

# Sylvan Lake Specialized Transportation Feasibility Study



***Submitted to***

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## 1. Introduction

### 1.1 Purpose

In 2015, the Town of Sylvan Lake completed a Social Needs Assessment and a Transportation Master Plan. The Social Needs Assessment identified the need for affordable and accessible transportation for seniors and individuals with limited mobility in order to enhance their overall quality of life.

The purpose of this study is to identify current transportation options for seniors and individuals with disabilities, gaps in transportation options, future needs, and create an action plan for the future provision of such service.

Specific objectives are to:

- Identify current services being provided;
- Identify existing need within the community;
- Identify current gaps in the service;
- Identify future service level targets and how those services levels may be achieved, including how/what group might be responsible for providing the service;
- Create an action plan for the future provision of such services; and,
- Develop a cost analysis and funding model to identify the cost of service delivery.

Specialized transit is a wheelchair accessible public transportation service. It is often reservation-based, serving residents that meet specific eligibility criteria. Most often, eligibility criteria require that riders have limited transportation options because of physical or cognitive impairments. Some specialized transit agencies allow other customers on board when space is available, for specific routes or for group bookings.

The availability of low-cost transportation for seniors and individuals with limited mobility will contribute to achieving the overall mobility goal found in the 2014 Sylvan Lake Municipal Development Plan. The overall mobility goal states that “the transportation network provides a wide variety of options that are efficient, reliable and cost-effective to serve diverse needs and capabilities of citizens”.

Transportation for seniors and individuals with limited mobility is also consistent with the 2010 Sylvan Lake Municipal Sustainability Plan, which states that “transportation options must also be considered for people with varying levels of mobility and incomes, ensuring that our transportation systems are sustainable”.

## 1.2 Methodology

To meet the objectives of this project the following activities were undertaken:

- Review of the profile of residents of Sylvan Lake with particular attention paid to age demographics and persons with disabilities;
- Review of current transportation options available to seniors and individuals with disabilities in Sylvan Lake;
- Study of specialized transportation services in municipalities of similar size in Alberta;
- Consultations and focus groups with individuals in the community who are familiar with specialized transportation needs or are potential users of specialized transportation;
- Identification of service concept design options included associated costs and potential demand for services;
- Identification of potential revenue streams and funding opportunities to support specialized transportation; and,
- Identification of potential partners in the implementation of specialized transportation.

## 2. Community Profile

The community profile provides an understanding of the local context for transit in Sylvan Lake. This section contains a geographical context, demographic profile and description of policies relevant to the provision of public transportation in Sylvan Lake.

### 2.1 Geographical Context

The Town of Sylvan Lake is located in Central Alberta, approximately 25 km west of Red Deer in Red Deer County. It is situated on the south-east shore of the freshwater lake with the same name as the Town. The area around the Town used to be a heavily forested area but is now a combination of forest and farmland.

The lake is surrounded by five Summer Villages: Birchcliff, Half Moon Bay, Jarvis Bay, Norglenwold and Sunbreaker Cove. These summer villages share an administrative office in the Town of Sylvan Lake.

Sylvan Lake Provincial Park is located within the Town and includes the beach and lake area adjacent to Lakeshore Drive. The Summer Village of Jarvis Bay is also the location of a provincial park.

**Figure 2.1 Map of Sylvan Lake Region**



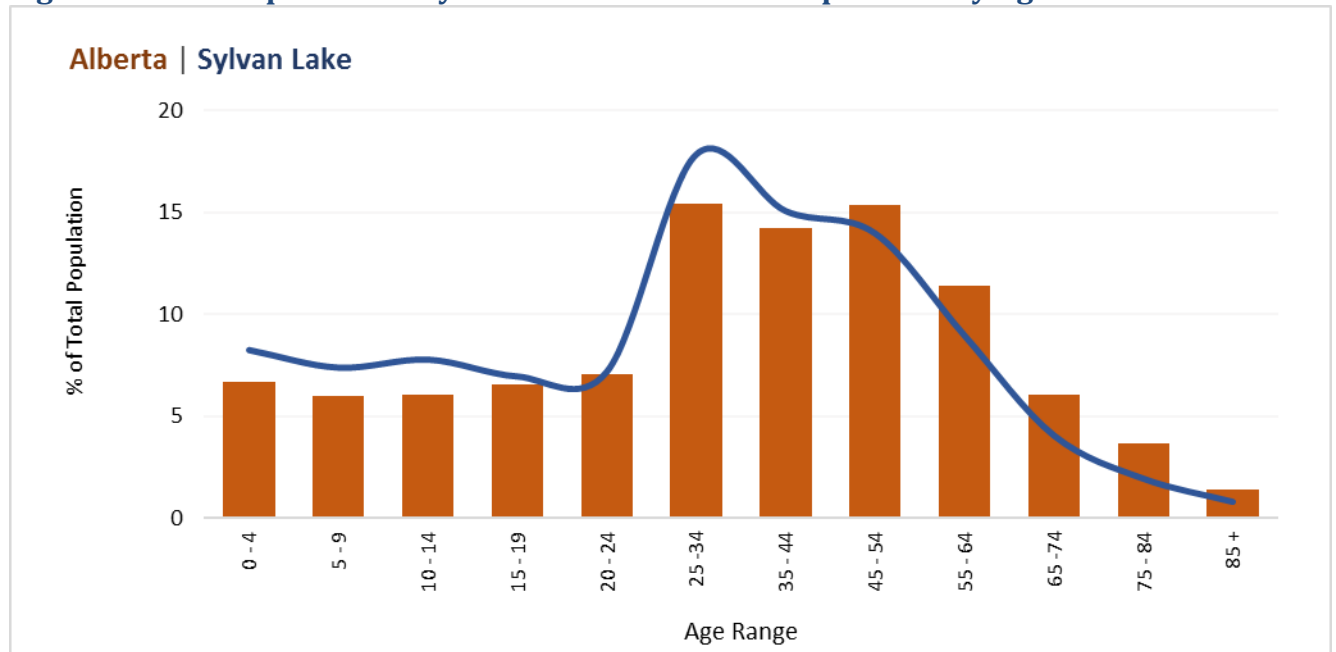
Source: Google Maps

## 2.2 Demographic Profile

### Total Population

Sylvan Lake is a young and growing community. According to the 2015 Municipal Census, the population of Sylvan Lake is 14,310 individuals, which is an increase of 10% since the 2013 Municipal Census. According to the 2011 Statistics Canada Census, 56% of residents of Sylvan Lake are below the age of 35 while only 48% of Albertans are in that age cohort. See Figure 2.2 for a comparison of Sylvan Lake and Alberta population by age categories.

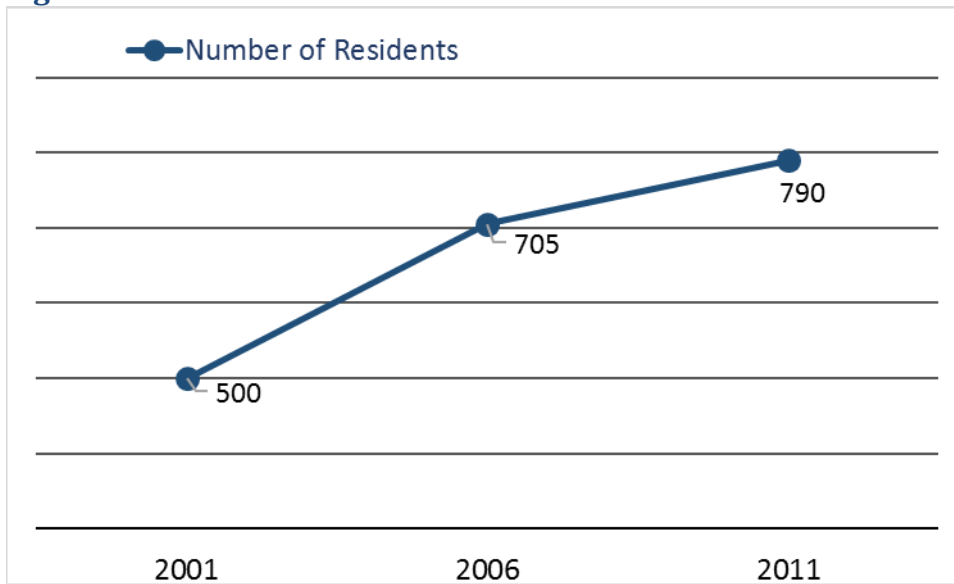
**Figure 2.2 Comparison of Sylvan Lake and Alberta Population by Age**



Source: Statistics Canada, Census, 2011

### Seniors

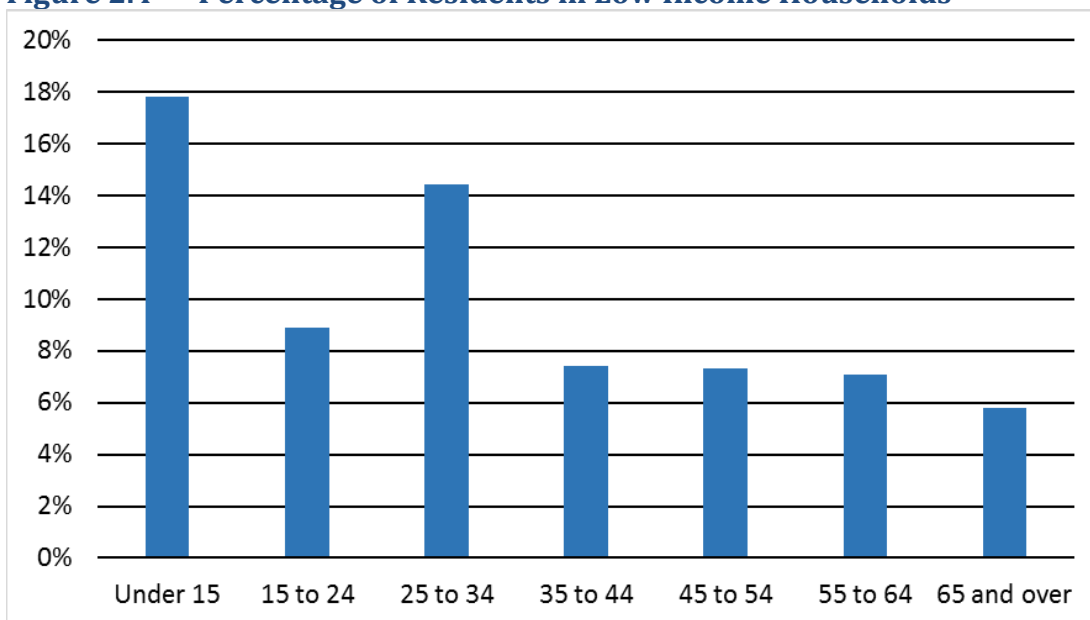
The number of Sylvan Lake residents over the age of 65 grew by more than 50% between 2001 and 2011 (see Figure 2.3), though as a percentage of the total population, residents over the age of 65 has remained relatively constant at approximately 6%. As the population of Sylvan Lake continues to grow, we anticipate that the number of seniors in the community will also grow.

**Figure 2.3 Residents 65 and Over 2001 - 2011**

Source: Statistics Canada, Census, 2001 – 2011

### Low Income Residents

Approximately 11% of residents of Sylvan Lake have low income<sup>1</sup>. The largest group (18%) of individuals living in low income households are children under the age of 15, while approximately 6% of residents over the age of 65 are low income. Figure 2.4 illustrates the percentage of the population, by age group that is considered low income.

**Figure 2.4 Percentage of Residents in Low Income Households**

Source: Statistics Canada, 2011 National Household Survey, Statistics Canada Catalogue No. 99-014-x2011043

<sup>1</sup> For the Statistics Canada National Household Survey, low income is represented by the after-tax low-income measure. All household members are attributed the same income status.



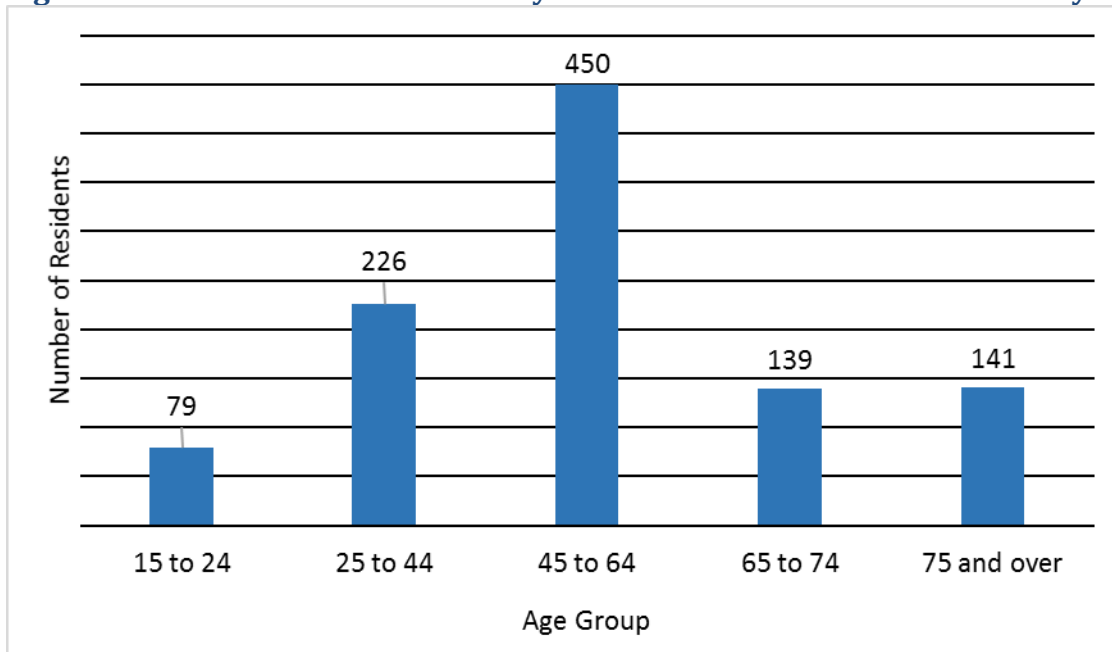
## Persons with Disabilities

There are approximately 1,090 residents of Sylvan Lake who have a disability<sup>2</sup>. The Canadian Survey on Disability categorizes disabilities in the following manner:

- Pain
- Flexibility
- Mobility
- Mental/psychological
- Dexterity
- Hearing
- Seeing
- Memory
- Learning
- Developmental
- Unknown

Figure 2.5 illustrates the estimated age categories of people with disabilities in Sylvan Lake.

**Figure 2.5 Estimated Number of Sylvan Lake Residents with a Disability**



Source: Statistics Canada, Canadian Survey on Disability, 2012

<sup>2</sup> Extrapolated from provincial data

### 3. Existing Transportation Services in Sylvan Lake

The majority of seniors in Canada have driver's licenses and continue to drive. However, for those who do not drive, transportation can be a significant obstacle in meeting basic needs. There are currently three modes of public transportation available to seniors and/or people with limited mobility. Each of these organizations has limited mandate concerning whom they serve and when they operate, meaning that although they provide a much-needed service in the community, there continues to be an unfilled service gap. The types of transportation services in Sylvan Lake are:

- Scheduled buses on limited service routes;
- School bus; and,
- Taxis.

#### Limited Service Routes

Limited service routes are trips designed around specific schedules and purpose such as shopping in Red Deer one day a week. This service is currently available to seniors in Sylvan Lake through the Sylvan Lake Seniors Bus Association and to residents of the Seniors Lodge through their own bus. The Sylvan Lake Seniors Bus Association provides weekly transportation to Red Deer for seniors and persons with disabilities. The association has a 21-passenger bus, which is not accessible for wheelchairs or individuals with significant mobility challenges.

#### School Bus

Chinook's Edge School Division has one accessible school bus in service in Sylvan Lake. Prairie Bus Lines Ltd. owns this bus and uses it for transporting students with limited mobility between their homes and their school. They also use it for special school trips.

#### Taxis

Sylvan Lake has two taxi companies, Aura Taxi and Associated Cabs. Associated Cabs has four wheelchair accessible vehicles that are not yet available in Sylvan Lake. One-way rides within Sylvan Lake cost on average \$6. Rides to Red Deer are approximately \$50 one way.

### 3.1 Additional Transportation Options

In addition to the existing transportation services available in Sylvan Lake, the 2015 Social Needs Assessment and the Transportation Master Plan identified the growing need for fixed-route public transportation both within Sylvan Lake and between Sylvan Lake and Red Deer (similar to BOLT between Blackfalds, Lacombe and Red Deer). The provision of a public transportation system could support the transportation needs of many seniors and residents with limited mobility to the extent that municipal buses have low floors and are wheelchair accessible.

## 4. Review of Other Municipalities

Information from 10 communities with specialized transportation was reviewed to assist Sylvan Lake in assessing transportation options for seniors and people with limited mobility. The population of the communities chosen for this review range from approximately 8,000 to 18,000 people. The communities selected were:

- Brooks
- Camrose
- Canmore
- Cold Lake
- Drumheller
- Edson
- Hinton
- Strathmore
- Wetaskiwin
- Whitecourt

The information about transportation services in these communities was obtained through interviews and various webpages. It is not recommended that this information be used as a direct comparison between municipalities as each community has a unique culture, characteristics and circumstances. However, the information provides some insights into the experiences of each of the municipalities.

### 4.1 Community Profiles

The following information provides a summary of the profiles of the communities chosen for this review (see Table 4.1 for more detail).

- Population ranges from 8,029 in Drumheller to 18,038 in Camrose. Communities chosen for this review have approximately 5,000 people more or less than Sylvan Lake.
- The number of seniors over the age of 65 in each community ranges from 480 in Whitecourt to 3,310 in Camrose.
- The communities are located between 40 km and 295 km from Calgary, Edmonton or Red Deer. The nearest major communities (Calgary, Edmonton, or Red Deer) are between 40km and 290 km away.

**Table 4.1 Community Profile**

	Municipality	Brooks	Camrose	Canmore	Cold Lake	Drumheller	Edson	Hinton	Strathmore	Wetaskiwin	Whitecourt
Community Profile	Population*	13,676	18,038	12,300	15,736	8,029	8,646	9,640	12,352	12,621	10,574
	# of Residents 65 and Older*	1,275	3,310	1,123	765	1,295	780	900	1,365	2,520	480
	Distance to major centre	158 km	98 km	103 km	295 km	135 km	202 km	288 km	40 km	70 km	180 km

\*Statistics Canada, Census 2011

## 4.2 Description of Services

- The majority of the communities listed above offer specialized transportation to residents over the age of 65 and people with limited mobility. Edson and Wetaskiwin are exceptions as they offer transportation to anyone over the age of 45 and 55 respectively. In all of the communities, individuals with limited mobility may be persons with permanent disabilities or those with short-term mobility challenges such as a broken leg. Interviewees also indicated that the majority of users are seniors as they make up a large portion of the population with limited mobility.
- All of the municipalities require memberships or registration for riders to be able to use their services. The majority of the membership/registration fees are free, though in some municipalities they cost up to \$20 per year.
- Most communities offer door-to-door handibus or handivan service. These services require the rider to pre-book their rides from 2-24 hours before their pick-up time. All of these communities allow attendants to ride at no additional charge when with a qualified passenger.
- Canmore and Strathmore have volunteer driver programs that offer door-to-door service. These programs require the rider to pay a pre-determined mileage to the volunteer driver. In Canmore the majority of volunteer drivers take passengers to Calgary.
- Canmore also has a taxi voucher program. This program is based on a voucher system where riders are given a predetermined number of vouchers per month and the value of the vouchers is fixed through an agreement with the Town and the local taxi companies.
- Hinton offers pre-determined scheduled rides to swimming and community programs from 8:30 AM to 9:00 AM and 3:30 PM to 4:30 PM during the week and to churches on Sunday mornings. During these scheduled times the door-to-door service is not available.
- To increase revenues of the specialized transportation services approximately half of the municipalities make their busses available for groups to take special trips.
- The number of vehicles operated by each municipality varies from one in both Hinton and Whitecourt to seven in Wetaskiwin.
- Most municipalities offer services Monday to Friday from about 8:00 AM to between 4:00 and 5:30 PM. Drumheller offers the service on Saturdays and Strathmore offers the service Monday to Friday from 6:00 AM to 6:00 PM.
- Seven of the 10 communities offer their services only within the municipality, while three make trips within the municipality and surrounding areas.

**Table 4.2 Description of Services**

Description of Service	Municipality	Brooks	Camrose	Canmore	Cold Lake	Drumheller	Edson	Hinton	Strathmore	Wetaskiwin	Whitecourt
	Client Description	Senior residents and visitors and people with disabilities	Seniors and individuals with physical, cognitive and/or developmental disability	Low income seniors and people with disabilities	Seniors and people with cognitive or physical disabilities	Senior residents and visitors and people with disabilities	Residents over 45 years of age and people with disabilities	Seniors and people with limited mobility	Seniors and people with limited mobility	Seniors and people with limited mobility	Seniors and people with limited mobility
	Membership/Registration Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Nature of Service	Door to Door On-demand	Door to Door On-demand	Volunteer driver & taxi voucher	Door to Door On-demand	Door to Door On-demand	Door to Door On-demand	Door to Door On-demand and Limited Service Route	Volunteer driver and Door to Door On-demand	Door to Door On-demand & Fixed route	Door to Door On-demand
	Special Trips (Yes or No)	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	No
	Operator	Municipality	Not for profit Rose City Handibus Society	Municipality	Municipality	Not for profit Valley Bus Society	Not for profit Edson Seniors Transportation Society	Municipality	Not for profit Strathmore Handi-Bus Association	Not for profit Wetaskiwin Transportation Society	Municipality
	# of vehicles	3	3	0	2	5	2	1	6	7	1
	Availability	M – F 8:00 AM to 4:00 PM	M – F 8:00 AM to 5:00 PM	Dependant on driver availability	Daily 8:30 AM to 4:30 PM Fridays to 9:30 PM	Mon – Sat 8:00 AM to 5:30 PM	Mon – Fri 8:30 AM to 4:00 PM	Mon – Fri 10:00 AM to 12:00 PM and 1:00 PM to 3:00 PM Sundays – to church	Mon – Fri 6:00 AM to 6:00 PM	Mon – Fri 8:00 AM to 5:00 PM	Mon – Thurs 8:00 AM to 3:30 PM
	Type of vehicle	Handibus and Handivan	Handivan	Taxis and personal vehicles	Taxis and Handibus	Handibus and Handivan	Handibus	Handibus	Handibus and Handivans	Handibus and Handivans	Handibus
	Geographic Area Served	Town of Brooks	Camrose and Surrounding Area	Town of Canmore	Town of Cold Lake	Drumheller and Surrounding area	Town of Edson	Town of Hinton	Town of Strathmore and County	City of Wetaskiwin	Town of Whitecourt

### 4.3 Ridership and Fares

- The number of rides provided per month varies greatly from 80 in Hinton to 2,000 in Wetaskiwin.
- Data on number of members/registered users was not available for three municipalities. For the other municipalities, the number of users ranges from 75 in Brooks to 400 in Strathmore. It is important to note that not all registered users are actively using the transportation services.
- A comparison of the number of members/registered users to the number of rides per month illustrates a range of demand for the service from one ride per month per member/registered user in Strathmore to ten in Wetaskiwin.
- The number of riders as a proportion of seniors ranges from 6% in Brooks to 50% in Whitecourt.
- Fares range from \$1.75 per one-way ride in Cold Lake to \$6.00 per one-way ride in Canmore and Wetaskiwin. Strathmore has two different fares, charging \$4 for a one-way trip to a medical appointment and \$5.50 for a one-way non-medical appointment trip.
- Bus passes are offered in most communities. Some communities offer a certain number of trips per month for a specified price, others offer a general monthly bus pass.
- The communities offering service for special trips charge an hourly fee plus mileage. The fees range from \$25 to \$55 per hour and the mileage ranges from \$0.48 to \$1.79 per kilometre.
- Stony Plain<sup>3</sup>, a community located close to a major centre, similar to Sylvan Lake, charges the following fees for their services:

#### **One-Way Trips**

Stony Plain \$4.50

Spruce Grove \$9.00

Edmonton - West \$31.00

Edmonton - South, Downtown, Devon \$36.00

<sup>3</sup> Data for a more in-depth analysis of transportation services in Stony Plain were not available for this report.

**Table 4.3 Ridership and Fares<sup>4</sup>**

Municipality		Brooks	Camrose	Canmore	Cold Lake	Drumheller	Edson	Hinton	Strathmore	Wetaskiwin	Whitecourt
Ridership	One-Way Rides per Month	280	600	900	700	1,000	200	80	520	2,000	470
	Members/Registered Users	75		130	230		100		400	200	240
	One-Way Rides per User per Month	4		7	3		2		1	10	2
	Members/Users as Percentage of Senior's Population	6%	-	12%	30%	-	13%	-	29%	8%	50%
Fares	Fares per One-Way Ride (\$)	4.00		6.00	1.75		4.00	3.00	\$8 return medical, \$11 return non medical	6.00	3.65
	Passes	10 trips \$40 50 trips \$180			Passes available in denominations of \$21, \$35 or \$70		10 trips \$30	10 trip pass \$30 30 trip pass \$70		Monthly Pass \$200	Monthly pass \$50
	Special Trips <sup>5</sup>	\$55/hr + \$1.79/km					\$25/hr + \$1.25/km			\$35/hour + \$0.48/km	

<sup>4</sup> Data availability and collection methods varied between municipalities.

<sup>5</sup> Organizations or groups can book the handibusses for trips. The cost of these trips includes use of the bus and the driver.

## 4.4 Financial Data

Revenue is generated from three primary sources for specialized transportation; the sale of rides, grants or contributions from provincial or federal governments and contributions from municipal governments. The amount of revenues under each category varies.

- Sales revenue ranges from \$5,768 in Brooks to \$206,000 in Wetaskiwin.
- Grants and contributions from provincial and federal governments range from \$2,621 in Camrose to \$80,100 in Strathmore.
- Contributions from municipalities range from \$54,500 in Edson to \$225,000 in Strathmore.

Expenses vary from \$72,700 in Edson to \$336,000 in Strathmore based on the number of vehicles owned, the number of drivers employed, the distance covered by the specialized transportation and the amount of maintenance required on the vehicles.

The average cost of specialized transportation is calculated by dividing expenses (fuel and maintenance, drivers, insurance etc.) by the number of one way rides in a year. The average cost per one-way ride for specialized transportation is \$24.00 in all the communities included in this study with actual costs per ride ranging from \$6.94 in Canmore where they use volunteer drivers and taxis to \$53.85 in Strathmore. The cost per ride is covered through a combination of:

- The sale of bus passes;
- Provincial or Federal Grants; and,
- Municipal contributions.

The average cost to municipalities is based on the amount each municipality contributes to their communities specialized transportation divided by the number of rides given in a given year. The average cost to municipalities per one-way ride for specialized transportation is \$31.00 across all the communities with actual costs per ride ranging from \$6.94 in Canmore to \$53.85 in Strathmore.



**Table 4.4 Financial Data**

Municipality		Brooks	Camrose**	Canmore	Cold Lake	Drumheller*	Edson*	Hinton	Strathmore*	Wetaskiwin*	Whitecourt
Financial	Sales Revenue (\$) <sup>6</sup>	5,800	116,000	-	13,500	110,000	54,052	15,000	80,000	206,000	18,000
	Gifts and Government Revenue (\$)	-	2,600	-	-	39,649	29,765	-	80,100	10,679	10,000
	Municipal Contribution	78,800	60,800	75,000	135,500	73,000	54,500	162,000	225,000	88,000	90,000
	Expenses	84,500	202,000	75,000	149,000	253,500	72,700	177,000	336,000	293,000	117,000
	Cost per Ride (one-way)	25.15	28.06	6.94	17.74	21.13	30.29	-	53.85	12.21	20.74
	Municipal Contribution per Ride (one-way)	23.44	8.44	6.94	16.13	6.08	22.71	168.75	36.06	3.67	15.96

Source: \* <http://donate2charities.ca/>

\*\* <https://chimp.net/charities>

<sup>6</sup> Revenue is generated through fares and special trips

## 5. Service Options for Sylvan Lake

### Key Characteristics for Successful Seniors Transportation Services<sup>7</sup>

- **AVAILABILITY** – refers to transportation services that are provided to seniors and those services are available when needed (e.g., days, evenings, weekdays, weekends).
- **ACCEPTABILITY** – refers to transportation in which service quality is acceptable in terms of advance scheduling; vehicles are clean and well maintained; service providers provide driver ‘sensitivity to seniors’ training.
- **ACCESSIBILITY** – refers to transportation in which the service provider provides ‘door-to-door’ and ‘door-through-door’ transportation; provides transportation to essential and non-essential activities.
- **ADAPTABILITY** – refers to transportation that can accommodate riders wanting to make multiple stops (trip chaining); service providers allow for different types of routes (fixed vs. user response) and passenger service (single vs. group); service providers can accommodate wheelchairs and walkers; escorts can be provided.
- **AFFORDABILITY** – relates to the cost of transportation and transportation that is affordable (e.g., uses volunteer drivers to reduce costs, vouchers, or coupons available, etc.).

<sup>7</sup> (From Medically At-Risk Driver Centre – University of Alberta (MARD) Transportation Toolkit for The Implementation of Alternate Transportation for Seniors in Alberta, 2016)

## 5.1 Para Transit

Para Transit tends to use handibusses that are wheelchair accessible. Services range from door-to-door demand responsive services to scheduled stops on fixed routes. Para Transit can also be a hybrid of these services, which can be a more cost-effective way of meeting the needs of the general seniors' population while at the same time providing a higher level of service for those individuals who are unable to get to a route. The greatest challenge of hybrid transportation is the need for effective scheduling. Hinton uses a hybrid system where certain hours of each day are dedicated to fixed trips and other hours the handibus is available for door-to-door on demand service.

The three most promising implementation options for para transit in Sylvan Lake are:

- The Town delivering the service independently;
- A non-profit organization delivering the service with support from the Town; and,
- The City of Red Deer providing the service in collaboration with the Town.

**Table 5.1 Annual Summary for New Vehicles (See Table 6.1)**

Summary			
Vehicles Required:	2	Revenue:	\$28,000 to \$124,000
Number of Individual Riders:	40-60	Annual Operating Cost:	\$162,000 to \$164,000
		Municipal Subsidy:	\$124,000 to \$136,000

**Table 5.2 Annual Summary for Used Vehicles (See Table 6.2)**

Summary			
Vehicles Required:	2	Revenue:	\$28,000 to \$124,000
Number of Individual Riders:	40-60	Annual Operating Cost:	\$168,000 to \$180,000
		Municipal Subsidy:	\$111,000 to \$132,000

## 5.2 Taxi Supplement Program

Taxi supplement programs use taxi companies to provide transit services. Trips are dispatched to an operator and the driver uses the company's vehicle(s). Passengers using the service pay a portion of the standard fare, with the remaining portion paid by the municipality often through a non-transferable monthly voucher system. In this model individuals are permitted to share rides where one passenger provides a voucher for one-way and another passenger provides a voucher for the return trip. The cost of service may either be a metered amount, a per-trip or per-hour amount. The Town of Canmore operates a taxi supplement program. In Canmore they are able to control their maximum monthly cost based on the number of vouchers they make available and they indicated that not all vouchers get used in a month.

**Table 5.3      Annual Summary for Taxi Supplement Program (See Table 6.3)**

Summary			
Vehicles Required:	0	Revenue:	\$0
Number of Individual Riders:	40-60	Annual Operating Cost:	\$73,000 to \$106,000
		Municipal Subsidy	\$73,000 to \$106,000

### 5.3      Volunteer Driver Program

Volunteer Driver Programs rely on dedicated individuals who are willing to use their own vehicles and time to transport people with specialized transportation needs. In most programs, the volunteer driver is paid a nominal fee by the passenger to offset the cost of gas, maintenance and added insurance costs. It is important to note, as the drivers are volunteers, the Town would have limited control of driver availability.

Volunteer Driver Programs are often used to supplement more formal transportation systems or to fill a need during an interim period. The cost of the volunteer driver program includes the salary for a volunteer coordinator who provides training, ensures drivers meet minimum requirements for their role and does trip scheduling. Canmore and Strathmore are examples of communities with volunteer driver programs.

**Table 5.4      Annual Summary for Volunteer Driver Program (See Table 6.4)**

Summary			
Vehicles Required:	0	Revenue:	\$0
Number of Individual Riders:	40-60	Annual Operating Cost:	\$30,000
		Municipal Subsidy	\$30,000

**Table 5.5 Service Option Comparison**

<b>Service Option</b>	<b>Relative Operating Cost</b>	<b>Advantages</b>	<b>Disadvantages</b>
<b>Demand Responsive Para-transit</b>	High	<ul style="list-style-type: none"> <li>• Flexible hours of operation</li> <li>• Demand-based</li> <li>• Highly accessible</li> </ul>	<ul style="list-style-type: none"> <li>• Requires a dispatcher</li> <li>• High cost per customer</li> <li>• Availability may be limited depending on demand</li> <li>• Buy-in from potential users may be difficult if they have other transportation options</li> </ul>
<b>Taxi Supplement Program</b>	Medium to High	<ul style="list-style-type: none"> <li>• The Town is not directly responsible for vehicle leases, insurance, and maintenance</li> <li>• Can be more economical service as the Town does not have to pay for driver between trips</li> </ul>	<ul style="list-style-type: none"> <li>• Can be harder to monitor and control passengers and customer service</li> <li>• The Town may have less control over physical condition and accessibility of vehicles</li> <li>• At some point it may be more economically feasible to hire a driver.</li> </ul>
<b>Volunteer Driver Program</b>	Low	<ul style="list-style-type: none"> <li>• The Town is not directly responsible for vehicle leases, insurance, and maintenance</li> <li>• Can be more economical service as the Town does not have to pay for driver</li> <li>• The Town does not have to pay for driver "down-time"</li> </ul>	<ul style="list-style-type: none"> <li>• Can be harder to monitor and control customer service</li> <li>• Can be harder to control and mitigate driver and passenger safety</li> <li>• Can be difficult to achieve accessibility for all who need it</li> <li>• Requires a paid coordinator to ensure driver and vehicle qualification and to handle scheduling</li> <li>• Dependent on driver availability</li> <li>• The Town may have less control over physical condition and accessibility of vehicles</li> </ul>

## 6. Demand and Cost Analysis

### 6.1 Estimated Demand

Demand for specialized transportation is dependent on many variables including:

- Number of seniors and people with limited mobility in the community;
- Willingness of individuals to use specialized transportation;
- Fares; and,
- The availability and price of alternate modes of transportation.

This study examined each of these factors through a review of statistical data, discussions with organizations providing support to seniors and people with disabilities and conversations with seniors, to gain a better understanding of the potential demand for specialized transportation services in Sylvan Lake. The potential number of users of specialized transportation in Sylvan Lake can be summarized as follows.

- Fewer than 10 individuals are in wheelchairs.
- Approximately 85 individuals in the PDD and various seniors' programs currently need assistance with transportation.
- Over the next five years it is anticipated that an additional 35 individuals will require the service.
- Previous attempts to provide transportation to seniors have not been considered successful as very few individuals used the service. However, seniors who provided input into this study indicated that there is a growing need for the service particularly for low-income seniors and people with mobility challenges.
- Currently there are limited modes of transportation for individuals who require door-to-door service. Sylvan Lake has two taxi companies though neither of them currently provides wheelchair accessible taxis. Residents indicated that individuals with special transportation needs most typically rely on relatives and friends for transportation.
- For the purpose of this study, it is assumed that approximately 50% of individuals who require door-to-door specialized transportation will use the service.

## 6.2 Estimated Cost

Costs for four specialized transportation options are provided in Tables 6.1 through 6.4 for four alternatives, namely;

- Para transit using two **new** 14 passenger vehicles (6 passenger + 4 wheelchairs)
- Para transit using two **used** 14 passenger vehicles (6 passenger + 4 wheelchairs)
- Taxi supplement program
- Volunteer drivers program

Specialized transportation costs were estimated based on:

- our research findings of average costs of the other municipalities identified for this review;
- interviews with bus sellers; and,
- interviews with other providers of transportation services;

Fixed costs for bus purchases were annualized over the four years of operations using a 30% declining balance depreciation estimate.

Ridership was assumed to increase over time as the ridership base increased and familiarity with the service increased.

### New Para Transit Vehicles

The estimated costs for new para transit vehicles are illustrated in Table 6.1. Over the four-year period this option is marginally less expensive than buying used vehicles (approximately \$6,000) with total gross operating costs of approximately \$607,000 (average of \$152,000 per year) and net operating cost of approximately \$472,000 (average of \$118,000 per year). The two largest expenses for this service are driver salaries and the annual depreciation of the new vehicles. However, as the depreciation costs decrease over time, by year three, this option becomes more economically desirable.

**Table 6.1 Estimated Costs for New Para Transit Vehicles**

	Year 1	Year 2	Year 3	Year 4
<b>Fixed Cost</b>				
Vehicles	190,000			
<b>Operating Costs</b>				
Fuel and Maintenance*	15,000	15,000	15,000	50,000**
Coordinator/Scheduler	15,000	15,000	15,000	15,000
Driver (\$25/hour 1.5FTE)	75,000	75,000	75,000	75,000
Insurance	2,000	2,000	2,000	2,000
Annual Depreciation***	57,000	39,900	27,930	19,551
<b>Gross Operating Cost</b>	<b>164,000</b>	<b>146,900</b>	<b>134,930</b>	<b>161,551</b>
<b>Revenue</b>				
Fares within Sylvan Lake (\$4 one way)	3,840	4,800	5,760	5,760
Fares to Red Deer (\$15 one way)	14,400	18,000	21,600	21,600
Special Trips	10,000	10,000	10,000	10,000
<b>Total Revenue</b>	<b>28,240</b>	<b>32,800</b>	<b>37,360</b>	<b>37,360</b>
<b>Net Operating Cost (Gross Operating Cost – Revenue)</b>	<b>135,760</b>	<b>114,100</b>	<b>97,570</b>	<b>124,191</b>
Hours of service (9:00 - 5:00 M-F)	2,000	2,000	2,000	2,000
Number of days	250	250	250	250
Rides per month	160	200	240	240
Number of users	40	50	60	60
Cost per Ride (one-way)****	85.42	61.21	46.85	56.09

**Assumptions:**

- \* Fuel and Maintenance assuming available 3-year warranty on new vehicle
- \*\* New bus warranty expires
- \*\*\* 30% per year based on Revenue Canada Capital Cost Allowance
- \*\*\*\* Calculated based on Gross Operating Cost/(Rides per month x 12 months)

**Used Para Transit Vehicles**

While purchasing used vehicles is much less expensive than buying new vehicles the annual operating costs are higher due to the increased estimated maintenance costs as used vehicles do not benefit from new vehicle warranties. In total it is estimated that the gross operating costs of a para transit service using used vehicles would be \$613,000 (approximately \$153,000 per year) over four years. The net operating cost would be approximately \$478,000 over four years (average of approximately \$119,000 per year). Table 6.2 provides estimated revenues and costs of a para transit service using used vehicles.



**Table 6.2 Estimated Costs for Used Para Transit Vehicles**

	Year 1	Year 2	Year 3	Year 4
<b>Fixed Cost</b>				
Vehicles	60,000			
<b>Operating Costs</b>				
Fuel and Maintenance	50,000	50,000	50,000	50,000
Coordinator/Scheduler	15,000	15,000	15,000	15,000
Driver (\$25/hour 1.5FTE)	75,000	75,000	75,000	75,000
Insurance	2,000	2,000	2,000	2,000
Annual Depreciation*	18,000	12,600	8,820	6,174
<b>Gross Operating Cost</b>	<b>160,000</b>	<b>154,600</b>	<b>150,820</b>	<b>148,174</b>
<b>Revenue</b>				
Fares within Sylvan Lake (\$4 one way)	3,840	4,800	5,760	5,760
Fares to Red Deer (\$15 one way)	14,400	18,000	21,600	21,600
Special Trips	10,000	10,000	10,000	10,000
<b>Total Revenue</b>	<b>28,240</b>	<b>32,800</b>	<b>37,360</b>	<b>37,360</b>
<b>Net Operating Cost (Gross Operating Cost – Revenue)</b>	<b>131,760</b>	<b>121,800</b>	<b>113,460</b>	<b>110,814</b>
Hours of service (9:00 - 5:00 M-F)	2000	2000	2000	2000
Number of days	250	250	250	250
Rides per month	160	200	240	240
Number of users	40	50	60	60
Cost per Ride (one-way)**	93.75	72.75	59.31	58.39

**Assumptions:**

\* 30% per year based on Revenue Canada Capital Cost Allowance

\*\* Calculated based on Gross Operating Cost/(Rides per month x 12 months)

**Taxi Supplement Program**

A taxi supplement program is a cost-effective way to provide door-to-door specialized transportation when demand is relatively low. However, as demand for service increases the cost of offering such a service also increases. It is estimated that over four years the operating costs of a taxi supplement program would be \$375,000 (approximately \$93,680 per year). See Table 6.3 for a breakdown of costs.

**Table 6.3 Estimated Costs for Taxi Supplement Program**

	Year 1	Year 2	Year 3	Year 4
<b>Operating Costs</b>				
Coordinator	8,000	8,000	8,000	8,000
Vouchers (6 local and 4 Red Deer)*	65,280**	81,600	97,920	97,920
<b>Gross Operating Cost</b>	<b>73,280</b>	<b>89,600</b>	<b>105,920</b>	<b>105,920</b>
<b>Net Operating Cost***</b>	<b>73,280</b>	<b>89,600</b>	<b>105,920</b>	<b>105,920</b>
Number of days	365	365	365	365
Number of users	40	50	60	60

\* Six in-town vouchers valued at \$6 per voucher and four vouchers to Red Deer valued at \$25 per voucher for one-way rides.

\*\* Calculation for vouchers is based on (\$6 per in town voucher x 6 vouchers) + (\$25 per Red Deer voucher x 4 vouchers) \* 12 months x # of users. Number of users increases from 40 in year one to 50 in years two and 60 in years three and four.

\*\*\* Net operating cost equals gross operating cost as there are no revenues to the municipality. All revenues go to the taxi company.

### Volunteer Driver Program

A volunteer driver program can be the most cost-effective way of offering door-to-door specialized transportation. The net operating cost to a municipality for this type of program consists of the salary of the program coordinator, as all other costs are assumed by the driver and reimbursed by the passenger. See Table 6.4 for an estimate of the cost of a part-time coordinator (15 to 20 hours per week) for a volunteer driver program.

**Table 6.4 Estimated Costs for Volunteer Driver Program**

<b>Operating Costs</b>	<b>Per Year Cost</b>
Coordinator/Scheduler	30,000
<b>Gross Operating Cost</b>	<b>30,000</b>
<b>Net Operating Cost</b>	<b>30,000</b>

## 7. Funding Sources

There are a number of grant programs available to support municipal transportation projects in Alberta. Table 7.1 provides a list of grant options relevant to the implementation of specialized transportation in Sylvan Lake. It is important to remember that there is no guarantee of ongoing sustainable support for any of these grants or that a grant submission will be successful.

**Table 7.1 Specialized Transportation Funding Sources**

Funder	Grant Opportunity	Amount	Capital Costs	Operating Costs
<b>Government of Canada</b>				
Employment and Social Development Canada	New Horizons for Seniors Program	Up to \$25,000 per year	X	X
<b>Government of Alberta</b>				
Alberta Culture and Tourism	Community Initiatives Program	Up to \$75,000 per year	X	X
Municipal Affairs	The Municipal Sustainability Initiative	Proposal based	X	X
	Alberta Community Partnership <sup>8</sup>	Proposal based	X	X
	Federal Small Communities Fund	Cost sharing (1/3 Federal, Provincial and Municipal) up to \$3 million	X	X
Alberta Transportation	Green Transit Incentives Program (Green Trip)	Cost sharing (2/3 Provincial, 1/3 Proponent)	X	
	Strategic Transportation Infrastructure Program <sup>9</sup>	Cost sharing	X	
<b>Other Funders</b>				
Federation of Canadian Municipalities	Green Municipal Fund	Up to 50% of \$350,000 for plans and feasibility studies Up to 80% of \$5 million in grants and low interest loans for capital projects	X	

<sup>8</sup> The Alberta Community Partnership Program is an option if there is collaboration with other municipalities in providing Specialized Transportation.

<sup>9</sup> STIP has been unfunded for new projects for three years. A total of \$100 million in new funding for STIP will be available in 2017-18 and 2018-19. The government will consult with municipalities and key stakeholders to ensure the criteria and application process achieve the most efficient and cost-effective results possible. Criteria and specific details will be available following consultations with municipalities.

## 8. Recommendations

According to the Town of Sylvan Lake Municipal Development Plan, the Town's Mobility Goal is that:

*Sylvan Lake is accessible. The transportation network provides a wide variety of options that are efficient, reliable and cost-effective to service diverse needs and capabilities of citizens. Strive to decrease car dependency through meaningful travel options and land use patterns that support walkability and sustainability.*

In the short term, a taxi supplement program that helps offset the cost of transportation for low-income seniors and people with disabilities appears to be the service that will best support the Town of Sylvan Lake in contributing to its mobility goal. A taxi-supplement program can provide reliable, on-demand, door-to-door service for residence of Sylvan Lake while having limited risk to the municipality. As demand for door-to-door service increases, moving to an on-demand para transit system could become a more efficient, reliable and cost-effective option for citizens with limited mobility.

The most economical program for specialized transportation in Sylvan Lake is a volunteer driver program. This type of program has been implemented in Sylvan Lake in the past and its low costs are initially appealing, but it was difficult to manage and there were not sufficient number of volunteers to make the program viable. In addition, people requiring specialized transportation need a service that is dependable and volunteer driver programs tend to be much less reliable than programs with paid drivers. The lack of reliability will impact the effectiveness of the program and limit the buy-in from residents. For these reasons, it is not a recommended option for Sylvan Lake.

There are a number of supply and demand factors that need to be considered when making decisions about implementing specialized transportation services in Sylvan Lake. These factors are:

- According to seniors and service providers, buy-in for specialized transportation services has, in the past, been too low to justify offering this service. The seniors who participated in this review are concerned that demand for the service will remain low as many individuals with limited mobility have come to rely on family and friends who provide rides free of charge. They might be slow to adopt an alternative mode of transportation and therefore a strategy to promote the benefits of this service may be required.
- The 2016 Social Master Plan identifies the goal of providing public transportation within Sylvan Lake and to Red Deer using low floor transit busses. These busses are wheel chair accessible and can therefore reduce the need for a specialized transportation program.

Individuals with limited mobility who can get to a bus stop could take advantage of a public transportation system.

- The City of Red Deer operates the Action Bus with services for residents of the City and County. A partnership with the City of Red Deer would be a cost efficient approach to providing specialized transportation in Sylvan Lake as both capital costs and operating costs could be shared by the two municipalities.
- The Sylvan Lake Seniors Bus Association may be interested in acquiring a wheel-chair accessible bus and be willing to offer door-to-door service for residents with limited mobility. If this is the case, then a partnership between the municipality and the Association could be an effective option.
- The Sylvan Lake Seniors Bus Association takes seniors on regular trips to Red Deer and occasional trips to Calgary, Edmonton or other distant locations. If they became the provider for door-to-door service these special trips could become part of their business model. If another organization or the Town provides the specialized transportation there will be competition for those special trips, which will impact the cost effectiveness of both providers.

## Summary

Based on our analysis, it is recommended that in the short term, Sylvan Lake work with the taxi companies to bring wheel chair accessible taxis to Sylvan Lake and implement a taxi supplement program. The taxi supplement program would provide low income seniors and people with limited mobility six one-way taxi vouchers within Sylvan Lake and four one-way vouchers for trips to Red Deer to help offset their monthly transportation costs. The suggested value of these vouchers is \$6.00 for trips within Sylvan Lake and \$25 for trips to Red Deer.

If demand for this service grows to beyond 50 individuals using the service on average four or more times per month, then Sylvan Lake should consider moving towards offering specialized transportation using wheel chair accessible handibusses. The cost of trips, to be consistent with fares in other municipalities, should be approximately \$4 one-way within Sylvan Lake and \$15 one-way to Red Deer.

A partnership either with the City of Red Deer or the Sylvan Lake Seniors Bus Association or another not-for-profit group would be a potentially viable option for this service. Partnering with the City of Red Deer can reduce overall costs of providing the service while a partnership with the Sylvan Lake Seniors Bus Association can reduce competition for special trips, allow for fundraising opportunities to help offset costs and build on the strengths and services that already exist in the community.

In addition, there are a number of grants available for municipalities and not-for-profit organizations to help offset the capital and operational costs of public transportation. These grants can support the purchase of busses and help offset the operational costs of the service while demand may be low. However, it is important to remember that there is no guarantee



that the Town of Sylvan Lake will get the grants nor that the grants will be available to the Town of Sylvan Lake each year.

The Town of Sylvan Lake could also consider a feasibility study of a fixed-route transportation service with service within Sylvan Lake and to Red Deer, similar to BOLT. This service could address some of the needs of individuals with mobility issues as municipal busses are generally wheel chair accessible. The provision of this type of a transportation system could help offset the demands for a handibus.



## A. Sylvan Lake Social Master Plan Open House Survey Results for Transportation

### Survey Conducted in May 2016

Total Respondents - 115

1. Do you think the identified goals and strategies will help address transportation needs in Sylvan Lake? Yes \_\_\_\_ No \_\_\_\_ If no, why not?

Yes: 87%  
No: 1%  
No Answer: 12%

2. Would you or other members of your household use a public transportation system **within** Sylvan Lake? Yes \_\_\_\_ How often? \_\_\_\_\_ No \_\_\_\_

Yes: 49%  
No: 45%  
No Answer: 6%

How often (If respondent answered Yes):

- 18 respondents did not provide an answer
- 7 respondents indicated 2 to 3 times per week
- 3 respondents indicated sometimes; once in awhile
- 6 respondents indicated always; every day
- 7 respondents indicated 5 days per week
- 4 respondents indicated once per month
- 8 respondents collectively indicated rarely; weekend use; not often; unsure; if needed; maybe my kids would use it; depends on what is offered

3. Would you or other members of your household use a public transportation system **between** Sylvan Lake and Red Deer? Yes \_\_\_\_ How often? \_\_\_\_\_ No \_\_\_\_

Yes: 52%  
No: 38%  
No Answer: 8%  
Maybe: 2%

How often (If respondent answered Yes):

- 19 respondents did not provide an answer
- 8 respondents indicated 3 to 5 times per week
- 8 respondents indicated daily usage
- 5 respondents indicated 1 to 2 times per week
- 5 respondents indicated 1 to 2 times per month
- 1 respondent indicated once every other month

- 14 respondents collectively indicated occasional; unknown; unsure; not often; rarely; if needed; random; once in a while; sometimes; varies – would use during winter; depends when its offered
4. Do you or other members of your household require a limited mobility transportation system? Yes \_\_\_\_ How often? \_\_\_\_\_ No \_\_\_\_
- Yes: 9%
- No: 83%
- No Answer: 8%
- How often (If respondent answered Yes):
- 6 respondents did not provide an answer
  - 2 respondents indicated 7 days per week
  - 1 respondent indicated unknown
5. Please provide us with any comments you might have about the Transportation portion of the draft Social Master Plan.

**Comments:**

- (Referring to Transportation Goals and Strategies) Let's do it!
- The size of Sylvan Lake and where retail is located, there needs to be public transportation
- (Referring to public transportation between Sylvan Lake and Red Deer) I think it is a necessary thing for many in the community
- (Referring to limited mobility transportation system) I think it is an invaluable need in the community
- (Referring to limited mobility transportation system) Don't need it yet, here for life
- Sylvan Lake and Red Deer transport would work if there is drop off and pick-ups throughout Red Deer e.g. major bus stops and edges of Red Deer, only need a couple of pick-up places in Sylvan Lake
- (Referring to limited mobility transportation system) Don't need it yet
- Though I do not need either of the Transportation strategies, I believe they will go a long way to helping those who could use them
- Even though we wouldn't utilize public transportation, I feel it's a very good idea for our community
- (Referring to limited mobility transportation system) Great idea
- Have heard from immigrants that transportation access is poor
- Transportation access from Sylvan Lake to Red Deer is becoming a very needed option
- Handibus is too expensive for many people I hear from
- Cheaper and easier to use bus (seniors bus) I realize cost and manpower is a problem
- Need a bus service
- A city bus from Red Deer to Sylvan Lake would help people to go back and forth
- This (transportation) is a big issue – Sylvan Lake is not a wheelchair friendly town
- (Referring to limited mobility transportation system) would have used it – have bought our own due to lack of services



- All these programs are a necessary next step in aiding the growth of our Town
- Need wheelchair accessible for seniors and others who need it
- I am not sure a public transportation system would have high usage in Sylvan Lake
- There is a regional transportation report available for reference through Central Alberta Economic Partnership (CAEP) BOLT – public transit between Lacombe/Blackfalds/Red Deer came from it
- Do not drive in winter so have to rely on other people for CT/MRI so needed!!
- Bus service within Sylvan Lake would enhance community safety as well as it pertains to school age children
- (Referring to public transportation within Sylvan Lake) Not currently needing it, but will as kids get older
- Although this wouldn't affect my family, I am well aware that this is a need (transportation to Red Deer) through my profession at Red Deer Hospital
- A bus route from Sylvan Lake to Red Deer would be helpful
- Public transportation is an absolute necessity
- I don't need limited mobility transportation but my neighbours do
- Public transportation for Town and to Red Deer I would use as I've needed other services that are not offered in Sylvan Lake
- As the Town grows this is a much needed service
- Great to see that there will be options for community members