# 2007 West LRT Report

November 20, 2007



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#### 1.0 Foreword

At the 2007 November 06 Special Meeting of City Council the following motions were approved in relation to West LRT:

- "3a. Council approve the West LRT as the next new LRT line to be constructed, and approve an initial appropriation of \$84 Million (21 LRVs) in Program 664;"
- "3b. Council approve the West LRT as the next new LRT line to be constructed, and \$50 Million in Program 738 West LRT for design and strategic land purchase;" and
- "4. Direct the Administration to prepare a report to the 2007 November 21 Proposed Strategic Planning meeting of Council for approval of the functional design, budget and design/build implementation strategy for the West LRT including servicing options to Mount Royal College and other potential major land uses in the west sector, e.g. Tsuu T'ina Nation lands and Westhills;"

The following report provides information on the West LRT project as requested by Council at the 2007 November 06 Special Meeting.

# 2.0 Background

Light Rail Transit (LRT) was selected for Calgary following a series of studies, conducted in the 1970s, of various rapid transit alternatives. These studies concluded that LRT would provide the best means of providing a higher capacity transit service that would offer the required capacity, travel speed, reliability and passenger comfort to attract increased transit ridership and influence land development.

The development of Calgary's LRT system – The CTrain – began with the opening of the South line in May 1981. The following table provides a summary of LRT development including the extensions that are currently under construction.

#### **Initial Lines**

1981 – South – 12.9 km
1985 – Northeast – 9.8 km
1987 - Northwest – 5.6 km
1987 - South – 12.9 km
16 stations (incl. 9 downtown platforms)
9 stations (incl. 2 downtown platforms)
5 stations

#### **Extensions**

•	1990 – Northwest	– 1.0 km	1 station
•	2001 - South	– 3.4 km	2 stations
•	2003 - Northwest	– 3.0 km	1 station
•	2007 - Northeast	– 2.7 km	1 station
•	2008 - Northwest	– 4.1 km	1 station
•	2011 - Northwest*	– 2.1 km	1 station
•	2011 - Northeast*	– 2.9 km	2 stations

<sup>\*</sup> As approved at the 2007 November 06 Special Meeting of Council.

With the completion in 2011 of the Northwest line extension to Rocky Ridge / Tuscany and the Northeast extension to Saddletowne, Calgary's LRT system will consist of 47.5 kilometres of track and 39 stations.

Currently, on an average weekday, approximately half of Calgary Transit's 540,000 daily passengers board the CTrain making this the most heavily used LRT system in North America. Total CTrain passenger trips entering the downtown on the three LRT lines in the morning peak hour exceed 17,000. Approximately 11 traffic lanes would be required to carry these people in cars (assuming an average 1.2 persons per car) or about 285 buses.

Key factors in achieving this success are strategically planning LRT lines and stations to intercept and serve travel in key corridors and the reservation of land to allow implementation when required.

### 2.1 LRT Planning

Figure 1 shows Calgary's primary LRT network which includes the current three lines (including planned extensions) and three additional lines planned for the West, Southeast and North-Central corridors. Functional studies to identify alignments, station locations and land requirements have been completed and approved for the West and Southeast lines. A functional study for the North-Central LRT line is underway and will be completed in 2008.

In 2006, Council approved the Downtown LRT Feasibility Study, which illustrated how the six LRT lines would serve the downtown. This report identified the need for a subway section as part of the Southeast line and confirmed the need for an 8<sup>th</sup> Avenue subway to accommodate the South and Northwest lines when the capacity of 7 Avenue is exceeded.

The approval of LRT functional planning studies allows Administration to begin to acquire land on an opportunity basis and to include these LRT lines in the transportation

**Primary LRT Network NE Industrial Calgary North** Lands Tuscany I Rocky Ridge North LRT Northwest LRT Saddletowne West LRT 69 Street W Legend LRT Station - 4 Car Platform LRT Allignment Future LRT Extensions North LRT Southeast LRT West LRT Southeast LRT Forecasted Growth (2007-2011) Forecasted Growth (2012-2016) South LRT Forecasted Growth (2017-2021) Forecasted Growth (2022-2026) Southeast **Employment** Centre 212 Avenue S **CALGARY** TRANSPORTATION PLANNING

Figure 1: Primary LRT Network

network planning process. Such decisions help to determine the city-wide requirements for roadways, interchanges, pedestrian / cycling facilities and transit service plans including Bus Rapid Transit (BRT) routes and amenities such as bus terminals and park and ride lots. Approved functional planning studies are also used to determine or adjust land use designations and to facilitate transit oriented development, where appropriate. These plans are also used by other City Departments to adjust servicing plans and by other public sector agencies and the private sector to make long commitments in terms of land use and development.

The LRT network represents the highest order of transit service in Calgary and is designed to move large numbers of people within a short period of time to common destinations. The radial LRT network is planned to serve high concentrations of travel that occur along common corridors. The LRT network, while focused on the downtown, is also designed to serve other trip generators such as schools, shopping centres, entertainment and recreational facilities. The reserved rights of way and priority treatments for LRT allow for more rapid and direct travel than other modes. This allows LRT to accommodate rapid travel by transit from one sector of the city to another with the downtown acting as both a travel destination and a travel hub.

LRT represents a substantial investment in land, infrastructure and vehicles. However, the benefits of LRT have proven the value of this investment in terms of attracting ridership and helping to shape land use in the downtown and at LRT stations. The development of this system has generally followed the growth of the city. However, it is important that the timing and direction of LRT expansion is in concert with the scope and opportunities for land development in each corridor and the capacity required to accommodate transit demand.

The next order of transit service is Bus Rapid Transit (BRT). This involves limited stop bus service operating generally in mixed traffic with varying levels of transit priority and higher capacity buses. Park and ride and enhanced passenger waiting amenities are also provided. Generally, this form of service has a lower capital cost than LRT but also a lower passenger carrying capacity.

Currently, Route 301 BRT is providing service in the North and West Calgary transportation corridors. In the past a similar concept – Blue Arrow bus service – was used successfully to provide a higher level of bus service and most of these routes were replaced by LRT. In the future, as part of a long range transit network design, Calgary Transit intends to develop a network of BRT services that will fill the gap between conventional community based bus service and LRT. Future BRT routes will be used to provide service to destinations and corridors that are not served by the six primary LRT lines and to provide connectivity between LRT lines.

# 2.2 Strategic LRT Development

As noted previously, Calgary's LRT network has been developed to respond to the needs of a growing city. Prior to LRT, Blue Arrow, express buses and, recently, BRT services have been implemented to provide a higher level of service within future LRT corridors. The BRT service currently operating in West Calgary has been highly successful since it was implemented in 2004. BRT service for the rapidly growing Southeast area is planned for implementation in 2009. The following table provides the current and future population and employment figures for each of the LRT corridors. This data shows that West LRT is the next logical step in LRT network expansion. It also shows the need for the Southeast and North-Central lines in the near future.

Table 1: LRT Corridors - Current and Future Population and Employment Projections

	South	NW	NE	West	SE	NC
Current						
Population	202,200	159,300	164,900	84,300	65,100	57,900
<b>Employment</b>	93,000	45,600	68,600	18,000	48,700	5,600
2015						
Population	247,000	170,000	191,000	118,300	135,000	170,000
<b>Employment</b>	121,000	54,000	95,000	21,700	85,000	16,000

It should be noted that West LRT is also the easiest line to implement since it will function as an operational extension of Northeast LRT and requires no new infrastructure in the downtown to support it.

# 3.0 West LRT Planning

Planning studies for West LRT began with land use and transportation studies completed in the late 1970s for the southwest area<sup>1</sup>. The Southwest Roads Study first identified the need for a West LRT line in order to reduce the scale of roadways connecting southwest communities with the downtown. In 1983, the West LRT Functional Study was completed by the Transportation Department (CALTS Series 86). This study examined a considerable number of alignment alternatives along Bow Trail, 17 Avenue, and Crowchild Trail as well as routes through inner city neighbourhoods. An alignment for West LRT including station locations and amenities was approved by Council in 1988 following extensive study and public consultation.

<sup>&</sup>lt;sup>1</sup> Strathcona Design Brief – 1978, Southwest Roads Study - 1979

In 1990, Council approved a report that provided updated costs, population and employment figures for West LRT and recommended constructing West LRT in one stage from downtown to 69 Street SW. In 2006, the Transportation Department conducted a review of the approved alignment and station concepts to determine current costs for construction and land acquisition for West LRT.

The West LRT alignment extends 8.0 kilometres from 11 Street SW in the downtown to 69 Street SW and includes 6 stations. The tracks will connect with the current LRT lines on 7 Avenue. The route crosses 11 Street SW and follows Bow Trail to 33 Street where it traverses the Westbrook Mall area to 17 Avenue and then proceeds west along 17 Avenue to 69 Street SW. The West LRT service area and alignment is shown in Figure 2. Construction of West LRT will be done in concert with the relocation of the 10 Street SW station as part of the 7 Avenue reconstruction program. This will enable West LRT to operate as an extension of Route 202 Northeast LRT in the same way that the South and Northwest lines function as a continuous corridor.

#### Station locations for West LRT are:

- Sunalta (16 Street and 9 Avenue SW)
- 26 Street and Bow Trail SW
- Westbrook (33/37 Street and 17 Avenue SW)
- 45 Street and 17 Avenue SW
- Sirocco Drive and 17 Avenue SW
- 69 Street and 17 Avenue SW

Along 17 Avenue SW, the right of way for West LRT has been protected by means of a bylaw setback and some property has been acquired along the north side of the right of way between 37 Street and Sarcee Trail SW. Land for bus terminals, park and ride and station amenities has been acquired at Sirocco Drive and at 69 Street SW on the south side of 17 Avenue. This land includes a parcel acquired for a future transit oriented development that is currently leased to the West Market Square on Sirocco Drive. Finally, land was acquired for a wider right of way for 17 Avenue west of Sarcee Trail.

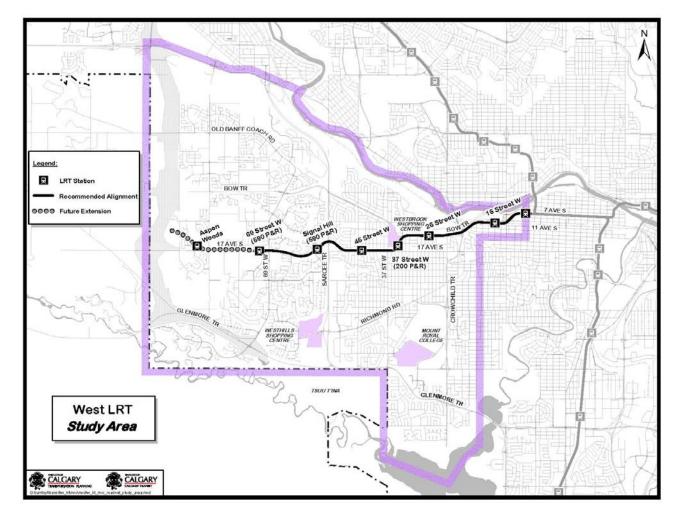


Figure 2 West LRT Study Area and Recommended Alignment

#### 3.1 West LRT Service Area

West LRT is designed to serve communities in Southwest Calgary that are generally located west of the Centre City, between the Bow River and the Glenmore Reservoir. The service area is shown on Figure 2. This area is expected to grow from its current population of approximately 90,000 to eventually achieve about 120,000 in the long term. Jobs in this area are expected to increase from 18,000 currently to 23,000 in the future. These figures are considerably higher than the estimates developed in 1988 for this area (see Table 2).

**Table 2: Comparison of Population and Employment Projections** 

#### **West LRT Service Area**

	1988 Forecast			
	1985 Actual	1 Million	1.25 Million	
Population	33,361	52,800	80,050	
Employment	8,261	12,145	15,445	

<b>Current Forecast</b>			
2005 Actual	1.25 Million (2015)		
84,300	118,300		
18,000	21,700		

### Option to Serve Westhills Shopping Centre and Tsuu T'ina Nation

The West LRT alignment at Sarcee Trail and 17 Avenue provides an opportunity to reserve the potential for a future LRT spur line to serve destinations south of the main east / west alignment. A spur line could depart from the primary alignment in the vicinity of the 17 Avenue / Sarcee Trail crossing and utilize a portion of the Sarcee Trail right of way to serve the Westhills centre and, potentially, the proposed Tsuu T'ina developments south of Glenmore Trail.

For the foreseeable future, transit service to the Westhills centre and, potentially, to developments on the Tsuu T'ina Nation will be a combination of the following:

- feeder bus routes running between the developments and LRT stations,
- community shuttle routes serving adjacent communities, and
- potential future cross-town BRT routes.

### 4.0 West LRT Transit Service Plan Concept

West LRT is centrally located within the service area. This was a key factor in the selection of this route since it will provide the most convenient and shortest access to the greatest number of residents, employees and students in the area. Based on the projected population and employment for the West LRT service area, the daily ridership for West LRT is estimated at 37,000 to 44,000 assuming a modest level of transit oriented development at some stations.

It is proposed that current bus routes will be realigned to operate in a north / south orientation. Average travel times by bus to the various stations will be about 10 minutes. Park and ride lots and bus terminals that are currently serving bus customers along 17 Avenue at 69 Street and Sirocco Drive SW will be expanded for LRT. As well, bus stop amenities in the form of dedicated bus loops or on-street stops will be developed at the other stations. Opportunities for modest-sized joint use park and ride lots will also be sought in conjunction with any station area redevelopment. Figure 3 illustrates the

proposed concept for the future bus service that will be designed to serve LRT and other destinations within the Southwest Calgary area.

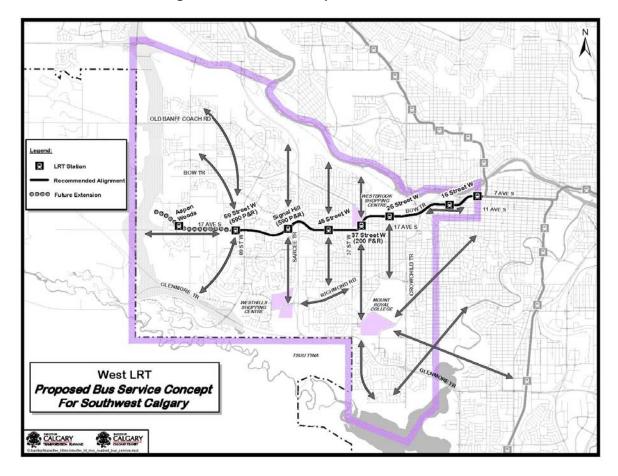


Figure 3 West LRT Proposed Bus Service

#### **Transit Oriented Development**

A number of land use planning initiatives are underway to realize Transit Oriented Development opportunities along the future West LRT line.

#### West LRT Land Use Study

In November 2006, the West LRT Land Use Study was launched by Land Use Planning and Policy. This study encompasses the communities of Shaganappi, Rosscarrock, Westgate, Glendale, Scarboro/Sunalta West and portions of Killarney/Glengarry, Spruce Cliff & Richmond. The purpose of the study is to produce a multi-community Area Redevelopment Plan (ARP) that will direct the appropriate development in the vicinity of future LRT stations while at the same time manage development pressures in other

areas. The land use plan will align with Council's Transit Oriented Development (TOD) Guidelines (2005), the Calgary Transportation Plan (1995) and the Calgary Plan (1998).

The development of a draft concept land use plan is underway, based on a series of technical studies and input received from the public through surveys, open houses, visioning workshops and the Citizens' Advisory Committee. The draft concept reflects the input and ideas of over 1,000 citizens. From this input, several recurring themes have emerged under the categories of Land Use; Mobility; and Public Realm & Urban Design. These themes are listed below.

#### Land use:

- Residential & Mixed Use Development
- Commercial Services
- Recreation
- Community Services and
- Community Life & Activities.

#### Mobility:

- Bicycling & Pedestrian Pathways
- Parking & Vehicular Movement
- Transit Connectivity.

#### Public Realm & Urban Design:

- LRT Design
- Streetscape & Public Space Design
- Open Space & Vegetation
- Community Character.

A brief summary of the land use planning activities and TOD opportunities at each station area is discussed below:

#### Sunalta Area Redevelopment Plan (ARP) Amendment & Sunalta Station Area

A land use study to update the existing Sunalta Area Redevelopment Plan (1983) has begun. The purpose of the study is to amend the existing ARP to introduce a new LRT station and incorporate Transit Oriented Development policies to guide and direct future development for the community of Sunalta. The public engagement process for the land use study will begin in 2008.

Within the Sunalta ARP Amendment process, the appropriate land use mix and densities will be determined for the area around the future LRT station. Development opportunities exist for the lands within the north half of Sunalta, especially between 14 Street and Crowchild Tr, north of the CPR tracks, and 10 and 11 Avenues.

#### 26 Street SW Station Area

Intensification opportunities are currently being explored for this area. The large Jacques Lodge site, east of the Shaganappi Golf Course is being considered for higher density uses.

#### Westbrook Mall Station Area

The area bounded by Bow Trail, 17 Avenue, 33 Street and 37 Street contains Westbrook Mall, Ernest Manning High School (CBE), as well as supporting commercial/office and residential uses on approximately 50 acres of land. This has been acknowledged as one of the most significant opportunities for Transit Oriented Development along the West LRT line. The West LRT Land Use Study has identified the Westbrook Mall station area as a future high density, comprehensive, mixed use area that has a village feel. A large multi-family residential development for approximately 550 units is currently under construction on the lands immediately north of the mall.

#### 45 Street SW Station Area

Transit Oriented Development opportunities are being explored primarily along 17 Avenue within the West LRT Land Use Study process.

#### Sirocco Drive SW Station Area

The City of Calgary owns approximately 9 acres on the southeast corner of 17 Avenue and Sirocco Drive SW. Approximately half of this land is under long term lease to West Market Square while the east portion has been developed for park and ride and a small bus loop. It is intended that a park and ride lot and bus terminal that incorporates a more intensive commercial development will be developed on these lands. Over time, the current commercial site could be redeveloped or intensified.

#### 69 Street SW Station Area

A small bus terminal and park and ride for 170 cars has been developed on the land located at the southwest corner of 17 Avenue and 69 Street SW in conjunction with the Westside Recreation Centre. This facility is used by local transit routes and the BRT service.

Just west of this intersection and south of 17 Avenue, approximately 80 acres of land has been set aside for the development of three major schools – Rundle College, Ambrose University College and a Calgary Board of Education high school. When completed, these schools will have a combine enrolment of 4,000 students plus faculty and staff. Additional information describing this 'educational campus' is provided below.

#### Rundle College

Rundle College is a private junior/high school campus on the south side of 17 Avenue at 73 Street that opened in 2005. Currently 500 students attend this school. Rundle

College has indicated plans to relocate their primary school and business administration offices to this campus adding another 400 students plus associated teaching and administrative staff.

### Ambrose University College

Ambrose University College is currently developing 9 acres of their 40 acre site located to the southwest Rundle College. As part of this initial development, Ambrose University College is anticipating up to 2,000 students. Construction is underway on an Academic Centre, Library, Athletic/Performing Arts Centre and on campus student residences for about 130 students with opening scheduled for Fall 2008.

#### High School Site

On the east side of Rundle College approximately 18 acres of land has been set aside for a public school on the west side of 69 Street and south of 17 Avenue. This parcel is to the east of both Rundle College and Ambrose University College and it adjoins both sites (shown in a figure at the end of this report). Tentative agreement has been reached with the Province and the Calgary Board of Education to construct a high school west of 69 Street SW as part of the West LRT project. Discussions are underway to facilitate the transfer of the Ernest Manning High School to this site. Currently over 1,100 students attend Ernest Manning High School.

Given the scope of the educational campus development of these lands the West LRT line would be extended to the west side of 69 Street SW with a station, bus terminal and park and ride lot developed in conjunction with the high school. Further discussions with area stakeholders will be undertaken to develop the plans for this area in conjunction with the design and construction of the West LRT line.

#### 5.0 Recommended Alignment

As noted previously, functional planning for West LRT Line dates back to a 1983 study. Council approved an updated plan and alignment for West LRT in 1988 and in 1990 Council confirmed the alignment and the recommendation to construct West LRT to 69 Street SW in one stage. Since 1990, several planning and design developments have occurred that modified some aspects of the West LRT alignment.

The following is a general description of the recommended alignment for the West LRT Line. Further adjustments to this alignment may be made during the Design/Build process which will include an intensive public engagement program to consult with area residents, businesses and other stakeholders. The alignment has been divided into areas for the purpose of this summary and illustrated in Figure 4. Detailed illustrations of each area are included in Appendix 1 at the end of this report.

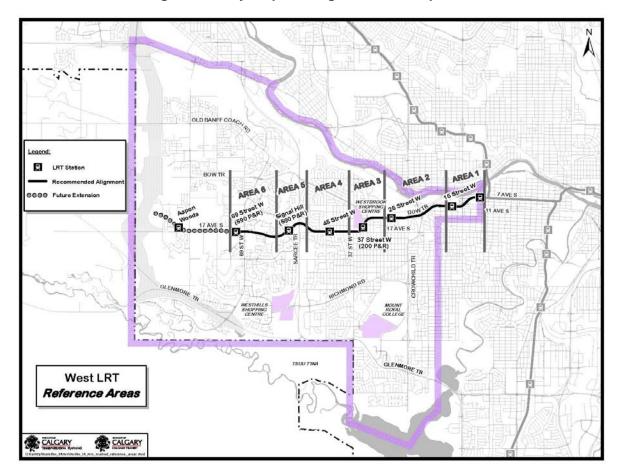


Figure 4 – Key Map for Alignment Descriptions

#### Area 1: 10 Street to 18 Street SW

The West LRT alignment begins from a new station located on 7 Avenue between 10 Street and 11 Street SW and proceeds westerly with an at-grade crossing of 11 Street SW and continue westward between the Mewata Armoury and the Telus World of Science (Science Centre) sites. The LRT tracks will ramp up to an elevated structure (elevated guideway) that will take the LRT over Millennium Park, 14 Street, 9 Avenue and CP Rail mainline tracks. Heading west, the alignment will continue on an elevated guideway along the south side of the CP Rail right-of-way. An elevated station is proposed adjacent to the community of Sunalta at approximately 16 Street SW including grade-separated pedestrian connections north to the Greyhound Bus Terminal as well as south to the community of Sunalta. From here, the elevated guideway will continue westerly, adjacent to Sunalta, along the south side of the CP Rail right-of-way towards Crowchild Trail.

#### Area 2: 18 Street to 26 Street SW

Continuing on an elevated guideway, the LRT alignment crosses over Crowchild Trail on the south side of the Crowchild Trail/Bow Trail interchange area. The LRT alignment returns to grade at 24 Street with an at-grade crossing of 26 Street and an at-grade station located on the west side of 26 Street. Some property will be required on the north side of Bow Trail from the Jacques Lodges site (Metropolitan Calgary Foundation) as well as some private residences and land from the Shaganappi Golf Course. Reconfiguration of the Shaganappi Golf Course will be required.

#### Area 3: 26 Street to 37 Street SW

Proceeding west from 26 Street, the alignment remains at-grade until 31 Street where it is lowered to an underground tunnel to cross Bow Trail at 33 Street into the Westbrook Mall/Ernest Manning High School site. The LRT remains underground traversing the playing fields of the Ernest Manning High School site with an underground station located in this area. The topography of the land in this area lends itself to constructing an underground alignment. To facilitate this LRT alignment, the Ernest Manning High School will be transferred to a new site at 17 Avenue and 69 Street SW.

Relocation of the high school will facilitate transit-oriented development of the lands surrounding the Westbrook station. The proposed land uses to facilitate such a redevelopment are currently being created as part of the West LRT Land Use Study.

The LRT alignment will remain underground as it turns to the west along 17 Avenue and passes underneath 37 Street.

#### Area 4: 37 Street to Glenside Drive SW

The LRT alignment continues underground along 17 Avenue crossing under 37 Street and re-surfacing to grade at approximately 41 Street. It continues westwards at-grade to the 45 Street station. Proceeding west, the LRT will cross 45 Street at-grade and will continue along 17 Avenue towards Sarcee Trail. An option to continue the tunnel section to the west side of 45 Street SW will be explored during the design / build process.

Land on the north side of 17 Avenue has been protected by setbacks and some of it has already been acquired. Construction of the Calgary Police Service building and Alberta Motor Association building has left land sufficient to accommodate the LRT. More land will be required on the north side of 17 Avenue to accommodate the LRT in this area.

Eliminating access to 40 Street, 41 Street and 42 Street on the north side of 17 Avenue will require further review with refinement of the LRT alignment, a traffic impact study and public consultation.

The design will provide for a possible future spur line to serve development along the Sarcee Trail corridor and to the south of Glenmore Trail. Construction of this spur line is not included as part of the West LRT Line but the design will provide an allowance for this potential.

#### Area 5: Glenside Drive to Christie Park Gate SW

An elevated guideway carries the LRT alignment over Sarcee Trail along 17 Avenue. The location of this structure will accommodate the future interchange at Sarcee Trail/17 Avenue. The interchange will not be constructed as part of the West LRT project. The Signal Hill station is located just east of Sirocco Drive on 17 Avenue with pedestrian connections to the north and to the bus terminal and Park 'n Ride facility located on the south side of 17 Avenue just east of the West Market Square retail complex. The LRT alignment continues west along 17 Avenue crossing Sirocco Drive/Costello Boulevard at-grade continuing up the hill at-grade towards Christie Park Gate.

#### Area 6: Christie Park Gate to 73 Street SW

The grade of the LRT alignment is lowered heading west of the at-grade crossing of Christie Park Gate until sufficient elevation difference between the LRT and 17 Avenue is created to cross the LRT underneath 17 Avenue to the south side of the road right of way. This requires realigning the eastbound lanes into the median of 17 Avenue to accommodate the LRT on the south side, east of 69 Street. The LRT crosses underneath 69 Street and remains lower than the elevation of 17 Avenue with the line ending east of 73 Street. The LRT station is located on the west side of 69 Street to provide accessibility to the educational campus that is being developed in this area. Currently, Rundle College (private school) is located on the south side of 17 Avenue at 73 Street and Ambrose University College is under construction located to the south of Rundle College. The land on the west side of 69 Street and south of 17 Avenue is the location for the new Ernest Manning High School.

Bus zones and park and ride facilities will be located as part of the design of the 69 Street station.

#### Refinement of the West LRT Alignment

This recommended general alignment for the West LRT will be refined further through the Design/Build process (discussed in Section 6.0) and will be discussed with stakeholders through an intensive public consultation and engagement program that will be developed and implemented as part of the West LRT program. This process will be an extension of the current West LRT Land Use Study which has been underway since 2006.

# 6.0 Project Delivery Options

There are multiple methods of procuring and delivering major infrastructure projects ranging from Design-Bid-Build to Public-Private Partnerships. Administration has assessed the range of available project delivery methods and has considered three primary objectives in selecting the method of project delivery for the West LRT Line.

- 1. Ability to attract both engineering and construction resources to complete this large and complex project given the high level of engineering and construction activity across Canada.
- 2. Desire to achieve an increased level of cost certainty for this project which is the largest public transit project undertaken in recent times by The City of Calgary.
- 3. Desire to compress the overall schedule to complete the West LRT Line and to commence revenue service.

Based on the above objectives, Administration is proceeding with using the Design/Build project delivery method for implementation of the West LRT Line based on the following:

- 1. To increase the attractiveness to both the engineering and construction industries to competitively bid on this project.
- 2. To allow for transferring of some risk from The City of Calgary to the Design/Builder, specifically in terms of cost certainty and schedule performance.
- 3. To encourage innovation in the competitive bidding environment during the Request for Proposals stage of this complex project.
- 4. Due to the planned work load to expand the Northeast and Northwest LRT Lines along with the on-going upgrades along the 7 Avenue corridor.
- 5. The West LRT Line will function as a continuation of the Northeast LRT Line and will be operated and maintained by Calgary Transit. As a result, this line needs to be compatible with the existing technology used in Calgary's LRT system. In addition, funding arrangements for this program have also been secured; therefore pursuing a Public-Private Partnership project delivery model, without financing, is not feasible.

To realize the opportunities for Transit Oriented Development at the Ernest Manning High School site (17 Avenue/35 Street SW) and for City owned lands at West Market

Square (17 Avenue/Sirocco Drive SW), these lands will be vended in with the Design/Build procurement for the West LRT Line. The proceeds realized from redevelopment of these sites would be used to offset some portion of the capital costs for constructing the West LRT Line.

The Design/Build approach would result in lower overall costs and will maximize and accelerate transit oriented development as part of the West LRT.

# 7.0 Implementation Steps

The following next steps are recommended for the West LRT project from November 2007 to October 2008:

- Staffing and set up of West LRT Program Management Office
- Procurement of Owner's Engineer
- Land Acquisition
- Preliminary Engineering
- Public Consultation & Stakeholder Engagement Preliminary Engineering Phase
- Preparation of Procurement Documents for Design/Build project delivery
- Issuing a Request for Proposals by 2008 October 15

Administration is requesting approval for 12 Full-Time Equivalents (FTE) related to the West LRT project. These FTE's are a base adjustment for 2008 and are fully offset by capital recoveries.

The total budget for West LRT is \$700 million including \$84 million for the purchase of Light Rail Vehicles required to service the West LRT Line. On 2007 November 06, Council approved \$134 million related to the West LRT. This included \$50 million for Program 738 – West LRT for design and strategic land purchase and \$84 million for Program 664 – Light Rail Vehicles.

Administration is requesting Council to approve \$566 million for Program 738 – West LRT, representing the remaining budget required for West LRT.

# Appendix 1 – Area Plans

