

**One Year Review of  
Blue Line (NE) LRT Extension:  
Martindale Station,  
Saddletowne Station,  
and Transit Service Changes**

**Transit Planning**

**Calgary Transit**

**2013 August**

## Summary

On August 27, 2012, Calgary Transit opened the 2.9 kilometre extension of Blue Line (Northeast) LRT from McKnight-Westwinds Station to serve two new stations: Martindale and Saddletowne. This report provides an overview of the changes in transit service and ridership that have been measured during the first year of operating the extended line. A summary of the changes described in the report are listed below:

- Prior to the extension, 5 bus routes provided service from McKnight-Westwinds Stations to the communities north of 64 Av NE. For the extension, 2 routes were discontinued, 2 new routes were introduced and the remaining 4 routes were revised to service the two new stations.
- The new bus services provide the same level of frequency but with a quicker travel time to the stations. Bus customers in the area save an average of 10-15 minutes a trip compared to previous bus trips to McKnight West Winds.
- CTrain daily ridership at McKnight-Westwinds, Martindale and Saddletowne Station increased by 70% with approximately 9,300 passengers a weekday compared to CTrain ridership before the extension. Reasons include improved access to the LRT, shorter travel times to stations and an average of 7% population growth in the area.
- Overall ridership on the Blue Line (NE LRT) increased by 12% from Spring 2012 to Spring 2013.
- 7 percent of people now accessing LRT via either Martindale or Saddletowne stations previously traveled to their destination by car (driver or passenger).
- 89% and 63% of Martindale and Saddletowne Station users, respectively, walk to the station compared to an average at other stations of about 15 to 20 percent walking.
- While overall ridership in the area has increased significantly bus ridership on routes serving the new Martindale and Saddletowne stations decreased with many transit customers in the area now walking to access the stations.
- At Saddletowne Station, only 130 Park and Ride stalls were added. The limited number of stalls has encouraged CTrain users to walk, cycle and use bus service to access Saddletowne Station. There have been very few complaints about the limited amount of parking.
- A customer survey conducted in December 2012 and May 2013 found that majority of customers gave a good to fair ratings to nearly all aspects of the stations and transit services.

## Background

On 2012 August 27, the Blue Line (Northeast LRT) was extended 2.9 kilometres from McKnight-Westwinds Stations and opened two new CTrain stations: Martindale and Saddletowne Station. Martindale Station, nested in the community of Martindale, provides community residents direct access to the LRT system by walking or cycling. Saddletowne Station, the new terminus of the NE LRT, provides LRT service to the developing communities north of 80 Av NE. In conjunction with the station openings, significant improvements and changes were made to local bus service to serve the new stations. Shorter travel times, improved access to local businesses, shopping, neighbourhood schools and a Park and Ride facility are just a few of the benefits provided with the opening of Martindale and Saddletowne Station.

The following information has been compiled by Calgary Transit- mainly during Spring 2012 and Spring 2013 to evaluate the new transit services following the line extension.

The service area for the Blue Line extension encompasses four communities located north of 64 Av and east of Metis Tr NE. The communities are:

- Martindale
- Taradale
- Saddle Ridge
- Skyview Ranch

According to the 2013 Calgary civic census, the total population of the area was 51,000 and from 2012-2013 and this area experienced a 7 percent population increase in comparison to a 3 percent city wide growth (see table 1).

**Table 1: City of Calgary Census Comparison**

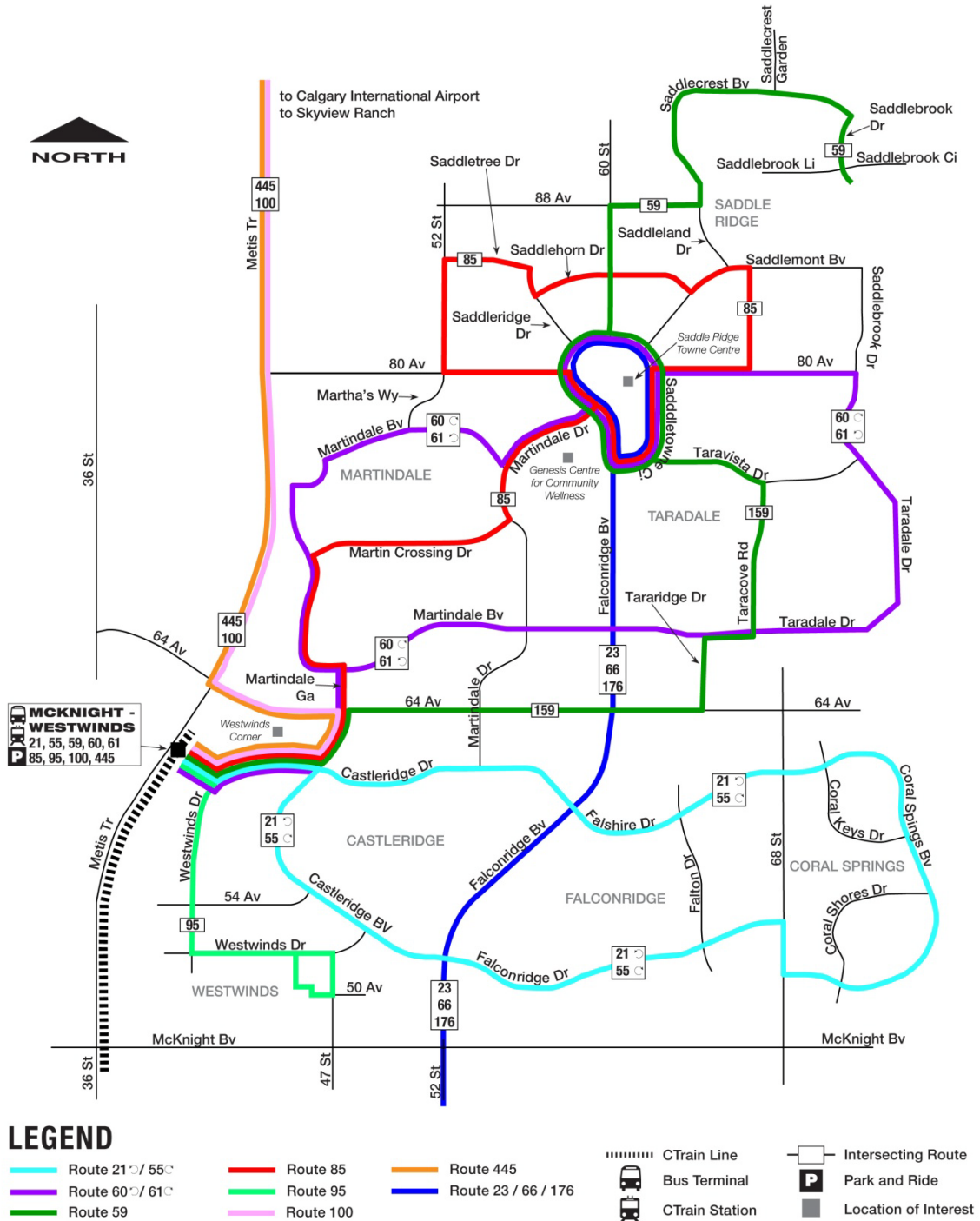
<b>Community</b>	<b>2012</b>	<b>2013</b>	<b>Percent Change</b>
Martindale	13,674	14,084	3%
Saddle Ridge	14,372	15,221	6%
Skyview Ranch	2,990	4,509	51%
Taradale	16,841	17,643	5%
<b>Total:</b>	<b>47,877</b>	<b>51,457</b>	<b>7%</b>
Calgary	1,120,225	1,149,552	3%

## Transit Service Changes

Prior to the LRT extension, there were five bus routes serving the study area and connecting to McKnight-Westwinds Station and serving other local destinations (See Map 1).

Other bus routes, Route 23 – Foothills industrial, Route 66 – Blackfoot Express and Route 176 – 52 St Express are cross-town routes that connect the northeast area to other communities further south, including the southeast industrial area. These routes were not changed after the NE LRT extension and are excluded from this evaluation.

**Map 1: Transit Routes before NE LRT Extension**



The bus routes serving this area, previously linked to McKnight-Westwinds Station, were shortened to serve the Martindale and Saddletowne stations. A summary of the new, discontinued and revised bus routes are shown in table 2.

**Table 2: Route Changes**

2012	2013	Change
59 – Saddlecrest	--	Discontinued, replaced with Route 159
60 – Martindale	60 - Taradale	Revised
61 – Taradale	61 – Martindale	Revised
--	71 - Taracove	New
85 – Saddleridge	85 – Martin Crossing	Revised
--	159 - Saddlebrook	New, replaced Route 59
445 – Skyview Ranch	445 – Skyview Ranch	Revised

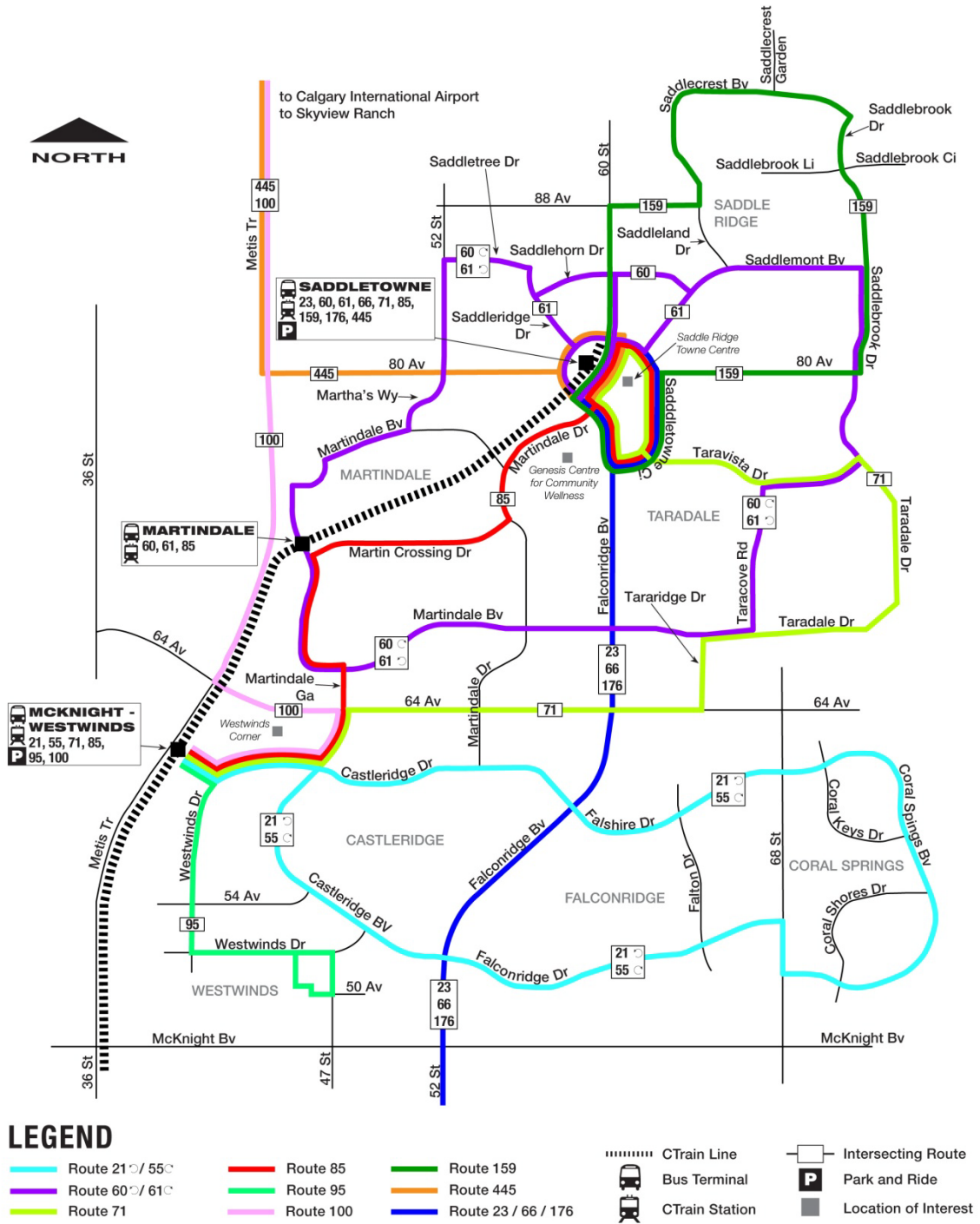
The CTrain extension and bus route changes required a 9% increase in transit service hours to this area mainly due to the CTrain extension and the addition of a new bus route – Route 71 Taracove. Bus and CTrain service frequency remains mainly the same throughout the week (see table 3) with some improvement to weekend service. The CTrain extension has resulted in improved overall service coverage, shorter bus travel times and shorter route round trips (See Map 2, Table 4 and Table 5).

**Table 3: Service Comparison**

	2012	2013	Result
Bus routes	5	6	+1 routes
<b>Annual Service Hours</b>			
Bus	966	1057	9% Increase
CTrain Route 202*	1120	1222	9% Increase
<b>Bus Service Frequencies</b>			
Peak periods	15-25	15-25	Same
Off-peak periods	30	30	Same
Weekends	30-45	30	More Frequent
<b>CTrain Service Frequencies</b>			
Peak periods	4-7	4-7 min	Same
Off-peak periods	10-15	10-15	Same
Weekends	10-15	10-15	Same

\*CTrain service hours from NE LRT Line only

Map 2: Transit Routes after NE LRT Extension



The LRT extension combined with bus route revisions has resulted in a significant decrease in travel time for transit customers accessing LRT due to shorter bus trip lengths to CTrain service. On average, transit customers are saving 10-15 minutes in their travel time to a CTrain station and overall transit routes in the study area have reduced the bus route round trip distance on previous routes by about 20 kilometres (see Tables 4 and 5).

**Table 4: Bus Travel Time to CTrain in Minutes**

2012		2013				Average Travel Time Savings
Route	McKnight- Westwinds	Route	McKnight- Westwinds	Martindale	Saddletowne	
60	25	60	--	10	15	10-15
61	25	61	--	10	15	10-15
		71	20	--	15	New
85	25	85	10	10	10	15
59	30	159	--	--	15	15
445	35	445	--	--	20	10
<b>Average</b>						<b>10-15</b>

**Table 5: Bus Route Round Trip Kilometres**

Route	Route Round Trip		Results
	2012	2013	
59 / 159	16.5	6.0	-10.5
60	11.0	10.3	-0.7
61	10.9	9.9	-1.0
85	12.2	8.9	-3.3
445	21.2	16.6	-4.6
Total	71.8	51.7	-20.1
<b>New Route</b>			
71	--	13.4	+13.4

## Ridership Changes

Bus ridership in the study area decreased by 8% between Spring 2012 to Spring 2013 (see table 6). However, overall daily CTrain ridership between McKnight-Westwinds, Martindale and Saddletowne Station increased by 70% or approximately 9,300 new passengers between Fall 2010 and Fall 2012 (see Table 7). This suggests more transit customers are using alternate modes of travel to access a CTrain station. A review of the travel modes in the study area will be analyzed later in this study.

**Table 6: Bus Ridership in Study Area**

Period	Week	Weekday	Saturday	Sunday
Spring 2012	144,250	25,280	10,020	7,830
Spring 2013	132,840	23,150	9,420	7,670
Change	-11,410	-2,130	-600	-160
Percentage change	-8%	-8%	-6%	-2%

**Table 7: CTrain Ridership in Study Area**

Station	Fall 2010*			Fall 2012		
	Entering	Exiting	Total	Entering	Exiting	Total
McKnight-Westwinds	7,190	6,050	13,240	5,560	5,860	11,420
Martindale	--	--	--	1,190	1,210	2,400
Saddletowne	--	--	--	4,090	4,640	8,730
Total	7,190	6,050	13,240	10,840	11,710	22,550
Change	9,310 (70%)					

\*a count for Fall 2011 at McKnight Westwinds is not available.

In 2013, there was a 12% increase in total ridership along the entire NE LRT line, approximately 12,300 passengers per week (see table 8).

**Table 8: NE LRT- Blue Line Ridership**

CTrain NE LRT Line	Week	Weekday	Saturday	Sunday
Spring 2012	105,900	64,100	24,500	17,300
Spring 2013	118,200	71,700	25,400	21,100
Increase	12,300	7,600	900	3,800
Percentage Change	12%	12%	4%	22%

Spring 2012: NE LRT Line: Bridgeland-Memorial to McKnight-Westwinds Station

Spring 2013: NE LRT Line: Bridgeland-Memorial to Saddletowne Station

## Park and Ride

One park and ride parking lot at Saddletowne station with 130 stalls opened in conjunction with the Blue Line extension. The occupancy rate is at 100% with a waiting list for reserved parking. Although there are a limited number of Park and Ride stalls for this extension (compared to other terminal stations), the location of the Saddletowne and Martindale station within the heart of the communities encourages transit customers to use bus service or walk and cycle to access the CTrain. There have been very few complaints regarding the limited supply of park and ride spaces.



As there was not a significant increase in the supply of park and ride stalls, the park and ride lot at McKnight-Westwinds Station continues to be at 100% capacity with reserved parking opportunities still available. Demand for park and ride at Whitehorn station is very low.

## Community Engagement

During preparations for the opening of the LRT extension and the two stations, engagement programs were conducted with the local communities and the nearby school to address crossing safety, security and noise concerns. A repeatable program on crossing safety was provided to the Martindale Crossing School who are able to give this information to students. There been no significant issues related to CTrain safety in this area.

## Customer Survey Results

After the implementation of the LRT extension and bus route service changes, surveys were conducted in December 2012 and again in May 2013. The surveys were intended to measure the changes to travel behaviour, transit use and customer experiences. A total of 537 surveys were completed.

The following are highlights of the survey findings:

- Majority of respondents' final trip destination is downtown (78%).
- Walking to a CTrain station has increased.
- Survey asked respondents to rate transit on a variety of items. Rating is on a scale 1 = Excellent to 4 = poor:
  - Average rating on bus and CTrain service is between good and fair (rating between 2 and 3).
  - Average rating on station, bus terminal, and Park and Ride attributes are between good and fair (rating between 2 and 3)

Comparing the mode of transportation for comparable trips before and after the opening of the station:

- 56% of respondents are currently walking to their first mode of transit compared to 36% before the NE LRT extension.
- 7% of survey respondents who previously drove or carpoled are now using transit for their trip.
- Customers driving to transit decreased by 15% during the survey period.
- 89% of respondents using Martindale Station walked as a travel mode.
- 63% of respondents using Saddletowne Station walked as a travel mode.
- Average walk time to Martindale and Saddletowne Station is 8 minutes.

## Destinations

Respondents	Destination
78%	Downtown
7%	Northeast Calgary
9%	Northwest Calgary
5%	Southwest Calgary
<2%	Southeast Calgary

## Previous Mode of Travel

Previous Mode of Travel (Before Extension)*			
Transit	Drove the entire trip	Carpooled	Other mode
89%	6%	1%	2%

## Previous Mode of Accessing Transit

Previous Mode to Transit (Before Extension)*			
Walked	Drove own vehicle	Dropped off by vehicle/ taxi	Other
36%	48%	8%	8%

## Current Mode of Accessing Transit

Current Mode to Transit (After Extension)*			
Walked	Drove own vehicle	Dropped off by vehicle/ taxi	Other
56%	33%	10%	1%

## Mode to Transit by Station

	McKnight Westwinds	Martindale	Saddletowne
Walked	20%	89%	63%
Drove own vehicle	75%	6%	19%
Dropped off by vehicle / taxi	3%	6%	16%
Other	2%	0%	3%

\* Percent by Station

### Bus Service Ratings

	Overall impression of the service on this bus route	Bus stop locations	Length of bus route (time)	Traffic encountered / congestion / delays	Crowding / comfort	Bus frequency / how often it comes
60 - Taradale	2	2	2	3	2	3
61 - Martindale	2	2	2	2	2	2
71 - Taracove	2	2	2	3	2	3
85 - Martin Crossing	2	2	2	2	2	2
159 - Saddlebrook	2	2	2	2	3	3
445 - Skyview Ranch	3	2	2	2	3	4

\* Rating is on a scale 1 = Excellent to 4 = Poor (Fair to Poor ratings highlighted)

### Station Ratings

	Weather protection on CTrain platform	Overall station design / appearance	Lighting	Directional signage	Feeling of safety / security	Pedestrian access	Bike racks or lockers if provided
McKnight Westwinds	2	2	2	2	2	2	2
Martindale	3	2	2	2	2	2	3
Saddletowne	2	2	2	2	2	2	3

\* Rating is on a scale 1 = Excellent to 4 = Poor (Fair to Poor ratings highlighted)

### Bus Terminal/Stop Ratings

	Pedestrian access / walkways	Waiting space	Bus stop locations	Size and spacing of the terminal	Location with respect to the CTrain platform	Amenities (shelters, garbage cans, benches)
McKnight Westwinds	2	3	2	2	2	3
Martindale	3	3	3		2	3
Saddletowne	2	2	2	2	2	2

\* Rating is on a scale 1 = Excellent to 4 = Poor (Fair to Poor ratings highlighted)

## Park and Ride Lot Ratings

	Pedestrian access / walkways	Lot layout	Location with respect to the CTrain platform	Amenities (plug-ins, etc)	Ease to enter the lot with a vehicle	Ease to maneuver in the lot with a vehicle	Ease to leave the lot with a vehicle	Number of free parking spaces	Number of reserved parking spaces	Directional signage
<b>McKnight Westwinds</b>	2	2	2	3	2	2	2	2	2	2
<b>Saddletowne</b>	2	3	2	3	3	3	3	4	3	3

\* Rating is on a scale 1 = Excellent to 4 = Poor (Fair to Poor ratings highlighted)

## Average Walking Time to First Transit by Station Used by First Transit Mode Accessed

	First Transit Mode	
	Bus	CTrain
<b>McKnight Westwinds</b>	3	15
<b>Martindale</b>	3	8
<b>Saddletowne</b>	5	8

\* Time in minutes

## Future Improvements

Throughout the first year of operating the NE LRT extension, Calgary Transit received many customer service requests (CSRs) through 3-1-1 regarding improving service frequency, scheduling and routing concerns on some routes.

In September 2013, the following improvements will be made based on feedback from CSRs and ridership review:

- Frequency on the Route 159 – Saddlebrook will improve to 10 minutes during the peak periods from 15 minutes and to 20 minutes mid-day and evening service from 30 minutes.
- Mid-day service will be implemented in the community of Skyview Ranch – Route 445.
- Extension of Route 445 – Skyview Ranch into the communities of Skyview Ranch and Redstone in the short to medium term.
- Mid-day frequency on Route 85 – Martin Crossing will be reduced to 30 minutes due to low ridership.
- Bike racks will be installed at Martindale Station in early 2014.

## Conclusion

The extension of Northeast LRT (Route 202) to Saddletowne has resulted in significant ridership increase on the LRT service in the study area:

- The CTrain ridership in the study area increased by about 9,300 customers from Fall 2010 to Fall 2012.
- The NE LRT Blue Line increase 12% or 12,300 from Spring 2012 to Spring 2013.

The proximity of the new stations to residents and businesses resulted in many transit users to walk as a primary mode of travel to a CTrain station:

- Of the 540 surveys received, approximately 56% of survey respondents are currently walking to transit and driving decreased by 15%.
- Average walk time to Martindale and Saddletowne Station is 8 minutes.
- 7% of survey respondents who previously drove or carpoled are now using transit for their trip.

The overall customer rating of various features of the new stations and transit service is good to fair:

- Very few complaints were received regarding the limited parking spaces at the Saddletowne Station Park and Ride.

Customer service requests received during the first year of operation regarding improving service frequency, scheduling and routing concerns on some routes are currently being reviewed or implemented:

- Frequency improvement on Route 159 – Saddlebrook.
- Mid-day service implemented on Route 445 – Skyview Ranch and review of evening and weekend service.