lantzville Weekday Ridership Trend



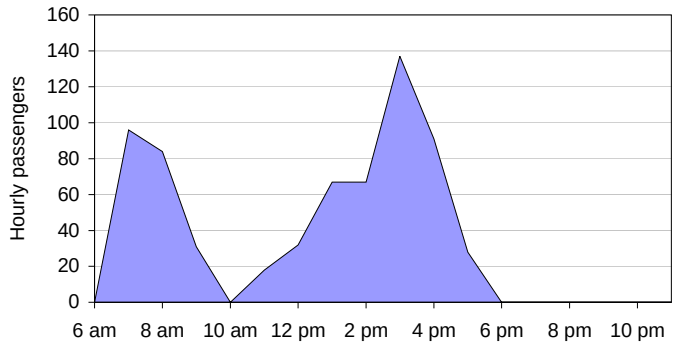
Average daily weekday ridership has fluctuated between 50 and 70 over the past six years.

15-Malaspina UC Connector

The 15-Malaspina UC Connector provides fast, direct service via the Parkway between Woodgrove Mall and Malaspina University College.

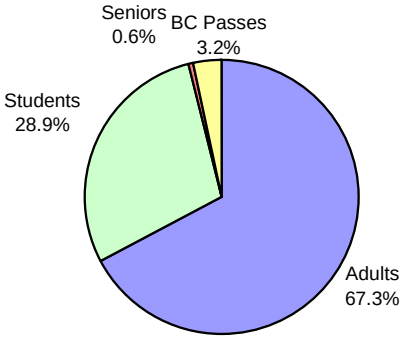
This route operates from 7:30 am to 5:55 pm on weekdays only. Service is roughly every 30 minutes.

15-Malaspina Hourly Passenger Boardings



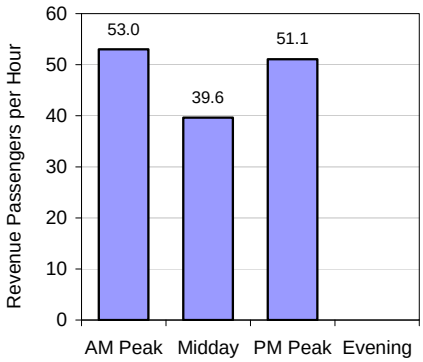
This route shows very sharp morning and afternoon peaks due to the strong commuter market. Malaspina students form a key component of this.

Weekday Rides by Passenger Group



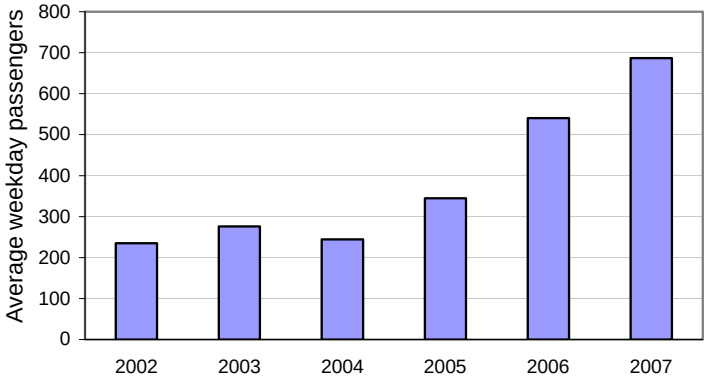
This route has a very high proportion of adults, many of whom are Malaspina students. High school students make up most of the remaining ridership, with very few seniors and BC Bus pass users.

15-Malaspina Connector Productivity by Time Period



This route has high productivity, especially during the peak periods.

15-Malaspina Connector Weekday Ridership Trend

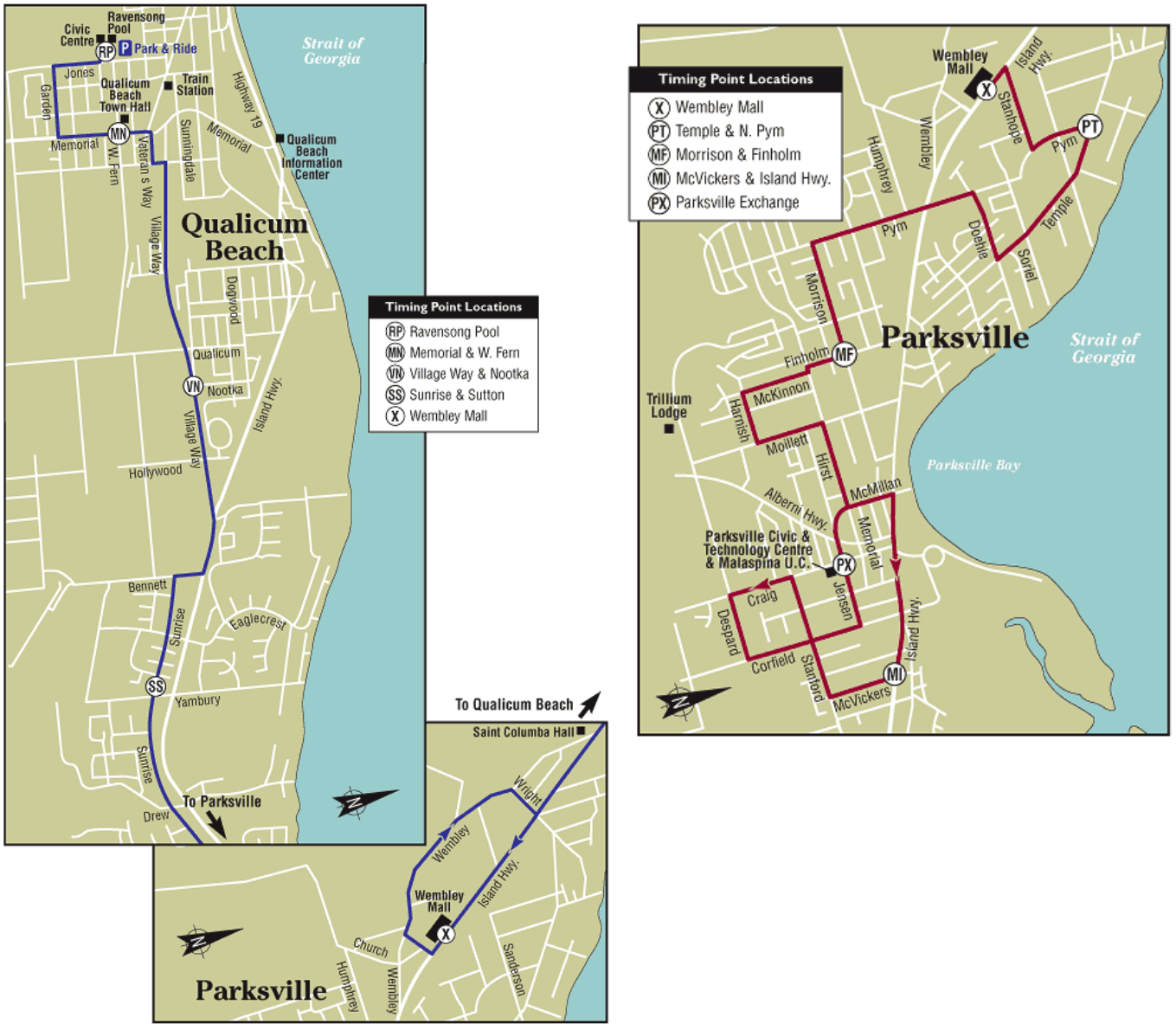


Average daily weekday ridership has been increasing strongly on this route as the service level has been increased. Ridership has nearly tripled since 2004

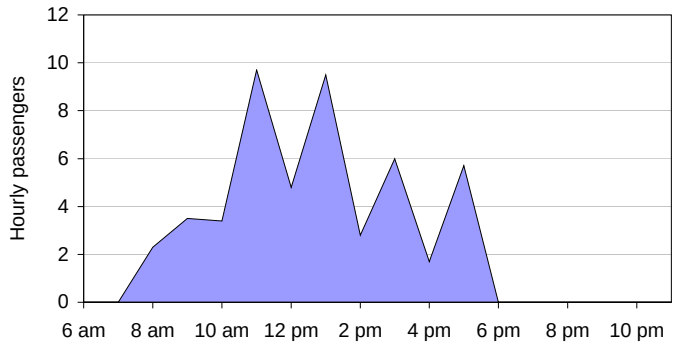
88-Parksville / 89-Qualicum Beach

The 88-Parksville and 89-Qualicum Beach routes provide local service within Oceanside. The two routes both serve Wembley Mall.

The 88-Parksville operates from 8:21 am to 6:01 pm, weekdays and Saturdays, with 6 trips per day. The 89-Qualicum Beach route operates from 10:17 am to 5:29 pm, weekdays and Saturdays, with 4 trips per day.

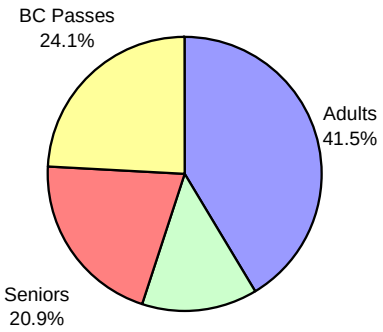


88/89 Parksville-QB Hourly Passenger Boardings



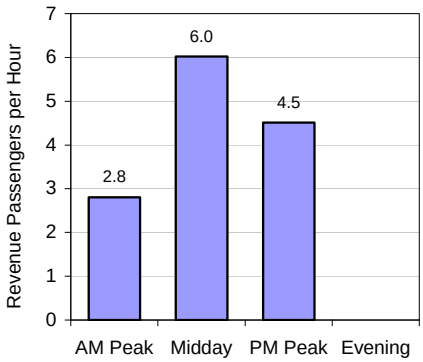
Hourly ridership has no strong commuter peaks, and is more indicative of a midday shopper service.

Weekday Rides by Passenger Group



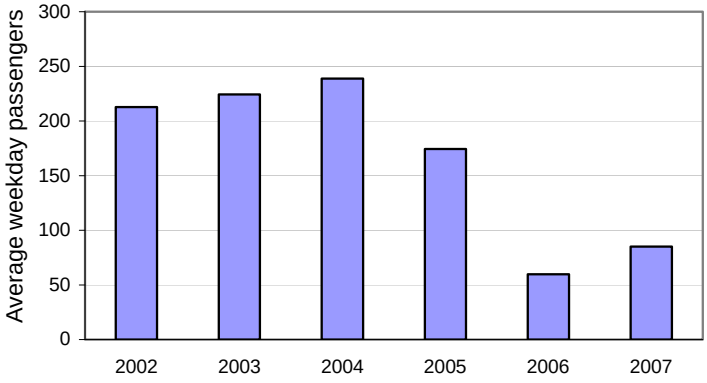
Seniors and BC Bus Pass users make up nearly half of the ridership on this route. This reflects the demographics in Oceanside.

88/89 Parksville-QB Productivity by Time Period



Productivity on this route is very low, espcially during the peak periods.

88/89 Parksville-QB Weekday Ridership Trend

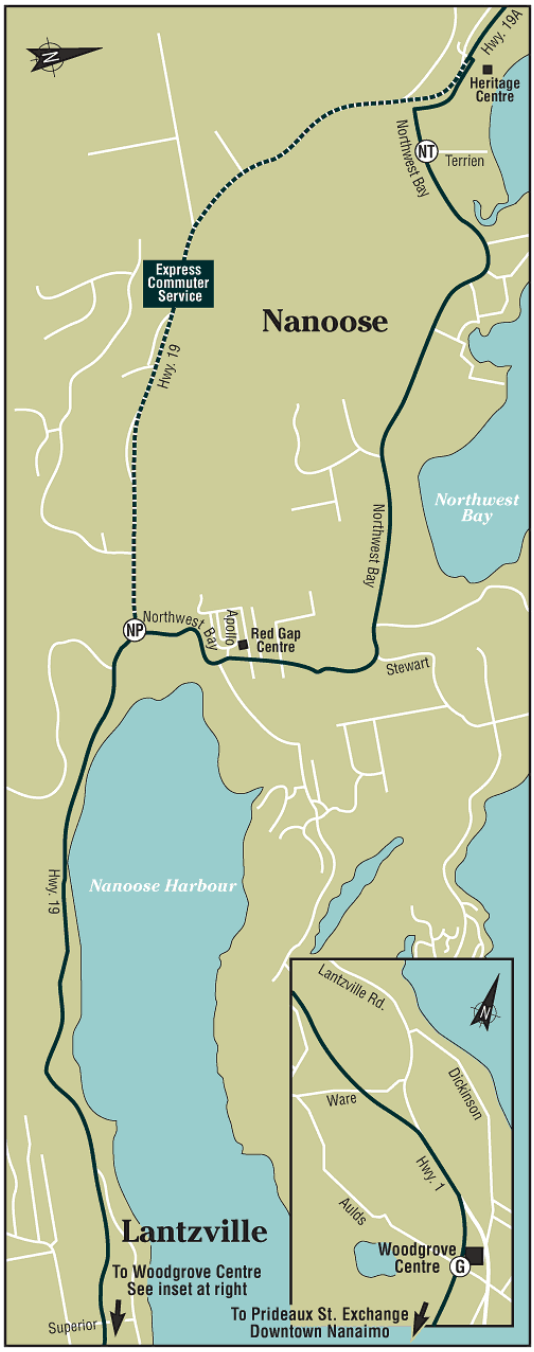


Average daily weekday ridership decreased sharply from 2004 to 2006, then recovered slightly in 2007. Much of this is due to service changes.

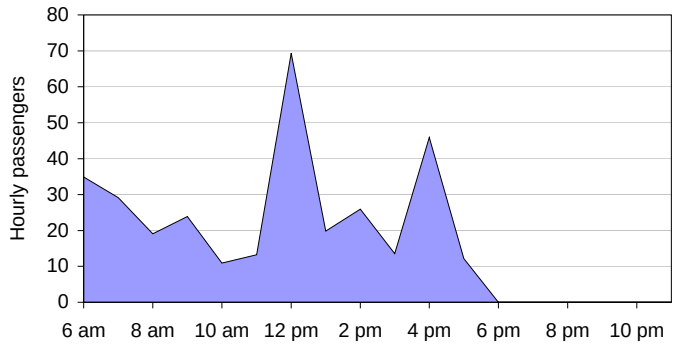
90-Intercity Connector

The 90-Intercity Connector route provides regional service between Woodgrove Mall, Nanoose, Parksville, and Qualicum Beach.

This route operates from 6:27 am to 7:23 pm on weekdays and Saturdays (to 10:44 pm on Fridays only), and from 7:55 am to 9:26 pm on Sundays. Service is roughly every two hours on weekdays and Saturdays, while there are four round trips daily on Sundays.

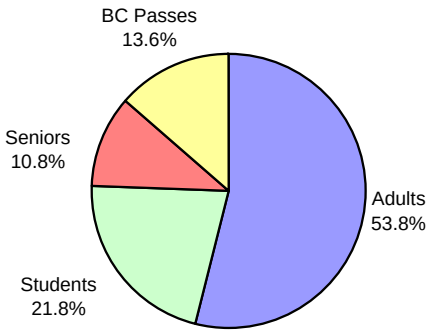


90-Intercity Conn. Hourly Passenger Boardings



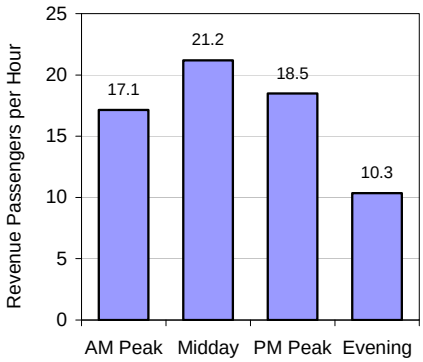
Hourly ridership shows peaks at 12 pm and 4 pm. Service frequency is limited on this route, which is reflected in the hourly ridership profile.

Weekday Rides by Passenger Group



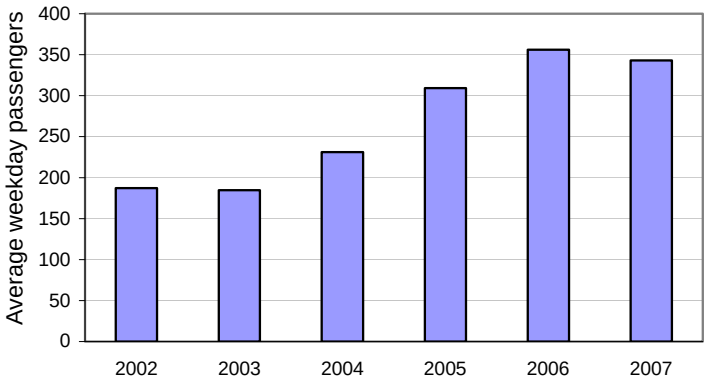
The 90-Intercity Connector route has a smaller share of students and a higher share of seniors and BC Bus Pass users than the system as a whole.

90-Intercity Connector Productivity by Time Period



This route has below average productivity, especially during peak periods.

90-Intercity Connector Weekday Ridership Trend



Average daily weekday ridership increased steadily from 2003 to 2006, then levelled off in 2007. In part, this reflects changes in service over the past few years.

Appendix 2: Summary of Public Consultation

Public consultation is a key part of the Transit Business Plan process, allowing transit users, key stakeholders, and the general public an opportunity to provide input into the plan. This consultation process involved four components at different stages of the development of the plan:

1. Stakeholder meetings to provide initial input on goals and priorities
2. On-board passenger survey to gather input from transit users
3. Public meetings to gather feedback on the draft plan
4. On-line survey to gather feedback on the draft plan

1. Stakeholder Meetings

A series of stakeholder meetings were held between May and July 2007 at the beginning of the Transit Business Plan process in order to assess priorities and community goals for transit in the Nanaimo Region. This initial, front-end outreach is focused on information gathered from informed community representatives. These meetings were conducted by IBI Group consultants, along with RDN and BC Transit staff. Stakeholder meetings were held with the following groups:

- Malaspina University College students and administration
- School District 68 (by telephone)
- Nanaimo Chamber of Commerce and the Downtown Nanaimo Partnership
- Agencies assisting people with disabilities, including the Independent Living Resource Centre, the Nanaimo Association for Community Living, and Community Living B.C.
- RDN transit operators
- Municipal planning representatives
- Ministry of Transportation
- Seniors community representatives

Although there were differences in the mobility needs and transit issues amongst the different stakeholder groups represented, there were a number of similarities in the role of transit in the Regional District of Nanaimo and how transit service could be improved.

Role of Transit

- Provide access to jobs, goods, services and activities – especially for those who cannot or choose not to drive.
- Provide an attractive alternative for those who have access to a household vehicle.
- Support environmental goals – air quality and reduction of SOV dependency.
- Serve existing and new residential and commercial development.

Priority Markets

- Malaspina University College students.
- Junior and senior high students (as School District No. 68 reduces student transportation services with anticipated funding reductions).
- Retail and entry level workers.
- Seniors and persons with disabilities.
- Shoppers and tourists.

Mobility Needs

- Student access to Malaspina University College.
- Access to medical, shopping, jobs and recreation.

Key Travel Destinations

- Malaspina University College
- Downtown Nanaimo – jobs, and retail at Port Place Shopping Centre.
- Nanaimo Regional Hospital.
- Country Club Centre (NCO Communications Centre) and Woodgrove Centre (shopping and recreation).
- North Nanaimo Town Centre, especially for seniors and shoppers
- Parksville – Malaspina students and seniors.
- Qualicum Beach – shopping, seniors
- Malaspina student residential concentrations – South Harewood neighbourhood and apartments near Country Club Centre and Nanaimo Regional Hospital.
- South Nanaimo Lands – planned new residential development.

Transit Issues

- Overloads around high school bell times.
- Overloads on Routes 15 and 44 in/out of Malaspina UC (around 8:00 am, 10:00 am and 12:00 pm inbound, and late afternoon and 9:00 pm outbound.
- Overloads on Route 90 outbound on 5:24 pm trip.
- Current schedules are confusing.
- Infrequent service between Qualicum/Parksville and Nanaimo.
- Lack of direct service to downtown Nanaimo (Downtown Exchange not centrally located – reducing the need to transfer to get to and from downtown).
- Too many buses circulating in downtown Nanaimo.
- Many bus stops are not accessible for persons with disabilities.
- Long on-board travel times on local routes between relatively close origin/destination pairs.
- Difficult to verify and monitor the use of transfers.
- Limited HandyDART capacity and service coverage – communities outside of Electoral District “A” are not willing to fund HandyDART service.
- No formal review of transit operating requirements in development approval process.
- Limited service coverage in Parksville and on Sundays throughout service area.
- Although school enrollment increases are not projected, there will be increased pressure for Regional Transit to provide school transportation as the School District decreases service with anticipated funding reductions.
- Although Malaspina UC enrollment is not expected to increase, there will be pressure to improve transit service for Malaspina students with the introduction of U-PASS.
- No direct service to the ferries from Oceanside
- No buses that are late enough on weekdays to service the needs of Oceanside, for example getting home on the ferry, late night shopping, or movies other than on Fridays
- Need more direct service from Oceanside to the Nanaimo Regional Hospital
- No service to Duke Point or the Airport

Suggested Improvements

- Increase service frequency to improve service convenience and attractiveness – local Nanaimo routes, local Parksville service, and intercity service between Qualicum Beach/Parksville and Nanaimo.
- Increase capacity to reduce standing loads and avoid pass ups.
- Reduce transfer wait times.
- Reduce number of transfers by increasing direct services (e.g., between off campus student residential concentrations and Malaspina UC).
- Introduce a flexible round trip transfer
- Improve transfer design to facilitate easier operator scrutiny.
- Provide more express and direct north/south services to reduce on-board travel times.
- Increase Sunday service span hours – start earlier and finish later.
- Reduce bus circulation in downtown and provide direct service through downtown.
- Do not locate Downtown Exchange in the old downtown core – locate on north or south fringe.
- Relocate Downtown Exchange to area around Port Place Shopping Centre (to reduce transfers). Port Place was identified as a key downtown destination.
- Operate a small bus as a downtown circulator to reduce larger bus movement along narrow downtown streets.
- Increase user-friendliness of service by re-establishing clock-face schedules.
- Establish a service hierarchy of high frequency north/south service with local feeders at the key exchanges of Woodgrove, Country Club, and Downtown.
- Expand service to Nanaimo Airport, Duke Point ferry terminal, and Ladysmith.
- Expand route coverage to reduce walking distances.
- Coordinate Regional Transit services with School District No. 68 student services to eliminate redundancies and to provide coverage where School District No. 68 services are reduced or eliminated.
- Ensure the Intercity connector connects with the Hammond Bay bus that goes to the ferries
- Offer later weekday buses to Oceanside
- Introduce the park and ride concept in key areas to allow access to the transit system from rural areas
- Establish South Parkway Plaza as an intercept park and ride site for commuters from Duncan and Ladysmith.
- Expand handyDART service coverage area and hours.
- Increase handyDART capacity to reduce trip refusals.
- Improve handyDART on-time performance (reduce waits).
- Increase peak time availability for all handyDART customers, not just those lucky enough to be booked already, secured in a time slot where no one else can get the bus (D69)
- Accommodate same day bookings on handyDART.
- Offer a monthly pass on handyDART.

2. On Board Passenger Survey

An on-board passenger survey was undertaken in September 2007. Six surveyors were hired to distribute survey questionnaires on a representative sample of transit trips. A total of 901 completed surveys were collected, representing roughly 10% of daily ridership. These results were used to identify key transit markets and needed improvements to the transit system. Some key highlights include the following:

- The results of this survey have been compared with the results from the last on-board survey done in 2003. The 2003 survey used somewhat different methodology, so some caution should be used when comparing the results. Nonetheless, there did appear to be some significant trends between the two surveys.
- **Ridership by Time Period and Route:** These questions show the distribution of respondents by time period and route. Results from these questions are not used to obtain information on ridership by time period and route, since much better information on this can be obtained from the two week passenger count. Rather, these questions are included as a check that the on-board survey respondents form a representative sample of all riders on the transit system. A comparison of the distribution of on-board respondents by time period and route with that from the two week count shows that the proportions are roughly similar, and indicates that sample is reasonably representative.
- **Trip Purpose:** Trip purpose is dominated by work (30%) and post secondary (27%) trips. Along with high school trips (11%), this means that commuter trips accounted for 68% of the total. In the 2003 survey, only 45% of all trips were commuter trips (including 25% for work trips). Shopping trips dropped from 28% in 2003 to 13% in 2007. While it's likely that these changes are partly due to the differences in methodology between the two surveys, there does still seem to be a trend towards increased commuter orientation for the transit system. Systems typically evolve from "shopper oriented systems" to commuter systems as the community and the transit system grow.
- **Transfers:** While 54% of trips did not involve a transfer, 18% transferred at Country Club while 11% transferred at Prideaux Street. In 2003, 16% transferred downtown while 15% transferred at Country Club. The decline in transfers downtown may be due in part to the relocation of the transit exchange.
- **Frequency of Use:** 78% of respondents are regular transit riders, using the system 4 days per week or more. This is up from 62% in 2003 and again indicates a trend to increased commuter orientation.
- **Transportation Alternatives:** Only 11% of transit users had no other transportation options available. These represent the core "transit dependent" riders. 23% of transit users could have made their trip as an automobile driver, representing the core "choice" riders. Those who cite other transportation options, such as walking or vehicle passenger, tend to fall somewhere between the core transit dependent and choice groups. In fact, walking (60%) was the most frequently cited transportation alternative. (It should be noted that respondents could provide up to 3 answers to this question so the total adds to more than 100%.) Compared with the 2003 survey, there seems to be a shift away from transit dependent riders to more choice riders. Those citing "no other option" dropped from 31% to 11% while those citing "vehicle driver" increased from 12% to 23%.
- **Overall Satisfaction:** Overall, 51% of respondents were satisfied or very satisfied with the current service.
- **Satisfaction by Aspect of Service:** Among individual aspects of the service, people were least satisfied with frequency of service while they were most satisfied with

courteousness of drivers. Compared with the 2003 survey, satisfaction levels were generally down slightly, with the biggest drop related to service frequency.

- **Service Improvements:** The most common request was for more frequent service (44% of respondents mentioned this), followed by more Sunday and/or holiday service (29%). Evening service (16%) and fares (7%) were the next most frequently requested improvements. (As with Question 8, respondents could provide up to 3 answers to this question so the total adds to more than 100%.)
- **Rider Demographics:** The largest group of riders was in the 18-24 age group (41%), with many of these likely being Malaspina students. Females accounted for 58% of riders, which is quite typical for most transit systems.

A sample questionnaire and the tabulated results from the on-board passengers survey are included in this Appendix.

3. Public Meetings

A series of public meetings were held in November 2007 and January 2008 to provide the general public with an opportunity to provide feedback on the draft service options and proposals which had been developed. These meetings were attended by RDN and BC Transit staff. Two meetings were held in the City of Nanaimo and one meeting was held in each of the remaining municipalities and electoral areas making up the Nanaimo Regional Transit service area. The summaries below outline the key discussion and questions from the public at these meetings.

PARKSVILLE - WEDNESDAY NOVEMBER 28, 2007

The meeting started at 10:20 am with seven members of the general public present.

D. Trudeau provided an overview of just what it takes to provide expansion within the system. This includes:

- more buses
- more frequency of service
- weekend service; and,
- service on statutory holidays.

The Board has directed staff to look at trying to improve the system by offering the above additional services. The cost involved is $720,000 out of a $12 million budget. That $720,000 would have to be paid by the taxpayers but BC Transit, who also provides funding, has recently come forward with more financial support in our cost-sharing agreement. Therefore, the numbers were re-worked and it will mean just a small increase in transit user fees. This proposal was brought to our Transit Select Committee and then discussed with municipal staff. It is important that this fits with any other plans of the municipalities. Our goal is to improve transit but we have to work within reason. It is a balance.

Once approval was received from the Board, we could move ahead. We need time to put together a proper business plan. The phases involved in the 2008 are:

- improvement in routing and frequency
- Sunday service
- statutory holiday service for 7 statutory holidays. This will not include Good Friday, Christmas Day or New Year's Day.

There will be a fare increase of 5% on monthly passes only. Funds required are $5 million, which will be acquired from tax requisitions, $4 million from BC Transit and the remainder from transit users.

We have these meetings once a year to give people who ride the buses an opportunity to provide proposals as to what they would like to see. One of the challenges for District 69 is that they do not have the density as in other areas. Again, there is a 'balance'. It is important to have connections to bigger services in Nanaimo, i.e. the malls, Mal-U, NRGH, etc. We need to look at finalizing the service options. A report must go to the RDN Board for approval. We use the TBP as a map for moving forward.

I will now offer you the opportunity to offer comments or questions to myself and members of our staff who are present:

QUESTION / COMMENT: Regarding 'Pym-Sorrell Route'. The distance from the bus stop to home is too great, especially for seniors.

DT: We try to make a route that is efficient and serviceable to most people. We will take a look at your request for that particular route to see if there is anything that can be done to resolve the issue. In the New Year, we will also be getting an additional 2500 hours of handyDART service.

QUESTION / COMMENT: Should have an extra handyDART on during the afternoon as there are a lot of mentally challenged people that use the system at that time.
DT: At the present time we are limited to the number of hours that we can schedule. We have only 48 hours. We will check to ensure that the allotted hours do meet the needs of the community. Transit does try to have buses until 5pm rather than 4pm. Also, we provide service on Mondays and try to have an additional bus in the afternoon so that we can have more accessible service between 3pm and 4pm.

QUESTION / COMMENT: Bus service is subsidized. Perhaps Transit should be looking at funding available from business partnerships.
DT: We have gone to the malls for subsidized bus service on holidays. Another partnership is with the cruise ships that come into the harbour throughout the summer/early fall seasons. This past summer/fall of 2007 we transported 5,000 people. ProPASS is another form of subsidization. It is set up to allow large employers to commit for a year for passes. Only five employees are required to sign up and enjoy a reduced rate for transit travel.

QUESTION / COMMENT: H. Hicks noted that years ago when she was a member of the workforce, she made a deal with her employer to pay for her bus pass.
DT: D. Trudeau noted that we are looking at ideas such as this with the different malls. Malls are now noticing the advantages of having buses based there.

H. Hicks encouraged Mal-U to increase their parking rates for staff and provide their employees with bus passes. D. Trudeau noted that buses that travel to Mal-U are full so even if Mal-U increased parking rates, we would still enjoy good ridership.

QUESTION / COMMENT: It was suggested we use buses from the private institutions/lodges, etc. for transporting seniors or handicapped clientele.
DT: We need to look at handyDART to provide transit service when users cannot use the conventional transit system. Door-to-door taxi service would average $20 as compared to $2.75 one-way for handyDART. Again, we must see how this fits into our plans.
QUESTION / COMMENT: Trillium has discontinued their bus service. Perhaps transit should talk to the Trillium Lodge administrator to see if transit could offer a service to take residents home for meals, outings, etc.

DT: Thank you for your idea. handyDART should advertise more and we will also note your suggestion.

QUESTION / COMMENT: Shelters are needed along the highway, in particular at the Island Highway and Wright Road.
DT: Application has been made for grants using gas tax money to improve our shelters. Grant applications totaling $3.1 million have been submitted.

QUESTION / COMMENT: Why is there not a bus shelter on mall property? I have been working for quite some time to get a bus shelter besides Save-On Foods. Presently there is just a bench there.
DT: This particular bus stop gets heavy use and should be improved. I will look into this. Bus stops/shelters inside municipalities are the responsibility of the individual municipality.

The Ministry of Transportation looks after those along the highways. Stops/shelters at malls are most often a partnership, except the Prideaux/Fitzwilliam exchange, which is solely the responsibility of the RDN.

QUESTION / COMMENT: We need Sunday service for shopping and going to church. It would be nice to have drop-off routes as close as possible to churches.
DT: Sunday service will be improved as of January 1, 2008. We were getting a lot of requests for workers who have to get to their jobs at the malls in time for their shifts. J. Adair noted that there will be an additional 4 trips to Oceanside and Qualicum Beach from Nanaimo and an additional two from there back to Nanaimo.

QUESTION / COMMENT: The Baptist Church has event happening each day of the week. If we bring service to there, there would be more riders using the system.
DT: There is always a challenge with a decrease in service in Qualicum Beach. The frequency is down. When BC Transit was looking at it before, prior to J. van Schaik assuming the position of Transit Planner and Contract Administrator – Municipal Systems, the staff member then advised we were right 'on the borderline' to carry service to the community. D. Trudeau advised those present that it is a policy for management staff to ride the buses at least once a week. Due to work commitments, this usually works out to be about one every two weeks. However, it is a way to keep a close watch on service to the community.

QUESTION / COMMENT: Why do you not listen to the bus drivers?
DT: Every run that is put in is vetted by the bus drivers that sit on the Scheduling Committee. They are very involved in route changes, frequency of routes, etc. We sit down with them at an early stage and listen to our drivers.

QUESTION / COMMENT: H. Hicks noted that many people comment on how few passengers they see on the buses. She shared a comment from a driver that the number of passengers riding the bus should be shown on the rear of the bus. This would be one way to display the true numbers of riders, not just the one you may see as you are passing a bus.
DT: D. Trudeau explained how the lesser density routes come into Woodgrove Centre, Country Club, etc. and definitely do fill up the buses with transfers and new passengers. An example is the Move Bus, which operates on Fridays from Qualicum Beach to Nanaimo. This is so successful an idea that we have had to put more buses on. There is an opportunity to get double-decker buses, which will give us a higher public profile.

A comment was received that the Movie Bus does not provide connections with the Port Theatre. D. Trudeau noted that this is indeed true at the moment but that we will take a look at possible connections. He said this is the first time he has heard this particular comment. We will see if it is just a matter of a bus connection to see if we can get people up to the Woodgrove exchange more quickly. Frequency is always something we can expand upon. Maybe we need to change the route. Another 5,000 hours is expected in 2009.

He noted that in the Grow Management Plan nodes and boundaries have been created for municipalities. Coombs-Errington is one of the nodes and to make them viable they need a connection to transit. Bowser and Extension are also nodes that will need transit to make them viable.

QUESTION / COMMENT: Why are there not more Park 'n' Ride areas?
DT: We need to be very careful about these areas.

QUESTION / COMMENT: Is there any way to make our schedules available to the taxi companies?
DT: We did look at this and taxi companies did agree that they would be available for connections for transit passengers. We have a location at Ravensong.

QUESTION / COMMENT: H. Hicks noted that she attended an event at the Port Theatre and actually questioned attendees as to which bus they were taking. Only two of all the people she asked were using public transit.
DT: To be honest I don't think it will be a market for transit because people are usually dressed more formally when attending events at the Port Theatre. We grouped seniors and students and are now focusing on increasing ridership among the 'middle' group.

QUESTION / COMMENT: Buses do not go down enough for pushcarts. Usually if you have support from the driver you can get your cart on board.
DT: I understand your concern. The buses do go down to allow wheelchairs to get on fairly easily.

QUESTION / COMMENT: Will there be an increase in fares?
DT: D. Trudeau explained that this will be the first increase in six years. There will be an increase in monthly pass fares only.

QUESTION / COMMENT: How much are the other fares being increased?
DT: D. Trudeau again noted that there will not be an increase in other fares.

QUESTION / COMMENT: Are you intending for commuter/shuttle buses to provide more service?
DT: Service has already been tried. I believe it is more of a frequency issue and this will be reviewed for possible implementation in 2009.

QUESTION / COMMENT: Why is there not more frequent service for Parksville, Qualicum Beach and French Creek areas?
DT: This service will be increased but not Monday through Friday. Increased service will be provided for Sunday and seven of the 11 statutory holidays.

QUALICUM BEACH - WEDNESDAY NOVEMBER 28, 2007

The meeting started at 3:15pm with 53 members of the general public present.

D. Trudeau talked about identifying a service that is needed and actually implementing it. An example of this is the Friday night Movie Bus, which has proven to be very successful. A report from the Transit Select Committee was taken forward to the Regional District of Nanaimo (RDN) Board who provided direction to go ahead and determine the implications of offering this service. It took almost one year to put this service into operation. The RDN is composed of many areas. For any changes/improvements in service, reports must first go forward to the Board for approval. We expect a much better system in 2008 and over the next five years our challenge will be to create an even better one. We need to think smart and schedule runs so that ridership is full.

Trudeau noted that in 2008 the community can expect an expansion of service including:
- more buses
- more frequency of service
- weekend service; and,
- service on statutory holidays.

It is also important that transit plans fit with any other plans of the areas/municipalities it serves. Our goal is to improve transit but we have to work within reason. It is a balance. The TBP is a map we can use for moving forward.

QUESTION/COMMENT: Wayne Brown, QB. People will use the service if it is available. I would like to see a Park 'n' Ride service to the BC Ferries terminal on Departure Bay Road that operates on Wednesday and Saturday. This could leave the Civic Centre; go to Wembley Mall, to Northfield and directly to the BC Ferries terminal. The new ferries will be bringing in about 1600 people and having a system in place that offers direct service would alleviate further congestion. It is possible that people from Port Alberni and surrounding areas would use this service. If it is efficient and serves the community's needs, it will be used. This is a retirement community and this would offer yet another service to entice people to live here. This would allow residents to go over to the mainland for shopping, shows, etc. and back home by 11pm the same day.

Another member of the audience had a similar comment but would like to see the service expanded so that it is wheelchair accessible. The problem now is that there is only space for two wheelchairs on the bus. If there is a service to the mainland, please ensure there is room for wheelchair users.
DT: With regard to service from Qualicum Beach through to the BC Ferries, the RDN has a bylaw whereby the cost is based on the use of the system, i.e. how many hours the bus is in Qualicum Beach. The tax requisition is based on this as well. If we had a service from Qualicum Beach through to the BC Ferries then it becomes a specific service for a specific area and that particular community would be charged for it. D. Trudeau noted the need for making connections via transit to the BC Ferries. We will be taking a look at this at our Transit Select Committee meetings. This type of service just cannot be initiated overnight. We have to get a Board resolution to allow us to move forward.

QUESTION/COMMENT: The last bus coming back to Qualicum Beach is at 6:30pm. Not having a later bus makes the afternoon schedules very ineffectual.
DT: Whenever we pull a service from one run, it may affect different people each time and therefore we may end up affecting 100 people. When we pull a run out we do look at all avenues. Having buses at the end of the day also allows more access for wheelchair people.

QUESTION/COMMENT: Larry Thomas. What was the cost of putting in the movie bus?
DT: $1700 per month for the four days per month that it runs. This is cost shared by Qualicum Beach, Parksville, Electoral Area 'G', Electoral Area 'E' and Nanaimo (District 68).

Mr. Thomas wanted to know how this is different from the requested bus to the BC Ferries.
DT: People coming in on the movie bus can still access the whole system, not just a direct route to the BC Ferries terminal.

Mr. Thomas asked whether a bus could run from Qualicum Beach to Woodgrove Centre and then passengers could transfer to an express/shuttle bus to the ferry terminal.
DT: If we have an existing route that services District 68, then it would be cost-shared among Electoral Area 'G', Electoral Area 'E', Qualicum Beach, Parksville and District 68 (Nanaimo). We are hearing that you want a better run to BC Ferries and we will be looking closely at this.

QUESTION/COMMENT: The last bus from Woodgrove Centre at 5:30pm has only two spaces for wheelchairs.

DT: There is a 6:30pm bus and I can assure you that we have never left a person in a wheelchair behind nor would we. We have never had that incident happen.

QUESTION/COMMENT: I would like to reiterate – getting to a movie versus getting to the mainland. To me, getting to the mainland is way more important. Often #90 and #2 do not connect. I would just like to emphasize the importance of it.

QUESTION/COMMENT: Donna Lynn Brown. I just want to reiterate the importance of bus service and the efficiency of service. If there is efficient service, it will be used.
DT: We are trying to make the system as efficient as possible to accommodate as many in the community as possible. With a 5-year plan we can look at a 5-10% increase so that people are aware it is coming. There will be further expansion in 2009, which will be about 5%. This may offer the opportunity to provide specific runs that may address the BC Ferries service.

QUESTION/COMMENT: Worker/driver program in Kitsap. I am concerned about the inefficiency of driving empty buses.
DT: Our system runs north to south and is destination/exchange related. Our main station is at the north end and when we begin, we do so by deadheading north and south.

QUESTION/COMMENT: Jack Ellison, Qualicum Beach. You had students talk to the ridership about why they use buses. I suggest that they talk to groups such as this. They need to consider the demographic changes – people live here but work on the mainland. The problem is he stays overnight in Vancouver due to safety concerns for his wife having to drive to pick him up. There is now a lack of specialists for doctors/treatment on the island. There needs to be a service to accommodate this. Service needs to be available regardless of the cost. Is it a different type of service that is needed, a user-pay service perhaps?
DT: We would have to take a look at other service that is available before considering such a service.

QUESTION/COMMENT: Wayne. Island Link cannot service the entire area. Service needed to Woodgrove to BC Ferries. Once people are dropped off the bus can go into the system and return back to the terminal at night to pick up from the second last ferry.
DT: Inside Nanaimo the majority of people have to change buses to get to the ferry terminal. The challenge with transit system is that we deal with a variety of passengers. We do have flexibility but when you are expecting to connect, let the driver know and they will hold over as long as possible to accommodate you.

QUESTION/COMMENT: Not everyone can afford $25 to ride. We need public transit.

QUESTION/COMMENT: I travel back and forth from the mainland on the weekend. Connections are sometimes an issue. On every ferry there is a Greyhound Bus, which brings you right to the corner of the street. People need to plan their trips to take advantage of connections between various service groups.
DT: We are receiving more pressure; we are hearing that pressure and we are trying to accommodate the needs of the population.

QUESTION/COMMENT: Have you investigated the West Vancouver Transit System? It is an incredibly efficient and well-used service. It does not meet every boat or extras sailings but it is an amazingly efficient operation.
DT: The West Vancouver Transit System is five times larger than our system. They are able to do more since there are more people to share the cost.

QUESTION/COMMENT: I do not use Transit because it is inefficient.
DT: What are your needs? We need to identify the needs and address them. The expenses need to be calculated and the recommendations taken to the Board.

QUESTION/COMMENT: Have you thought about contracting local service providers with smaller buses?
DT: The RDN has a Union contract, which outlines specific wages. This is also in effect for custom buses.

QUESTION/COMMENT: When TransLink decides they choose a supplier. We should not be held hostage to a Union.
DT: This is the way it is.

QUESTION/COMMENT: How do you determine the cost of improved service so that we could decide if service needed could be offered? Can this be calculated so that the people could know their options?
DT: This is the type of information that will be brought to the Transit Select Committee so the decision that is made is an informed one.

QUESTION/COMMENT: We are not talking about an express bus to the ferry terminal every day but merely four times a week.
DT: This is a little bit challenging to fit into a schedule. The Movie Bus also allows people who are in District 68 to go into District 69 so it is a different calculation of costs.

QUESTION/COMMENT: Mrs. Prefontaine. We do need an express bus service to the ferry terminal. I am also concerned about bus service to the hospital (NRGH). Will there be changes forthcoming? Will there be a closer drop-off for riders going to the hospital?
DT: We have received requests for better connections to NRGH. Proposals for expanded service in 2009 do show that the #3 Hospital bus will extend to Woodgrove Centre. This will mean only one transfer to the hospital.

QUESTION/COMMENT: Vivian. I use the bus that departs at 9:38am from the Civic Centre to Woodgrove. There is usually only one rider on it. Isn't this a waste of money?
DT: This is a bus that has finished its run and is offering at least some service. It was deadheading back to Nanaimo and I decided to offer benefit to passengers who may want to use it.

QUESTION/COMMENT: From all commentary, I realize and commend the flexibility of our bus service. It is important to communicate information so that people will be aware.
DT: We are looking at doing this any providing more information on the system to our ridership.

QUESTION/COMMENT: I often see large buses running empty. Can smaller buses not replace these buses?
DT: We could do this but the smaller buses are not usually wheelchair accessible and this would reduce flexibility.

QUESTION/COMMENT: If extra buses were put on for Mal-U during the school year, could the communities utilize these buses when they not being used by Mal-U during the summer months in order to get more service?
DT: We will consider this.

QUESTION/COMMENT: It is a balancing act in providing service. How do you decide on these hours? handyDART is over prescribed and would we be making a choice?
DT: When we get a bulk of service, it is usually broken up as 9% for District 68 and 10% Parksville-Qualicum Beach.

QUESTION/COMMENT: John Roberts. With regard to marketing, you need a little more intensive marketing campaign, i.e. leave your car for the day at a mall, etc. and use transit to get to other connecting services. Try to increase financial savings and make the general public aware of these savings.
DT: Comments/concerns re connections to other mobility sources are being heard from many different areas.

Teunis Westbroek, Mayor of Qualicum Beach feels that the time is very appropriate to request the Nanaimo Regional Transit System to investigate an express service run from Qualicum Beach to the BC Ferries terminal, which would run at least once or twice a week. He noted that the implementation of the Movie Bus, which is greatly used by the citizens in the area, took 1-1/2 years to bring to completion.

He noted that some services would not be available to Qualicum Beach for a long, long time. We need to demonstrate that how we allocate funding makes a difference on our environment.

What are the chances and how much will it cost to have more direct transit from Qualicum Beach?

D. Trudeau thanked those in attendance for coming and sharing their views and concerns with staff. He noted that the comments and suggestions presented today have been recorded and consideration will be given to the continued improvement of service to the Qualicum Beach area.

NANAIMO - THURSDAY NOVEMBER 29, 2007

The meeting started at 1:15pm with 28 members of the general public present.

L. Kiteley provided an overview of where we are with Transit and where we want to go. Transit is a very complex system. We have great ideas on improving the system; it takes up to one year to implement any/all good ideas. We just completed a 5-year business plan and it is time to take a look at where we want to be. The provincial government froze funding after the last Transit Business Plan (TBP) we actually had to cut services rather than implement expansions.

We have an expansion planned for 2008. This includes statutory holiday coverage and increased Sunday service. We cannot do it all at once but will do as much as we can than take a look at it again next year. There will be more frequency of service where we will try to balance the needs workers and students plus users to areas such as the hospital, etc. This will address commuter issues and will also improve access to Mal-U. We have tried to improve some of the routing in order to decrease transfers. Some will be done in our 5% increase each year. L. Kiteley reviewed the content of the posters for the audience, identifying requests that have been incorporated into the expansion plan. She specifically mentioned Transit's awareness of the need to improve service to the ferries. This is expected to come about by 2009. These are some of the ideas that the TBP actually addresses. This gives our Board and Regional Directors information on how it will impact taxes.
L. Kiteley opened the floor to questions.

QUESTION/COMMENT: Why was the airport connection removed?
DT: We will be looking at improving service to the airport and Duke Point. It was removed due to lack of customer use at that time.

QUESTION/COMMENT: Why cannot employers get bus tickets at discount price for their employees?
LK: When an employer has five or more employees who wish to use transit, they can obtain what is called a ProPASS. This offers a reduced fare and is offered through payroll deductions.

QUESTION/COMMENT: Why can't transfers be valid for a longer period of time rather than for the next connecting bus?
LK: This is one of the things that we are thinking of. There are other communities within BC Transit that have started a flexible transfer program. P. Murray, BC Transit, noted that in these other areas a transfer is generally good for a 60 to 90 minute period and can be used in either direction.

QUESTION/COMMENT: Getting around on a holiday is difficult because there is no bus service.
LK: After January 1, 2008 there will be service on seven of the 11 statutory holidays. At present there is not enough funding to do all 11 but this will be done incrementally. The malls are not open on the four statutory holidays during which service is not offered. The seven statutory holidays chosen were those most frequently requested.

QUESTION/COMMENT: What is included in the 5-year Transit Business Plan?
LK: An increase of 2400 hours is expected and this will be the first increase in over 10 years. This will be coming in June or July 2008. The hours will be based on shared costs in communities.

QUESTION/COMMENT: Why is there 'piggy backing'? This is very inconvenient and cold in inclement weather. This should be corrected now.
DT: Transit was presented with many challenges when we had to move the location of our downtown exchange, one of which was where we accessed the Port Place Shopping Centre. In the new schedule the #1 Downtown and #2 Hammond Bay will access Port Place as of 2008. From the exchange at Prideaux/Fitzwilliam they will be going to Port Place. The wait is due to the fact that some of the drivers require their break but at least with these changes there will be improved access. The move of the downtown exchange has created many problems.

QUESTION/COMMENT: Why is there no bus connection from Port Place Shopping Centre to my home just off Stewart Avenue? Also, all buses arrive at Country Club Centre at the same time. Perhaps you could vary the times of arrivals/departures.
DT: These are the types of comments we have been getting for the past few years. This is something we are looking at and are trying to improve.

QUESTION/COMMENT: Why was there not sufficient notice for the public consultation meeting? Also, there is often insufficient notice when bus service is halted or re-routed. Why?
LK: Posters noting the dates and times of the meetings were placed on the buses. They were also put in the local newspapers.

QUESTION/COMMENT: Will there be more Cedar buses?

LK: Yes, in 2008 and 2009.

QUESTION/COMMENT: Several of us are 'lost' by the terminology, i.e. 'TBP'. I feel that transit is a public service not a 'business plan'.
LK: Noted.

QUESTION/COMMENT: It would be nice to encourage people to be more courteous on buses. Do you ever ride the buses?
LK: Yes, it is policy that our management team rides our buses a minimum of twice a month, sometimes twice a week.

QUESTION/COMMENT: What about a whole month?
LK: J. Adair does this regularly. This allows him to see if connections are too light, etc. Also, we have our supervisor who does timing checks to determine whether buses are on time, to check timing performance, etc. If frequency increases this will not be as big an issue.

QUESTION/COMMENT: I would like to see Transit work with the City of Nanaimo (CON) to stop urban sprawl. Transit should be integrating plans with the CON.
LK: Transit has met with the CON Engineering Department, representatives of the Official Community Plan and others who share your concerns about urban sprawl. It is definitely a coordinated effort.

QUESTION/COMMENT: Hermine Hicks. It looks like everything is going to Woodgrove, which is not a community friendly mall.
JA: The bus stop at Nanaimo North Town Centre (NNTC) will be moved across from London Drugs. The #8 South and the #9 North buses will be stopping at the new stops. This is a safety issue as it is very difficult to manoeuvre the large buses around the corner and across the lane of traffic. There is a pedestrian crosswalk for passengers' use.

QUESTION/COMMENT: Hermine noted that if it is a danger for buses, it is a danger for users.
JA: By doing this, it will also eliminate eight minutes of running time, which is significant. It allows increased trips on the #8 and #9 by about 40%. This change was made based on feedback received.

QUESTION/COMMENT: Hermine commented that if Transit is so concerned, you could stop the bus on the other side of the mall at the Main door. The #8 can still go the same way as before.
JA: Input is good but when you make one change you affect the whole system. It is referred to the 'paid to platform ratio' – how much of the day you spend picking up passengers and how much deadheading.

QUESTION/COMMENT: Hermine observed that speaking for everyone, NNTC is the only bus friendly mall in Nanaimo.
JA: This is a valid point. Transit tries to serve a variety of users and obtain a balance.

QUESTION/COMMENT: Hermine noted that most people would rather have it the way it is now.

QUESTION/COMMENT: Seniors cannot walk across the road so why remove a service from the only bus friendly mall in Nanaimo?
LK: It is only good for the bus until we have an accident.

QUESTION/COMMENT: I would like to see service accommodate the Clipper hockey games. As it is now, I have to leave prior to the end of the game in order to catch my bus.
LK: Good comment.

QUESTION/COMMENT: How are we doing with smaller shuttle buses downtown?
LK: This is one of the things talked about. We are trying to remove as many larger buses as we can. This was looked at in depth for 2008 but we did not have enough hours. It is an excellent way to bring people back and forth.

QUESTION/COMMENT: What period does this Transit Business Plan cover?
LK: It covers 2005-2009.

QUESTION/COMMENT: Is there support to relocate the downtown exchange?
LK: This is a totally separate issue and there will be a public meeting solely to discuss this.
DT: The Board has directed us to consider other options and we are looking at different locations. We had a 3-year lease for the Prideaux/Fitzwilliam exchange so a decision must be made by **June** 2009.

QUESTION/COMMENT: What about the Vancouver Island Coach Line bus depot?
DT: In discussion re a possible partnership.

QUESTION/COMMENT: Is there any thought about incorporating the existing railroad into the transit system?
LK: Transit has not been in discussion with railway owners regarding this.

QUESTION/COMMENT: It might be possible to use the railway as a north-south route with buses linking to this for connecting routes.
LK: Appreciate your comments.

QUESTION/COMMENT: Will we be getting any new buses?
LK: We are expecting five new buses in December and another two handyDART in January 2008/

QUESTION/COMMENT: I live in the south end and it seems as though we are forgotten. What about the residents who cannot get to service centers?
LK: Transit looks at four different ridership counts before a change in made in service.

QUESTION/COMMENT: This still does not help folks who live beyond South Parkway Plaza. I have to leave at 8:30am in order to make a 12-noon appointment and then cannot get home until the 5pm bus. First you must improve the service and then you will get the ridership.
LK: First we need to try to increase frequency. If this is improved, then your situation will not exist.

QUESTION/COMMENT: When taxes go up, does the share to transit go up also?
LK: Yes, and this is how you can provide more expansion.

QUESTION/COMMENT: handyDART passes were eliminated. Is there any chance of bringing them back?
LK: No, but the forthcoming price break should compensate.

QUESTION/COMMENT: Can changes to the *Rider's Guide* be released earlier to the public for comments? I work doing bus training with the handicapped and this would be very helpful.
LK: Due to production issues this year we were unable to do this. If you leave me a contact number, I will be sure to send you the information electronically.

QUESTION/COMMENT: We need more advance notice of bus stop closures.
LK: These cannot be put on the radio because there is no one at the radio station at 5am to receive our call.

QUESTION/COMMENT: Can you not put *Rider's Guides* on all the buses?
LK: This was stopped due to wastage.

QUESTION/COMMENT: I would like bus service along Townsite to connect with the Island Highway. I ended up having to take #44 to Harewood, then go all the way back, almost to where I started in order to get to my destination.
LK: Great suggestion.

QUESTION/COMMENT: Can bikes or scooters go on all conventional buses or just on handyDART buses?
LK: All the low floor buses of which we have 36 in our fleet will accommodate them. It is listed in the *Rider's Guide* which buses take these.

NANAIMO – THURSDAY, NOVEMBER 29, 2007

The meeting started at 5 pm and there were 3 people who attended.

D. Trudeau, L. Kiteley and J. Adair welcomed the attendees. They then proceeded to review the posters, which outline the proposals to expand transit, on a one-to-one basis with them. Any questions/concerns from these individuals were explained and information provided as to proposed transit expansion.

The individuals were thanked for coming and asked to complete a feedback form. They were advised that all comments from the previous meetings, most of which received better attendance, have been recorded and that feedback is appreciated.

CEDAR – JANUARY 7, 2008

The meeting started at 6pm with seven members of the general public present.

D. Trudeau welcomed the attendees and introduced Electoral Area 'A' Director Joe Burnett and Electoral Area 'C' Director Maureen Young, as well as staff members present.

J. Adair, Operations Superintendent, provided a brief overview on where the 2008 expansions have happened. The primary two areas that have benefited are Sunday service and service on statutory holidays. Service on Sundays has been expanded from 7:30am through to 8:30pm. A new #7 route has been created within Extension and there has been a 40% increase Monday through Friday for the #8 South and #9 North. The #15 Malaspina UC Connector has also seen a 40% increase plus service frequency to Oceanside area has been boosted.

D. Trudeau noted that about a year ago the RDN Board asked Transportation Services to look at weekend service and service on Sundays. We had J. Adair and staff create an entirely different schedule. What needed to be done was to break out how many kilometers were in each electoral area and how many hours of service in each (10,000 hours of service costs about $1.2million). We created a committee involving 19 different stakeholders and a survey was done by Malaspina University-College students over a period of two days to determine how the system might be improved. We received a total of 1,000 surveys from our ridership. The comments from the stakeholders group and those from the surveys helped our consultant (IBI Group) to prepare options.

L. Kiteley, Manager, Transportation Services, noted that we formed a Stakeholders Committee with 19 different groups represented and a consultant to look at the transit system from a fresh start. Currently 68% of our ridership consists of students and commuters, which mean early morning service and later evening service are important. Improved service to BC Ferries was another popular request. L. Kiteley reviewed some of the proposed route changes as outlined in the posters on display. One particular suggestion is for the #3 Hospital buses that would have the route starting at Woodgrove Centre then down to NRGH and on to Port Place Shopping Centre. Also, L. Kiteley noted that we would like to look at a BRT (bus rapid transit) line that would connect with five major areas to Woodgrove Centre. Route #2 is a very linear route and we have added a #2A that will allow more frequent service in specified areas. These posters represent just some initiatives that came from our meetings and from the rider surveys.

D. Trudeau thanked Jason and Laura for reviewing the route changes and future proposed changes. He then offered the audience the opportunity to make comments or ask questions of him or staff members. He started by noting that it would be a great idea to have a bus connection with Ladysmith. He has received a call from the Mayor of Ladysmith requesting this. The Mayor thought Ladysmith residents would rather connect to Nanaimo than points south. We are looking to see if this is a possibility. A service agreement would need to be worked out and the proposal brought to the RDN Board. This would allow service to from Ladysmith to Duke Point, the Nanaimo Airport plus increased service to Malaspina University-College, etc.

QUESTION/COMMENT: Is there a possibility for a shuttle bus service to Vancouver airport?
DT: There are private services and we must ensure as a transit authority that we do not run someone out of business. Perhaps this could be a contracted out service. We are a short haul provider and we are looking at making better connections with long haul providers. Perhaps this could be achieved through a public/private partnership.

QUESTION/COMMENT: Is there a private shuttle from Qualicum Beach to the BC Ferries now?
DT: Yes.

QUESTION/COMMENT: What about having a different kind of transportation – are you thinking about smaller vehicles that people could take in order to connect with larger fleet vehicles?
DT: We have very large buses (39 seats/75 standing room) as well as Polar vehicles which are 20-seaters. We have the ability but these are not the best since they are not wheelchair accessible. The best use for these smaller type vehicles are in areas such as downtown. We expect to have double decker buses in the system in the next while. These will be more cost efficient.

QUESTION/COMMENT: What if there were smaller buses to service the smaller communities? The service may be better utilized by the residents.

QUESTION/COMMENT: How far is it from Ladysmith to Woodgrove Centre?
DT: 35-40 kilometres.

QUESTION/COMMENT: Why are we not accessing the train?
DT: Our system is buses; the train is the Island Corridor Foundation.

QUESTION/COMMENT: To utilize the train system, you could have smaller buses going from the train route.
DT: Our downtown exchange is at Prideaux/Fitzwilliam, which is just across from the train station so this could work to our advantage.

QUESTION/COMMENT: Riders must petition for rider representation on the RDN Board. (see attachment).

QUESTION/COMMENT: Integration is important. I would like to see some leadership role regarding integrating with the railroad. The real solution might be to get people from Comox through to Vancouver. I would ask that the Transit Select Committee take a leadership role in initiating integration with transportation by rail, marine and air. Railroad yards could be used to start a foot ferry service to downtown Vancouver. We really have to look at a central transportation hub in downtown Nanaimo. Busing is talked about as a 'subsidy' whereas roads are considered 'infrastructures'. Again, you need to consider a more pro transportation system.
DT: We need to have efficiency in such a system. Making certain that we hear what the people want is the reason why we are having these meetings. It is policy for our management team to ride the buses each week to try to determine where positive changes can be made.

COMMENT: Again rider representation on the RDN Board was reiterated. There needs to be rider representation on the RDN Board so that the people using the system have significant input.

QUESTION/COMMENT: Likes the idea of expanding bus service to Ladysmith. Why not extend bus service to Morden Road and areas such as Timberlands. These places may be off the route but are densely populated areas that need transit service. Consider extending service to Nanaimo Airport.

QUESTION/COMMENT: Park 'n' Ride. If I am in a car, I will not likely park and wait a half hour for a bus. You need to have people <u>not</u> drive their vehicle at all but rather focus on using the bus.
DT: In District 69 we did have a service that did a loop into a neighbourhood with a fairly dense population. What happened is that direction was received from the Transit Select Committee to eliminate that portion of service. However, we created a Park 'n' Ride at Ravensong and this gives the ridership access to the whole system from Qualicum Beach through to Cedar. Park 'n' Ride is a successful model and we are seeing more of them. If parking fees increase, transit will be more sustainable.

QUESTION/COMMENT: You are measuring how much one area measures over another. Areas that do not want to share the hardship of the other area(s).
DT: Our system is bylaw formulated. It is a user pay system.

QUESTION/COMMENT: Models can change. Maybe set aside 10% of the budget for sharing. Areas that need help can receive help. It is important to break loose from conventional thinking. Again we need to break model.
DT: 50% of the assessment is based on hours and kilometres and the other 50% is based on population. This does provide some buffering of expansion costs. District 69 has a population based model but this does not apply to District 68. We will also be looking at that model for District 68.

QUESTION/COMMENT: Nanaimo benefits from bringing people to downtown Nanaimo.
DT: The City of Nanaimo pays for 90%.

QUESTION/COMMENT: Will the exchange stay in the downtown area at Prideaux/Fitzwilliam?
DT: We are addressing options at our Board meeting this month. We really would like to develop a site right downtown.

QUESTION/COMMENT: Has there been a public meeting on this?
DT: A public meeting has been held and comments have been received on what the public would like to see.

D. Trudeau invited the audience members to review the posters that were displayed. L. Kiteley noted the displays are also available on line. D. Trudeau encouraged those present to complete feedback forms since we need to hear ideas and suggestions from the people.

QUESTION/COMMENT: Announcements on the radio regarding expansion of services did not mention Cedar. Why?
LK: We have had advertising done through A Channel, Shaw Cable, newspapers, on the buses and on our web site that included all areas. A Channel is pro transit. Getting the word out is what is needed. BC Transit paid for radio ads in December, which was quite costly at $1200.

QUESTION/COMMENT: Bus riders have difficulty in attending these evening meetings. Perhaps they should be held at an earlier time.
LK: It's a toss up. In the electoral areas it has been determined that it is best to hold the meetings in the evenings.

QUESTION/COMMENT: Is it not counter productive to advertise car dealerships on the buses?
DT: Advertising dollars help the system. The advertising contractor ultimately decides on what is used.

LANTZVILLE – WEDNESDAY JANUARY 9, 2008

The meeting started at 6pm with ten members of the general public present.

J. Adair, Operations Superintendent, explained some of the recent expansions to the transit system. The highlights include increased service on Sundays with service offered from 7:30am through to 8:30pm. Transit is also offering service on statutory holidays. Routes #8 and #9 saw additional expansion of about 40%. This also happened on the #15 Malaspina UC Connector. Lantzville trips have been expanded, particularly Saturday and Sunday service. There is better access to the Port Place Shopping Centre. The #1 and #2 buses now go to Port Place.

D. Trudeau noted that BC Transit has indicated the Tier 1 systems will be receiving funds and they must have valid Transit Business Plan in place. Laura will explain the process we have gone through and then we will open the floor to comments. Two suggestions that have been recurrent throughout our Public Consultation meetings to date have been that increased service to the BC Ferries and service to the Nanaimo Airport must be provided.

L. Kiteley said the process began by hiring a consultant (IBI Group) who specialized in transit and group planning. We wanted to know what transit would look like if there were no plan in place. Interestingly enough the routes that the consultant developed look much as they are now. We also met with seniors, students, commuters, etc. in stakeholder group meetings in order to get a baseline in terms of service wants. From the comments received we know where to focus our energies. For 2009/10 our expansion is looking at about 2,500 hours, which is about a 25% increase. A survey was done in which it was determined that 68% using the service are commuters or students. This dictates to us where we need to focus our energies. We also took a critical look at routes where people use transfers. We need to minimize transfers. Now the #3 Hospital starts at Woodgrove then goes to Country Club. What will happen is it will start at Port Place Shopping Centre then proceed to NRGH to Country Club to Woodgrove and then align with the #90 to Oceanside area. Express buses (bus rapid transit) will operate from downtown to Malaspina University-College (Mal-U) with 4 other stops in about 40 minutes. Woodgrove is one of the major nodes where you transfer to get into the system. Then we are suggesting a mall connector connecting the south to the north, i.e. Woodgrove Centre to parkway to Mal-U to South Parkway Plaza. Another change is the #2. We have a segment of the area that has been designated #2A. This does a particular loop allowing more frequent service in the area between Woodgrove and Brickyard where the bus does not have to go to Country Club. In all stakeholders meetings not once was it proposed that we had to improve service to BC Ferries. There is presently good service from Prideaux to Country Club to meet the ferries. Discussions with Ladysmith are underway that would allow us to provide service to the airport as well.

D. Trudeau thanked Jason and Laura for reviewing the route changes and future proposed changes. He then offered the audience the opportunity to make comments or ask questions of him or staff members.

QUESTION/COMMENT: Bus routes seem to start and stop at Woodgrove Centre. We need to know that you can park and safely leave your vehicle. Also, could there not be a stop along the #90 Woodgrove route where riders could access Lantzville?
DT: We are looking into having more Park 'n' Ride areas. We have had a meeting with the General Manager at Woodgrove Centre. Woodgrove is a very forward thinking mall and very pro transit. We likely could set up an agreement with them for a Park 'n' Ride. Another area we are considering for a Park 'n' Ride is South Parkway Plaza.

At present the only way you the #90 could provide access closer to Lantzville would be to flag the bus down. If there is an area that is safe for the driver to pull off and re-enter the stream of traffic, they will do so.

QUESTION/COMMENT: With regard to new developments, is it possible for someone to come up with a plan to outline what we need to do in order to have transit in the area?
LK: BC Transit has that information and we can access it at any time.

QUESTION/COMMENT: When will the downtown exchange be moved?
DT: The downtown exchange is a very important node. Nanaimo transit is a linear system and downtown Nanaimo is where transit needs to be. Land is locked up by Island Corridor. We have two reports that are going forward to our Transit Select Committee next week. As

far as Prideaux Street exchange goes, the Heritage Mews' businesses have really seen the benefit of having transit there. Port Place Shopping Centre is changing too since they are putting medical officers in, etc.

QUESTION/COMMENT: You interviewed the people riding the buses, now what about those that would like to ride? Also, have you given any thought to having smaller buses running more frequently?
DT: We need to put services out there in order that they can be used. We have small buses where people are left behind. Parksville/Qualicum ridership has gone up considerably. We are always open to suggestions from riders. These meeting were well advertised and we hoped to get people into thee meetings in order to get their comments. There is an internet site and a phone number that people can access to provide their comments.

We did a survey in 2001 and over 1% of people who rode the bus owned a car. Now that figure is 15% of the people who ride a bus that own a car. This means we are getting a little better with our service. Of note is the #44 Malaspina U-C buses where service now is every 15 minutes.

QUESTION/COMMENT: If you had a mini bus run into Lantzville more frequently, ridership would go up.
DT: If we did get smaller buses it would not be as efficient. The most efficient routes are the interline routes.

QUESTION/COMMENT: Given that transit requires density to work and given that Lantzville is against density developments, why do you keep wasting your dollars?
DT: This is probably why we have the system in Lantzville that we do. When small changes were done to service in Lantzville we certainly heard from the population. We need to ensure that we have the right schedule for the area. The areas that do not have as much density to fill the buses are the most difficult to service. There was a route in District 69 that was not working for them and this route was actually cut. Transit is a system that has to change in order to adapt. We created a Park 'n' Ride at Qualicum Beach and this gives the ridership access to the routes.

QUESTION/COMMENT: I have lived here all my life and have never used the bus. We need to get people out of their cars.
DT: We have captured the market of those who have no choice but now we have to focus on getting more commuters.

QUESTION/COMMENT: Proposal M1/M^2 is something that he could see himself using. Service needs to be going in that direction, from Courtenay to Sooke actually.
DT: I had a call from the Mayor of Ladysmith who requested connection to Nanaimo. A service agreement would have to be worked out but this would allow people to access the airport as well.

QUESTION/COMMENT: Ladysmith is part of another regional district but it is a part of our grid.
DT: There is a possibility that everything is going to be linked. Ladysmith has a lot of Mal-U students who utilize the bus.

QUESTION/COMMENT: Is there a possibility of a connection to the train station?
DT: We will take a look at how we would do connections. Maybe there is some partnership we can do.

QUESTION/COMMENT: How many ferries will the buses meet at Departure Bay Ferry Terminal?
JA: Nanaimo Transit does meet all the ferries at different times of the day. Currently we do not have a bus that will wait if the ferry is late arriving.
DT: We do know how important it is to be at the BC Ferries to pick up passengers.
LK: We are working with the BC Ferries and changes are going to be made such as having a 'bus only' lane, easy access for buses in and out of the terminal and having a stop in front of the terminal for bus passengers.

QUESTION/COMMENT: If the ferry is late will the bus wait?
LK: No, because the bus is on a schedule.

QUESTION/COMMENT: The transit system seems to work very well at the other end in West Vancouver. If only we could get these people to use the bus at the other end.
DT: Their service is probably a 15 minutes service. We can only get a half hour service.

QUESTION/COMMENT: Are the bus drivers okay with you coming on with parcels?
DT: The drivers are pretty lenient although safety would be the issue.

Again, D. Trudeau thanked those in attendance for coming and sharing their views and concerns with staff. He noted that there are feedback forms at the back and that these can also be accessed on our web site.

QUESTION/COMMENT: Are bus rates going up?
DT: Yes, although they went up only 5% which did not cover the increase in fuel prices.

QUESTION/COMMENT: How safe is bus transportation?
DT: We have been pretty lucky. The last assault on one of our drivers was three years ago. We have emergency radios on all buses. We have an application in for funding for video surveillance as well.

QUESTION/COMMENT: What is your experience with free transit? What has your research or experience shown?
DT: With the system we have in place, if we were not collecting fares, we would have to double rates.

QUESTION/COMMENT: Is free transit a good thing or bad thing?
DT: It is an excellent way to get people out of their cars, i.e. on New Year's Eve we transported 2,000 people. Also, on the first day of the new schedule we offered riders a $1 per ride.

QUESTION/COMMENT: If you want to get people out of their cars you have to offer free rides.
DT: Usually this applies only to areas such as resorts.

QUESTION/COMMENT: What do we pay for transit?
COLIN HAIME, MAYOR OF LANTZVILLE: $70,000 based on accessed value.

QUESTION/COMMENT: I would be willing to pay more if it would improve service.

QUESTION/COMMENT: Might have to go to call for service;. maybe on a user pay issue. There might be a way.
DT: Usually when transit opts out of something a private individual takes over.

QUESTION/COMMENT: What about advertising on the buses?
DT: $45,000 per year is realized from advertising on the buses.

QUESTION/COMMENT: They are getting way too good a deal – the rates should be increased.
DT: Advertising is in the best interest of transit.

NANOOSE – MONDAY JANUARY 14, 2008

The attendees arrived at 5:50pm. There were three members of the general public present and Director Holme.

D. Trudeau reviewed the posters, which outline the proposals to expand transit, on a one-to-one basis with them. Any questions/concerns from these individuals were explained and information provided as to proposed transit expansion.

Mrs. Carina Babich expressed her long time goal to have bus service routed along Stewart Road and onto Dolphin Drive, and then continue along Fairwinds. This expansion would provide service to one of the most densely populated areas in Nanoose. She noted that not only are there many seniors that would utilize such a route but also there are a lot of young people who would benefit from the expanded service. She also questioned when this could be implemented if funding was made available. D. Trudeau noted that should approval be received, implementation would not be until January 2009. It takes this long to get through the budget cycle, etc. As well, funding would be required from BC Transit to initiate the expansion so 2009 would be the earliest we could begin such a service. D. Trudeau noted that we have had more requests for penetration into the Nanoose area, but the cost is quite expensive and it is a user pay system. One of the biggest challenges for transit is puttin bus service into rural areas. Mrs. Babich noted that she would be happy to see bus service even once a day, twice daily at the most. As an example of the community working together with Transit, D. Trudeau mentioned the Friday Night Movie Bus from Qualicum Beach to Nanaimo return. This was a request from the electorate in District 69 and has turned out to be very successful.

D. Trudeau spoke briefly of the news release today regarding the influx of $1.5 billion for transit and service expansion. It was noted that the Federal government has allocated $14 billion over the next 12 years to improve transit within the Province of BC.

L. Kiteley noted that Novas are manufactured in Quebec, near Montreal. Mr. Biczo stated that a Vancouver bus driver said the new buses have a blind spot. These are the Vancouver buses that are *Flyers* and *MCI*'s. The Nanaimo Regional Transit System has *Novas* in their fleet and this does not appear to be an issue with our drivers.

D. Trudeau noted that the announcement made today by the Premier is the most aggressive transit plan in Canada. Mr. Biczo commented that if China and India are not 'environmentally' on board, it would not make much of a difference what Canada does.

FRENCH CREEK – WEDNESDAY JANUARY 16, 2008

The attendees arrived at 5:45pm. There were four members of the general public present.

D. Trudeau, L. Kiteley and J. Adair reviewed the posters, which outline the proposals to expand transit, on a one-to-one basis with them. Any questions/concerns from these individuals were explained and information provided as to proposed transit expansion.

One attendee noted that there are no bus stops between Wembley Mall and Oceanside School. He requested that a stop be considered at Wembley and Riley Road. J. Adair and staff will be attending the area tomorrow to look at different areas for bus stops. Drivers will pull over to allow riders to disembark but they tend to err on the side of safety and therefore it is not always possible to do this.

Mrs. Thibert requested that transit consider more service into her residential area (see attached). The area from Sunrise Drive, right onto Lee Road and left onto Morningstar Drive is quite heavily populated and she feels that additional service needs to be considered for the residents, particularly at Morningstar and Mulholland. D. Trudeau advised her to talk to her electoral area director, Joe Stanhope, to show that they do need service. It takes a minimum of a year to implement such expansion but it does start the wheels in motion. Bus stops also need to be where the density is. L. Kiteley mentioned that handyDART is a challenge in this area and the service is very limited. It is primarily for people who cannot use conventional transit. Public transit is mass transit. Any expansion of service to this area would be put in as a pilot project. If successful enough, it would become a fixture. L. Kiteley noted that there are plans in 2009 for a possible expansion of the Friday Night Movie bus service to run Monday through Friday.

D. Trudeau reviewed the numbers with regard to our transit system. The Nanaimo Regional Transit System provides over 100,000 hours of service and one million kilometres in the system, which is carried out with 120 drivers, 39 conventional buses and 12 custom buses. It is quite expensive to operate and costs approximately $12 million annually to run the system. We have a partnership with BC Transit and they pay approximately 30%. A further 40% of the funding is from taxes and the other 30-40% from fares collected. The system includes the municipalities of Nanaimo, Lantzville, Parksville and Qualicum Beach and Electoral Areas ‘A’, ‘C’, ‘E’ and ‘G’. The manner in which participants pay is pro-rated, i.e. per kilometers and hours of service. For 1% of the service you would pay 1% of the $12 million. It is important to have the right type of business plan as to where we are going to put the services. We need to make our politicians aware of any funding implications. The last Transit Business Plan was done in 2001 to cover the period 2001 – 2006. No expansions happened due to a provincial government freeze on transit. BC Transit is now putting more funding into transit. Also the recent announcement of $14 billion funding over the next 12 years from the Provincial government will affect us. If you look at the report in detail, they plan to double the number of people taking transit. We will have to double the number of vehicles and drivers over the next 12 years in order to accommodate such an expansion of service.

This is the eighth public consultation meeting that we have had. Overall we have had good response from the public and it should be noted that all comments received will be used to help to develop our Transit Business Plan for the next five years.

About 18 months ago we started hearing from the Board about expanding service on Sundays and statutory holidays. It took about a year to put these expansions in place. J. Adair will provide an update on the recent expansions for you.

J. Adair noted the expanded service included addressing the demand for Sunday service, service on statutory holidays, more frequency on routes (particularly #8 South, #9 North,

#15 Malaspina University Connection that saw an increase of 40% more service), as well as service hours expanded for Sundays.

A member of the audience questioned the recent change of stop for the #9 North. He said there was no notice of this given to the riders and could have caused a great deal of inconvenience to passengers. J. Adair noted that the stop needed to be moved due to safety concerns. Discussion ensued regarding the possibility of the bus going in by London Drugs and out by MacDonald's. J. Adair noted that the #8 South and the #9 North are almost express services so they do not want to change the running times. The customer suggested that transit just be aware that people need to be advised of any changes in services or bus stop locations. Again, J. Adair noted that riders' concerns are looked at very closely.

D. Trudeau noted that the draft proposals show a 5-10% increase in service every year for the next five years. He then asked L. Kiteley to talk about the proposed expansions.

L. Kiteley reviewed the posters displayed along the front that showed some of the future possible expansions to transit service. She explained that meetings had been held with a stakeholders group, which represented 19 different groups/businesses and a consultant (IBI Group) hired to assist in planning. Also, a survey of riders was done by Malaspina University-College students. They asked a series of questions to determine transit ridership. It was determined that 68% are commuters to and from work or going to and from schools. Therefore it is important that transit improve frequency and provide early morning service as well as service at peak hours that starts sooner. As a result of these meetings and the survey done, we have put together these posters showing the highlights. Now we have to do something with the ferry service. L. Kiteley outlined the #2A and #2 Hammond Bay routes, noting that the #2A has been implemented to provide more frequency of service in a selected area. Also, down the road transit will implement a ferry shuttle that will run from downtown to Country Club and then to the BC Ferries terminal. We will try to meet specific targeted ferries throughout the day.

QUESTION / COMMENT: What if the ferries run late?
LK: We would need to try to schedule the times late enough after the ferry is due to arrive that it can still meet it if the ferry is somewhat late. If it is too late, the passengers would have to wait for the next bus.

L. Kiteley noted that dialogue has also begun with Ladysmith to provide service for the residents. This would allow airport service and perhaps more frequent trips again to Malaspina University-College.

She noted that all this information is on our web site, including the feedback forms that we request guests to complete.

L. Kiteley reviewed the proposed expansion for the #3 Hospital bus. It would start out as a #90 Intercity and then that would offer a more direct service from Woodgrove Centre to the hospital and then on to downtown.

The South Parkway Plaza connector is also another exciting prospect. You would get on the #90 Intercity Connector and then go all the way, stopping at Malaspina University-College, and then on to South Parkway Plaza. This would mean a trip of approximately 40 minutes from our most northern point of service to the southernmost point. L. Kiteley also mentioned that this supports one of our major goals in transit and that is to minimize transfers. In 2010-2011, we hope to have a BRT (bus rapid transit) system in place from Woodgrove Centre to South Parkway Plaza. This would be different routing than the #90

Intercity Connector, connecting with all the malls along the way and Malaspina University-College. The BRT would do this route all day long.

These are pretty aggressive plans and feedback from these meetings is essential.

D. Trudeau stated that if the audience members had any questions, that this is the time to ask them. There are also feedback forms available to fill out. He said that more service and additional stops would be good and that J. Adair and staff will be in the area tomorrow to inventory stops. A successful service means that we will be getting more service in the future.

QUESTION / COMMENT: Mrs. Thibert asked if you decide to hold a meeting like this again to please let people know so that they can blanket the whole area to announce the meeting. She provided her telephone number and also asked that we contact the French Creek Residents' Association. They would be happy to ensure a good attendance.
DT: D. Trudeau noted that the public consultation meetings had been advertised in the newspapers, on television and on the buses but that for future meeting we would certainly take advantage of her offer and that her number has been recorded.

QUESTION / COMMENT: Could there be shelters put at bus stops?
DT: D. Trudeau advised that he had attended a meeting earlier today and that an application for $90,000 in funding is being made for shelters. They are even considering having certain bus shelters with solar panels to provide adequate lighting in facilities at the most frequently used stops.

PUBLIC MEETING FEEDBACK FORMS

Feedback forms were available at all the public meetings. The table below summarizes the responses received through the feedback forms.

	Where do you live?	Currently use system?	Frequency of use?	Reason for using transit?	What do you think of the changes?	How to make proposed changes better?
1	Parksville-Qualicum Beach	No			Sunday and stat improvements are great	more frequency
2	Parksville-Qualicum Beach	No			pleased	stop 5pm bus from WG at Legion on Alberni Hwy
3	Coombs	Not currently				Have #2 stay long enough to meet ferries. Can get bus to the ferry terminal but can't get back.
4	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
5	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
6	Hilliers	No				Service to Errington, Coombs
7	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
8	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
9	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
10	Parksville-Qualicum Beach	Yes	one day per month or less	shopping		Service to hospital and ferry
11	Parksville-Qualicum Beach	Yes	one day per month or less			Would like a direct Qualicum Beach to Departure Bay ferry bus. Better coordination with bus terminal and ferries.
12	Parksville-Qualicum Beach	Not currently			Looks satisfactory	Would like a direct Qualicum Beach to Departure Bay ferry bus.
13	Parksville-Qualicum Beach	Not currently				Would like a direct Qualicum Beach to Departure Bay ferry bus. How much would we pay in taxes for this?
14	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
15	Parksville-Qualicum Beach	Not currently				Would like a direct Qualicum Beach to Departure Bay ferry bus.
16	Parksville-Qualicum Beach	No			Rotten - not efficient	Listen to the Qualicum people at the meeting
17	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.
18	Parksville-Qualicum Beach					Would like a direct Qualicum Beach to Departure Bay ferry bus.
19	Parksville-Qualicum Beach	Yes	2-4 days per week	shopping	Excellent	Routing in and out of QB
20	Parksville-Qualicum Beach	Not currently				More express service, perhaps a grid system. Any plans to integrate bus and rail service?
21	Parksville-Qualicum Beach	Not currently			Will be an improvement	Express bus with stops at QB, WM, WD only. Better access to hospital
22	Parksville-Qualicum Beach		one day per month or less			Would like a direct Qualicum Beach to Departure Bay ferry bus.
23	Parksville-Qualicum Beach	Yes	2-4 days per week	shopping		
24	Parksville-Qualicum Beach	No				Would like a direct Qualicum Beach to Departure Bay ferry bus.. Wheelchair space very necessary. Service to Hospital. Rode bus daily to work until the routing changed.
25	Parksville-Qualicum Beach	Yes	one day per month or less	work		Would like a direct Qualicum Beach to Departure Bay ferry bus.
26	Parksville-Qualicum Beach	Yes	2-4 days per week	work		Would like a direct Qualicum Beach to Departure Bay ferry bus. Small bus to provide better neighborhood coverage to Qualicum.
43	Parksville-Qualicum Beach	Yes	one day per month or less			Improved connections to hospital and ferry
45	Coombs	Yes	one day per month or less	shopping		Better ferry connections. Express bus from Wembly mall. Lantzville bus needs reworking, especially for students.
27	College/Westwood	Yes	2-4 days per week	work		More frequency, 90-minute two way transfer. Surndy service to north end for 11 am start.
28	Downtown	Yes	every weekday or more	work	Okay for now	More downtown services, cover all stats. More frequency, more bus shelters.
29						Attended on behalf of employer with 600 mostly transit dependent workers
30	Downtown	Yes	2-4 days per week	shopping		
32					Not sure	Dedicated small bus from DB ferry to Brooks Landing and downtown, every 20 minutes. Reliable ferry connections needed.
33	Fairview	Yes	2-4 days per week	shopping	Service frequency increase is welcome	Would like to know more about location of new bus exchange. More bus shelters and no smoking. Airport/Ladysmith connection.
34	South Wellington	Yes	one day per month or less		Good to hear you're expanding	Service to Ladysmith
35	Downtown	Yes	2-4 days per month	shopping	Not serving public well.	Run a regular service in downtown area. Ferry terminal, Townsite, to Port Place. More schedule info at stops.
36	Downtown	Yes	every weekday or more	shopping		Thanks to all of you and the drivers.
37	Downtown	Yes	every weekday or more	work	Mostly happy with the improvements	Service to Ladysmith. Need shuttle from Country Club to bus stop.
38	North Nanaimo	Yes	every weekday or more	work	Like some of the proposals.	More service on #2 between downtown and CC. More buses at Port Place.
39	Downtown	Yes	one day per month or less		Makes good sense	small bus service in downtown area to replace big buses.
40	North Nanaimo	Yes	every weekday or more	work	Idea of of BRT and more service to ferry is great	More frequency, better weekend service. Look at synergy with railway.

4. On-line Transit Survey

An on-line survey of transit users and the general public was conducted to correspond with the public open houses. The responses are summarized below.

	Where do you live?	Currently use system?	Frequency of use?	Reason for using transit?	What do you think of the changes?	How to make proposed changes better?
1	Cedar	yes	every weekday	work	Good	Add service to Duke Pt. and airport.
2	South Nanaimo	yes	every weekday	work	Need more frequency	More frequent service to south end. More evening service. More service for retail workers who live in the South end and work in the north end.
3	Qualicum Beach	yes	2-3 times per week	work	Good	Better service from Parksville to QB in the evening.
4	South Nanaimo	yes	2-3 times per week	medical	handyDART is good but need more transit service	More frequent service to south end. (route 6)
5	Parksville QB	no			Good, but would like it sooner.	More frequent service in Parksville QB. Longer service day in Parksville QB
6	downtown	yes	every weekday	work	None of the changes helps regular riders	Overhaul the entire system. Lower fares for college students. Better evening and weekend service.
7	South Nanaimo	yes	every weekday	work	Okay, but could be better for those who don't drive	More South end service after 9 pm and more early Sunday AM service. More service for retail workers who live in the South end and work in the north end.
8	South Nanaimo	yes	every weekday	work	Okay, but more service needed	More service at peak times. Better connections Harewood to Country Club
9	downtown	yes	2-3 times per week	social/recreation	Much better than current, especially for Hammond Bay and Mal U	Better service from Hammond Bay to hospital and Mal U
10	North Nanaimo	no			Good	Need central exchange downtown
11	Hayrake Road	no	2-3 times per week	social/recreation	Don't address our needs	
12		no		school/university	Route 5 does not address the increase in population along Jingle Pot	
13	North Nanaimo	yes	every weekday	work	Need friendlier drivers	
14	Hospital	no		snow conditions	Better connections between Hospital and Mal U would be good.	Local service improvements should be given priority over regional service between Nanaimo and PQB
15	Hospital	yes	every weekday	social/recreation	Good	More frequency in Nanaimo and to PQB
16	North Nanaimo	yes	2-3 times per month	work	Good, but what about long term objectives?	Used to use transit, but got tired of waiting for the bus.
17	downtown	yes	less than once per month	social/recreation	Good, but concerned that existing routes might be dropped.	Taking bus to Departure Bay. Need more info on bus stop locations.
18	downtown	yes	2-3 times per week	work	Good, but need more service early Saturday AM to Woodgrove.	Should have better discount for work commuters
19	Gabriola Island	yes	2-3 times per month	Going to ferry terminal	Good, but need an express bus Downtown to Woodgrove	Move exchange back downtown
20	Parksville QB	yes	every weekday	work	Good	
21	North Nanaimo	no			Good, but could go further	Too far to walk to bus, but not eligible for handyDART
22						Don't alter 9:04 to Wembley and 5:35 return
23						Reinstate local routing in Qualicum, perhaps with a smaller bus.
24						Improve service to new development at the north end of Jingle Pot.
25						Improve the website, update more frequently
26						Like the idea of increased frequency on Highway 19A
27						Would like a zone fare system like Vancouver. Unfair that PQB riders pay the same as someone from Harewood.
28	Downtown	yes	2-3 times per week	Shopping	Looks positive	
29	South Nanaimo	not currently			Don't see any changes to the 15	need later bus from Mostar to Malaspina for 5:30 work finish. Extend hours on the 15 to accommodate commuters
30	North Nanaimo	yes	every weekday	school/university		
31	Gabriola Island	yes	2-3 times per week	work	Happy that #3 now leaves at 7:15	
32	North Nanaimo	yes	2-3 times per week	Shopping	Reasonably good	
33	North Nanaimo	yes	2-3 times per week	social/recreation		No service on 8 leaving WG between 7 & 9 am - difficult to get to medical appointments. Would also like to see hourly service in Lantzville
34	Cassidy	No				I would like to use the bus for shopping, medical/dental trips.
35	Comox	No				Would like to be able to take the bus from Comox to Duke Point
36	downtown	yes	2-3 times per week	work	Mostly good. Happy with stat holiday service.	
37	North Nanaimo	yes	every weekday	school/university		#2 to Woodgrove from Wellington Sec. needs to coincide with the times students get out of school. It has just recently been changed and students must wait 40 minutes.
38	North Nanaimo	No				Need service to the Airport and Duke Point.
39	downtown	not currently			Good	Would like to use transit to get to and from work.
40	Parksville QB	yes	once per month	medical	Like the proposed direct service from Oceanside to Hospital, ferry, and Mal.	I would use transit more if I didn't have to cross Hwy 19A to get to the bus stop.
41	Parksville QB	yes	2-3 times per month	Shopping		Would like bus from PQB to Departure Bay ferry
42	North Nanaimo	yes	2-3 times per week	school/university	Not enough service for 12-Lost Lake Road	
43	downtown	yes	every weekday	school/university	Like #1 & 2 running by Port Place.	Drivers should inform passengers when the buses aren't running in the snow. Drivers shouldn't move until everyone is seated.
44	North Nanaimo	not currently			Increased handyDART service is needed.	Ever since the #1 & 2 routes have limited connection at CC, I haven't been able to use to bus to get to work. They need to connect more often, especially in the afternoon.
45	South Nanaimo	yes	2-3 times per week	Shopping		Allow two way transfers.

	Office use only	

Nanaimo Regional Transit Passenger Survey – September 2007

Please answer in the spaces provided at the RIGHT

1. What is the main purpose of this trip?

1❑Work 2❑High School 3❑University/College
4❑Shopping 5❑Medical/Dental 6❑Other_____

2. Where did you **begin** your trip? *(if unsure of the area, note the nearest intersection or landmark in the space provided)*

1❑Downtown Nanaimo 2❑Mal-U /NDSS 3❑Townsite
4❑Harewood/Fairview 5❑Chase River 6❑Cedar
7❑Departure Bay 8❑Long Lake 9❑Bowen Road
10❑Nanaimo Regional Hospital 11❑Country Club 12❑Rutherford
13❑Woodgrove 14❑Dover//Hammond Bay 15❑Lantzville
16❑Parksville/Qualicum Beach 17❑Jinglepot 18❑Other _____

3. Where will you **end** your trip? *(if unsure of the area, note the nearest intersection or landmark in the space provided)*

1❑Downtown Nanaimo 2❑Mal-U /NDSS 3❑Townsite
4❑Harewood/Fairview 5❑Chase River 6❑Cedar
7❑Departure Bay 8❑Long Lake 9❑Bowen Road
10❑Nanaimo Regional Hospital 11❑Country Club 12❑Rutherford
13❑Woodgrove 14❑Dover//Hammond Bay 15❑Lantzville
16❑Parksville/Qualicum Beach 17❑Jinglepot 18❑Other _____

4. If your trip involved a **transfer**, where did you change buses?

1❑No Transfer 2❑Prideaux St. Exchange 3❑Country Club
4❑Woodgrove 5❑Rutherford Mall 6❑Brooks Landing
7❑Wembly Mall 8❑Mal-U 9❑Other_____

5. On average, how **frequently** do you ride the bus? *(check one only)*

1❑6-7 days a week 2❑4-5 days a week 3❑2-3 days a week
4❑2-4 times a month 5❑Less than 2 times a month

6. What other **transportation options** are usually available to you in Nanaimo?*(please check all that apply)*

1❑Vehicle (Driver) 2❑Vehicle (Passenger) 3❑Taxi
4❑Walk 5❑Bicycle 6❑Hitchhike
7❑Other _____ 8❑None. The bus is my only transportation.

7. **Overall, how satisfied** are you with your present bus service? *(circle one number only)*

Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	**2**	**3**	**4**	**5**

8. How **satisfied are you with the following aspects** of your transit service? *(circle one number only)*

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Don't know
a) Drivers are courteous & professional	**1**	**2**	**3**	**4**	**5**	**9**
b) Buses are clean & comfortable	**1**	**2**	**3**	**4**	**5**	**9**
c) Buses are on time	**1**	**2**	**3**	**4**	**5**	**9**
d) Buses run often enough	**1**	**2**	**3**	**4**	**5**	**9**
e) Fares	**1**	**2**	**3**	**4**	**5**	**9**
f) On-Street Information	**1**	**2**	**3**	**4**	**5**	**9**
g) Bus Info - Phone Line/website	**1**	**2**	**3**	**4**	**5**	**9**

9. How can we make the bus service **better** for you?

_____
_____

10. To help us better understand who rides the Nanaimo Regional Transit System, can you please indicate your sex and age group?

1❑17 and under 2❑ 18-24 3❑ 25-44 1❑ Male
4❑45-64 5❑65-79 6❑80 and over 2❑ Female

Please return to the envelope on the bus. Thank you!

REGIONAL DISTRICT OF NANAIMO

BC Transit

Nanaimo Regional Transit On Board Passenger Survey

An on-board passenger survey was undertaken on September 26, 2007. Six surveyors were hired to distribute survey questionnaires on a representative sample of transit trips. A total of 901 completed surveys were collected, representing roughly 10% of daily ridership. The tabulated results are attached. These results will help to identify key transit markets and needed improvements to the transit system. Some key highlights include the following:

- The results of this survey have been compared with the results from the last on-board survey done in 2003. The 2003 survey used somewhat different methodology, so some caution should be used when comparing the results. Nonetheless, there did appear to be some significant trends between the two surveys.
- **Ridership by Time Period and Route (Questions 1 and 2):** These questions show the distribution of respondents by time period and route. Results from these questions are not used to obtain information on ridership by time period and route, since much better information on this can be obtained from the two week passenger count. Rather, these questions are included as a check that the on-board survey respondents form a representative sample of all riders on the transit system. A comparison of the distribution of on-board respondents by time period and route with that from the two week count shows that the proportions are roughly similar, and indicates that sample is reasonably representative.
- **Trip Purpose (Question 3):** Trip purpose is dominated by work (30%) and post secondary (27%) trips. Along with high school trips (11%), this means that commuter trips accounted for 68% of the total. In the 2003 survey, only 45% of all trips were commuter trips (including 25% for work trips). Shopping trips dropped from 28% in 2003 to 13% in 2007. While it's likely that these changes are partly due to the differences in methodology between the two surveys, there does still seem to be a trend towards increased commuter orientation for the transit system. Systems typically evolve from "shopper oriented systems" to commuter systems as the community and the transit system grow.
- **Transfers (Question 6):** While 54% of trips did not involve a transfer, 18% transferred at Country Club while 11% transferred at Prideaux Street. In 2003, 16% transferred downtown while 15% transferred at Country Club. The decline in transfers downtown may be due in part to the relocation of the transit exchange.
- **Frequency of Use (Question 7):** 78% of respondents are regular transit riders, using the system 4 days per week or more. This is up from 62% in 2003 and again indicates a trend to increased commuter orientation.
- **Transportation Alternatives (Question 8):** Only 11% of transit users had no other transportation options available. These represent the core "transit dependent" riders. 23% of transit users could have made their trip as an automobile driver, representing the core "choice" riders. Those who cite other transportation options, such as walking or vehicle passenger, tend to fall somewhere between the core transit dependent and choice groups. In fact, walking (60%) was the most frequently cited transportation alternative. (It should be noted that respondents could provide up to 3 answers to this question so the total adds to more than 100%.) Compared with the 2003 survey, there seems to be a shift away from transit dependent riders to more choice riders. Those citing "no other option" dropped from 31% to 11% while those citing "vehicle driver" increased from 12% to 23%.
- **Overall Satisfaction (Question 9):** Overall, 51% of respondents were satisfied or very satisfied with the current service.
- **Satisfaction by Aspect of Service (Question 10):** Among individual aspects of the service, people were least satisfied with frequency of service while they were most satisfied with courteousness of drivers. Compared with the 2003 survey, satisfaction

levels were generally down slightly, with the biggest drop related to service frequency.

- **Service Improvements (Question 11):** The most common request was for more frequent service (44% of respondents mentioned this), followed by more Sunday and/or holiday service (29%). Evening service (16%) and fares (7%) were the next most frequently requested improvements. (As with Question 8, respondents could provide up to 3 answers to this question so the total adds to more than 100%.)
- **Rider Demographics (Question 12):** The largest group of riders was in the 18-24 age group (41%), with many of these likely being Malaspina students. Females accounted for 58% of riders, which is quite typical for most transit systems.

Nanaimo On-Board Passenger Survey Results

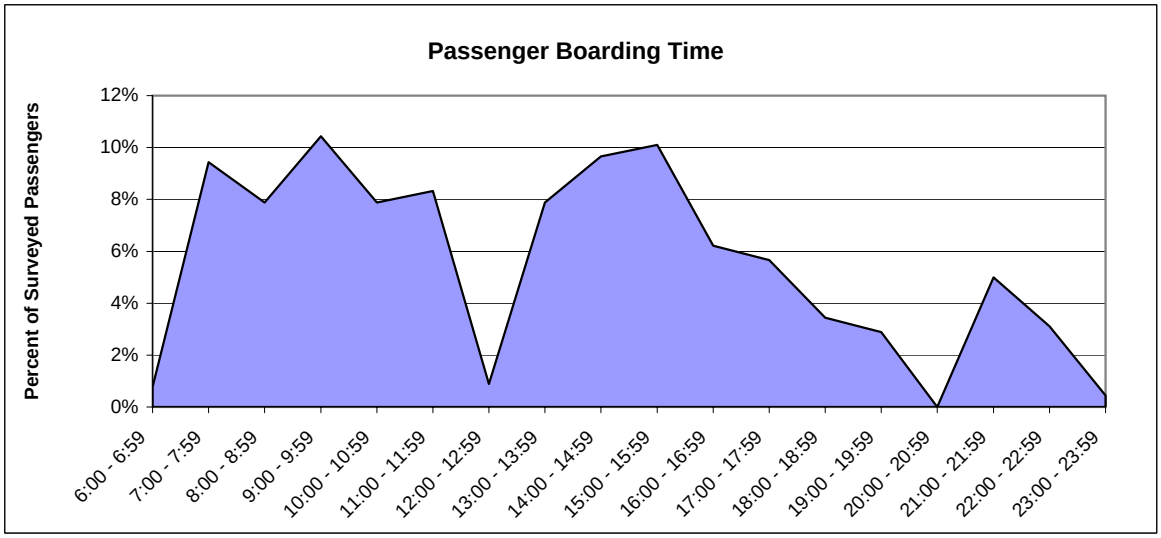
Based on a survey conducted September 2007

Number of respondents: 901

1. Boarding Time

6:00 - 6:59	7	1%
7:00 - 7:59	85	9%
8:00 - 8:59	71	8%
9:00 - 9:59	94	10%
10:00 - 10:59	71	8%
11:00 - 11:59	75	8%
12:00 - 12:59	8	1%
13:00 - 13:59	71	8%
14:00 - 14:59	87	10%
15:00 - 15:59	91	10%
16:00 - 16:59	56	6%
17:00 - 17:59	51	6%
18:00 - 18:59	31	3%
19:00 - 19:59	26	3%
20:00 - 20:59	0	0%
21:00 - 21:59	45	5%
22:00 - 22:59	28	3%
23:00 - 23:59	4	0%
Total	**901**	**100%**

	On board	On board %	TWC %
AM Peak	163	18%	22%
Midday	406	45%	41%
PM Peak	198	22%	26%
Evening	134	15%	12%
Total	901	100%	100%



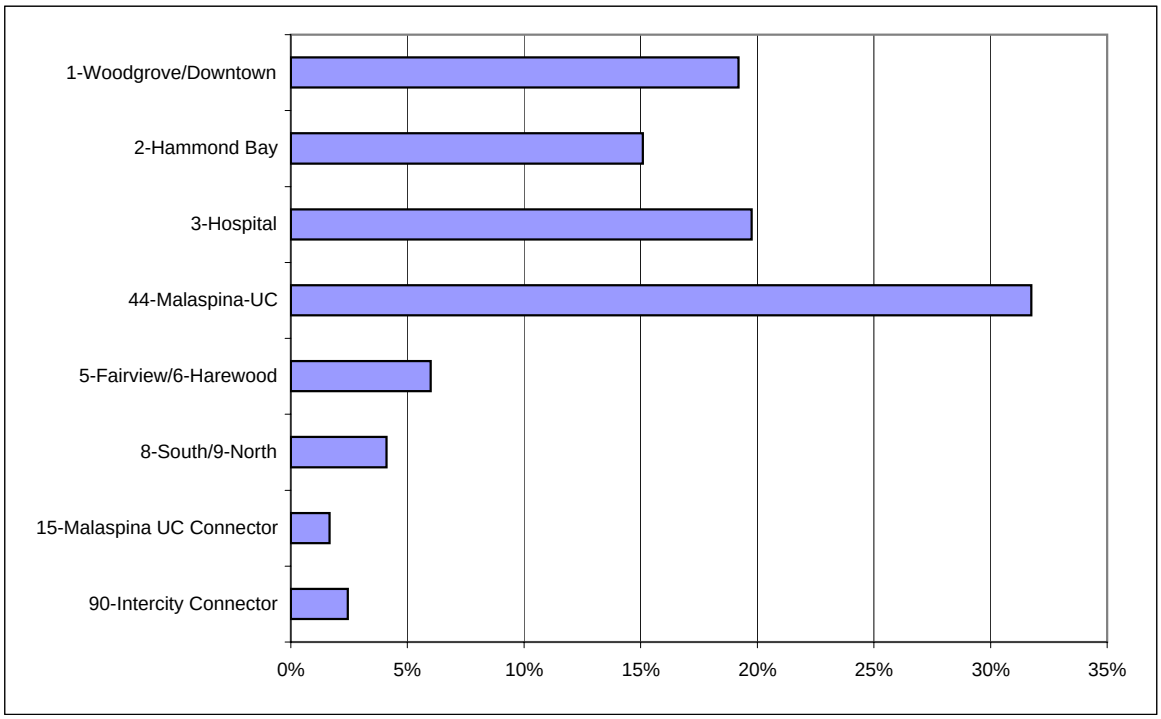
Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

2. Bus Route

			TWC %
1-Woodgrove/Downtown	173	19%	23%
2-Hammond Bay	136	15%	13%
3-Hospital	178	20%	11%
44-Malaspina-UC	286	32%	25%
5-Fairview/6-Harewood	54	6%	9%
8-South/9-North	37	4%	8%
15-Malaspina UC Connector	15	2%	5%
90-Intercity Connector	22	2%	4%
Total	**901**	**100%**	98%



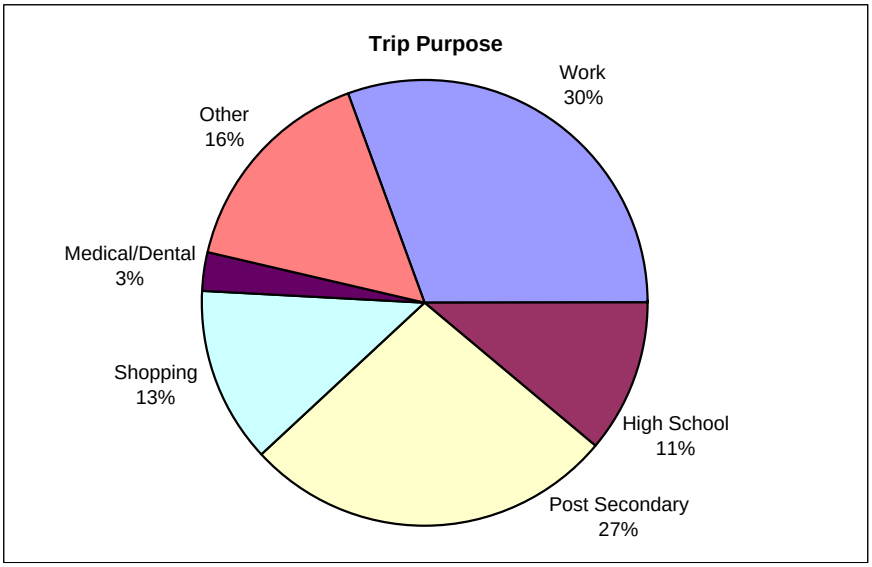
Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

3. What is the main purpose of your trip?

Work	272	30%
High School	99	11%
Post Secondary	242	27%
Shopping	113	13%
Medical/Dental	26	3%
Other	140	16%
Total	**892**	**100%**
No Response	9	1%



Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

4. Where did you begin your trip?

Downtown Nanaimo	154	18%
Mal-U/NDSS	102	12%
Townsite	31	4%
Harewood/Fairview	53	6%
Chase River	9	1%
Cedar	7	1%
Departure Bay	60	7%
Long Lake	3	0%
Bowen Road	71	8%
Nanaimo Regional Hospital	70	8%
Country Club	110	13%
Rutherford	22	3%
Woodgrove	58	7%
Dover/Hammond Bay	43	5%
Lantzville	5	1%
Parksville/Qualicum Beach	20	2%
Jinglepot	9	1%
Other	53	6%
Total	**880**	**100%**
No Response	21	2%

5. Where will you end your trip?

Downtown Nanaimo	145	16%
Mal-U/NDSS	171	19%
Townsite	22	2%
Harewood/Fairview	47	5%
Chase River	6	1%
Cedar	3	0%
Departure Bay	37	4%
Long Lake	4	0%
Bowen Road	44	5%
Nanaimo Regional Hospital	49	5%
Country Club	107	12%
Rutherford	22	2%
Woodgrove	96	11%
Dover/Hammond Bay	44	5%
Lantzville	2	0%
Parksville/Qualicum Beach	25	3%
Jinglepot	6	1%
Other	65	7%
Total	**895**	**100%**
No Response	6	1%

Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

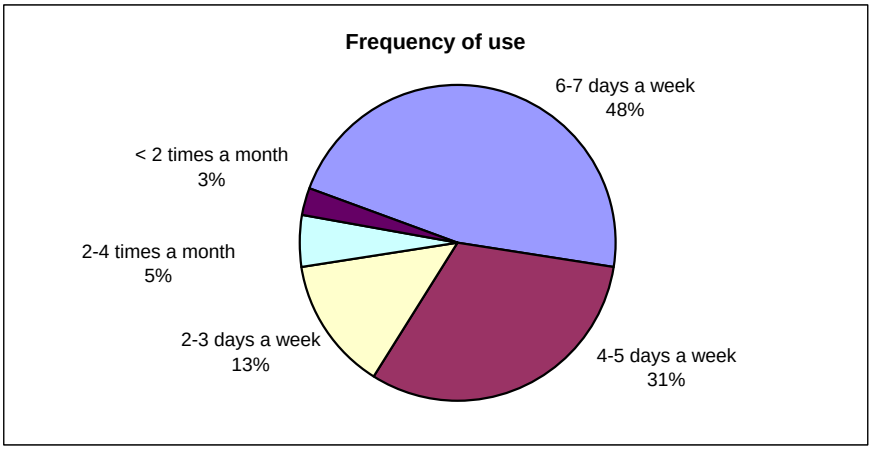
Number of respondents: 901

6. If your trip involved a transfer, where did you change buses?

No transfer	458	54%
Prideaux St. Exchange	90	11%
Country Club	155	18%
Woodgrove	72	9%
Rutherford Mall	5	1%
Brooks Landing	12	1%
Wembley Mall	3	0%
Mal-U	15	2%
Other	34	4%
Total	**844**	100%
No Response	57	6%

7. On average, how frequently do you ride the bus?

6-7 days a week	415	47%
4-5 days a week	278	31%
2-3 days a week	119	13%
2-4 times a month	47	5%
< 2 times a month	25	3%
Total	**884**	**100%**
No Response	16	2%



Nanaimo On-Board Passenger Survey Results

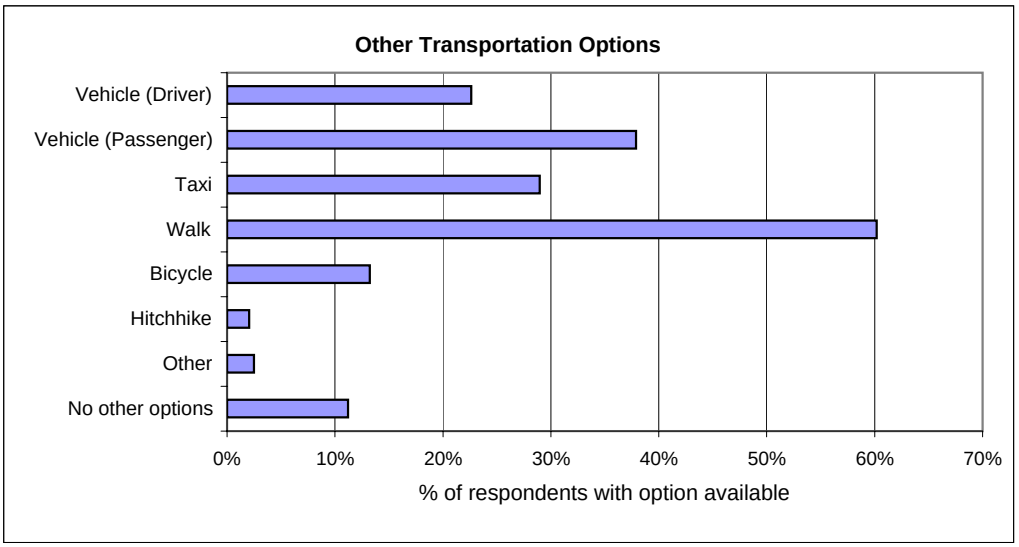
Based on a survey conducted September 2007

Number of respondents: 901

8. What other transportation options are usually available to you?

Vehicle (Driver)	200	23%
Vehicle (Passenger)	335	38%
Taxi	256	29%
Walk	532	60%
Bicycle	117	13%
Hitchhike	18	2%
Other	22	2%
No other options	99	11%
Total*	**1579**	**NA**
No Response	17	2%

*If respondents selected more than one choice, all were counted.



Nanaimo On-Board Passenger Survey Results

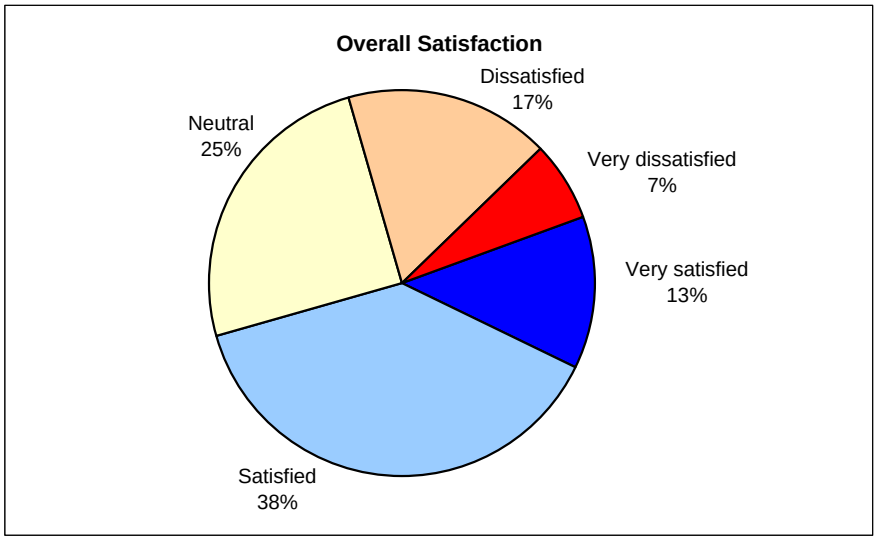
Based on a survey conducted September 2007

Number of respondents: 901

9. Overall, how satisfied are you with your present bus service?

Average score: 3.3

Very satisfied	111	13%
Satisfied	332	38%
Neutral	217	25%
Dissatisfied	149	17%
Very dissatisfied	58	7%
Total	**867**	**100%**
No Response	34	4%



Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

10. How satisfied are you with the following aspects of transit service?

a) Drivers are courteous & professional — Average score: 4.1

Very satisfied	332	38%
Satisfied	332	38%
Neutral	137	16%
Dissatisfied	42	5%
Very dissatisfied	20	2%
Don't know	14	2%
Total	877	100%
No Response	24	3%

b) Buses are clean & comfortable — Average score: 3.9

Very satisfied	216	25%
Satisfied	413	47%
Neutral	169	19%
Dissatisfied	48	5%
Very dissatisfied	19	2%
Don't know	8	1%
Total	873	100%
No Response	28	3%

c) Buses are on time — Average score: 3.4

Very satisfied	136	16%
Satisfied	299	35%
Neutral	257	30%
Dissatisfied	118	14%
Very dissatisfied	46	5%
Don't know	6	1%
Total	862	100%
No Response	39	4%

d) Buses run often enough — Average score: 2.5

Very satisfied	71	8%
Satisfied	127	15%
Neutral	168	19%
Dissatisfied	261	30%
Very dissatisfied	236	27%
Don't know	5	1%
Total	868	100%
No Response	33	4%

e) Fares — Average score: 3.2

Very satisfied	118	14%
Satisfied	227	27%
Neutral	297	35%
Dissatisfied	133	16%
Very dissatisfied	66	8%
Don't know	15	2%
Total	856	100%
No Response	45	5%

Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

f) On-street information

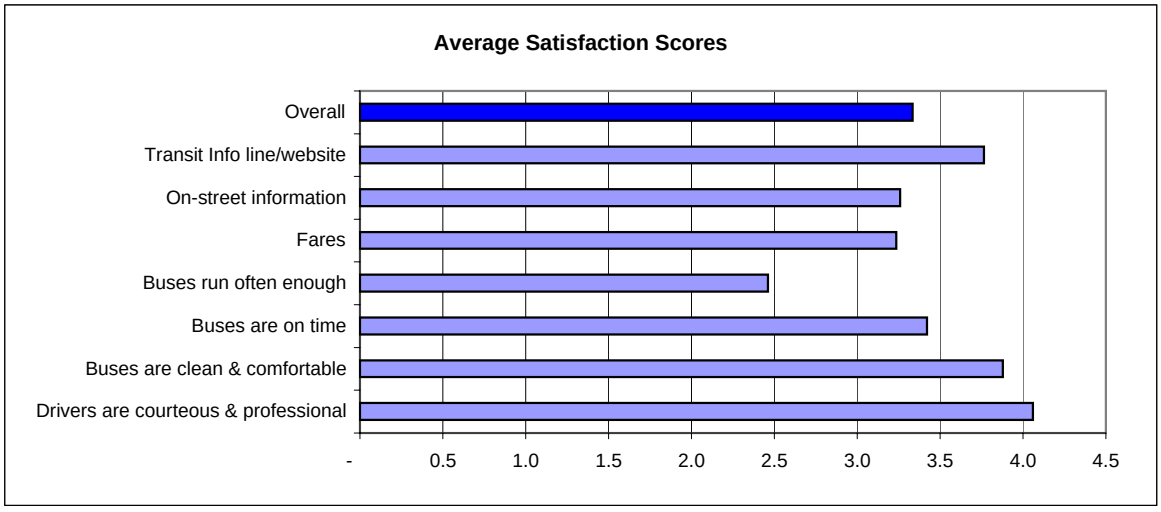
Average score: 3.3

Very satisfied	105	12%
Satisfied	263	31%
Neutral	259	30%
Dissatisfied	119	14%
Very dissatisfied	71	8%
Don't know	45	5%
Total	862	100%
No Response	39	4%

g) Transit Info line/website

Average score: 3.8

Very satisfied	202	24%
Satisfied	276	32%
Neutral	197	23%
Dissatisfied	43	5%
Very dissatisfied	32	4%
Don't know	109	13%
Total	859	100%
No Response	42	5%



Nanaimo On-Board Passenger Survey Results

Based on a survey conducted September 2007

Number of respondents: 901

11. How can we make the bus service better for you?

More frequent service	293	44%
More Sunday and/or Holiday service	189	29%
More evening service	108	16%
Fares/fare products	47	7%
New routes, improved service coverage	42	6%
Buses on time	39	6%
More early morning service	34	5%
Improved transfers	34	5%
Improve drivers' attitudes and safety	29	4%
Improved signage, information	23	3%
Faster, more direct service	18	3%
Improve comfort & cleanliness of buses	11	2%
Improve bus stops or exchange	7	1%
More bus stops	6	1%
Personal safety issues	4	1%
Other	39	6%
Service, drivers are good, etc.	34	5%
Total	**957**	**NA**
No Response	238	26%

Nanaimo On-Board Passenger Survey Results

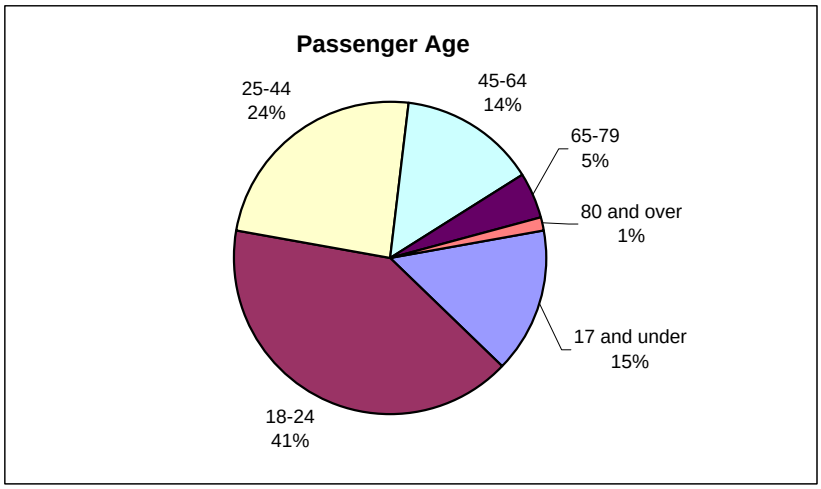
Based on a survey conducted September 2007

Number of respondents: 901

12. To help us better understand who rides the Nanaimo Regional Transit System, can you please indicate…

a) … your age?

17 and under	131	15%
18-24	354	41%
25-44	209	24%
45-64	124	14%
65-79	42	5%
80 and over	12	1%
Total	**872**	**100%**
No Response	29	3%



b) … your sex?

Male	262	42%
Female	355	58%
Total	**617**	**100%**
No Response	284	32%