

TRANSFORMING **EDMONTON** 

BRINGING OUR CITY VISION TO LIFE

September 2013

# FREQUENTLY ASKED QUESTIONS Valley Line (SE to West LRT) PRELIMINARY DESIGN

Through 2013, the City of Edmonton will develop and finalize the Preliminary Design for a 27 km urban low-floor rail system from Mill Woods to Lewis Farms, passing through downtown. This FAQ sheet provides basic information about the project. For more information, please visit <u>www.edmonton.ca/SEtoWestLRT</u>.

# PROJECT BACKGROUND

# WHY IS LRT EXPANSION TO SOUTHEAST AND WEST EDMONTON IMPORTANT?

The City of Edmonton's strategic vision calls for a more compact, livable and sustainable city, where people don't just have the opportunity to use alternative transportation modes—they also make the choice to use them. This is outlined in the City's Transportation Master Plan, *The Way We Move*. Expanding the LRT network is one of the ways the City plans to meet these objectives.

# WHERE WILL THE VALLEY LINE (SE TO W LRT) BE BUILT?

The 27 km Valley Line (SE to W LRT) links communities running from Mill Woods to Lewis Farms through downtown, and also provides access to major institutional, recreational, commercial, residential, and employment centres.

# HOW WAS THE ALIGNMENT FOR THE VALLEY LINE DETERMINED?

In December 2008, based on the City's new strategic direction to build a more compact, transit-oriented and sustainable city, where more people walk, cycle and use transit, City Council approved a new set of decision-making criteria for LRT route planning studies. New potential LRT route corridors are evaluated using these criteria to ensure the preferred corridor reflects the City's Transportation Master Plan, *The Way We Move*.

Learn more about the evaluation criteria and Corridor Selection process by reading the <u>LRT Route Planning & Evaluation</u> <u>Criteria</u> fact sheet.

# WHAT IS THE STATUS OF THE PROJECT TODAY?

The project's <u>Concept Planning</u> phase is complete and it is now in <u>Preliminary Design</u>. This phase is expected to be completed in 2013.







#### HOW IS CONCEPT PLANNING DIFFERENT FROM PRELIMINARY DESIGN?

In technical projects such as the Valley Line, the level of detail increases as the project progresses from Concept Planning to Preliminary Design, and the opportunities for public involvement are more defined as plans become finalized. The earlier Concept phase defined the major features of the Valley Line, including the corridor and alignment, station locations, integration with the transportation network, and preliminary property requirements and cost estimates.

Preliminary Design builds on the approved Concept Plans by conducting more detailed analysis of how the new low-floor urban LRT will operate, as well as how the system will aesthetically and functionally integrate into the existing and planned transportation network and the communities it serves.

# ABOUT the LRT

# WHAT IS URBAN STYLE, LOW-FLOOR LRT?

Edmonton's strategic plans, including *The Way We Move* and *The Way We Live*, as well as the *Transit Oriented Development (TOD) Guidelines*, all support a commitment to grow green and create a compact, more integrated urban environment where people have an opportunity and choose to use alternative transportation modes. This means designing a transit system that not only serves communities and destinations, but also integrates and identifies with them. Part of the way the City aims to achieve this is by:

- Building smaller scale stops that are spaced closer together than on the existing LRT system.
- Integrating the LRT with the surrounding area by providing better links to a greater number of destinations, and providing more direct transit, pedestrian and cyclist connections.
- Integrating visual elements that minimize intrusion and maximize openness of space to create a safe environment.
- Respecting communities. The LRT will operate with reduced speeds in congested areas, allowing LRT to fit and operate safely in pedestrian-oriented communities with reduced right-of-way and fewer barriers.
- Investing in aesthetics to fit within an urban environment. Landscape Architecture, Architecture, and Streetscaping are key design components of an urban LRT system. Opportunities to use embedded track instead of traditional rock ballast and railway ties will be incorporated to improve visual appeal and integration.

#### WILL URBAN STYLE LOW-FLOOR LRT WORK IN EDMONTON'S CLIMATE?

Yes. Similar technology has been successful in other North American and European winter cities that, like Edmonton, experience heavy snowfall and freeze-melt cycles.

#### WHAT IS THE TRAVEL TIME FROM MILL WOODS TO DOWNTOWN? FROM LEWIS FARMS TO DOWNTOWN?

Unlike suburban LRT, which is designed to move passengers at higher speeds from one specific location to another, urban low-floor LRT is designed to provide convenient service throughout the line. Travel times from Lewis Farms Transit Centre to downtown, and from Mill Woods Town Centre to downtown, are each expected to be approximately 30 minutes, giving a total time of 60 minutes for the entire 27 km line. However, travel time will vary to some extent as traffic and LRT operations change throughout the day.

#### WHAT WILL THESE URBAN-STYLE TRAINS LOOK LIKE?

The LRVs, or Light Rail Vehicles / trains will not be chosen for the Valley Line at this stage of the project. LRVs will be universally accessible, safe, and secure like the trains currently in use in Edmonton, and will be lower to the ground than the trains currently in operation in Edmonton. For more information, please see the <u>Urban LRT</u> factsheet.





# TRANSFORMING **EDMONTON**

BRINGING OUR CITY VISION TO LIFE

#### HOW MANY STOPS AND STATIONS WILL THERE BE?

In total, there are 25 stops and three stations planned from Lewis Farms to Mill Woods.

#### WHAT WILL THE STOPS AND STATIONS LOOK LIKE?

Two different scales of stations will serve the Valley Line, both featuring amenities such as seating, schedule information, climate protection, adjacent bicycle parking, fare vending and validating machines, and wayfinding information.



#### LRT STOPS

Stops for the Valley Line are similar in function to Edmonton's existing LRT stations, but are different in form. These stops will integrate into the communities they serve, reflecting local character and land use. LRT stops for the Valley Line are comparable to bus stops in terms of their spacing along the line, and in the amount of infrastructure provided. These 25 stops will be at road level and accessible to walk-up pedestrian traffic.



#### LRT STATIONS

The three LRT stations on the Valley Line are elevated with access via stairs, escalators, and elevators. These three stations will serve Wagner, Misericordia Hospital and the West Edmonton Mall.

# HOW DOES THE VALLEY LINE CONNECT WITH THE EXISTING TRANSIT SYSTEM?

Integrating urban LRT into the existing and planned transportation network means that pedestrians, cyclists, and passengers with mobility challenges will be able to easily access the line. A complementary bus network is being reviewed for efficient connectivity and some bus stops may be relocated to better integrate with the LRT.

Passengers will be able to access the system at 28 universally accessible stops and stations throughout the alignment. The line will also be accessible to transit passengers using other modes of transit. Not all trips can be made by one mode, so designing stop and station areas to facilitate multimodal linked trips—such as a combination of cycling and transit—is critical. Where possible, these facilities will link to sidewalks, on-street cycling facilities, Shared-Use Paths, bus interchanges, and Park & Ride facilities.

While the Valley Line does not physically connect with Edmonton's existing LRT system, passengers will have direct access to Edmonton's existing LRT at the shared Churchill station.





# TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE

#### HOW WILL ROAD USERS INTERACT WITH THE VALLEY LINE?

In areas between stations where the train operates at-grade, pedestrians and cyclists are expected to cross at designated pedestrian crossways at selected intersections. Mid-block crossings will be reviewed and assessed on a case-by-case basis. Safe crossing times for pedestrians at designated crossings will always be maintained. The character of urban LRT is that it integrates with the areas of the city it serves. With this in mind, the level of segregation on the Valley Line will be different than what is seen on Edmonton's existing system. In most cases, there will not be gates, bells, fences, or crossing arms as there are on the existing system. The LRT right-of-way will be clearly marked, and crossings will be just as safe as road crossings are today.

General purpose traffic, including bikes, cars, other transit vehicles, and transport trucks, cannot drive on the LRT rightof-way.

The Valley Line will operate in its own right-of-way, with priority. Unlike a pre-emptive system, in which the LRT receives absolute priority at every intersection and all cross-traffic stops to let the train pass, a priority system includes communication between the LRT and the signals at some intersections. The signal lengths are then automatically adjusted to promote smooth flow for vehicle traffic while ensuring the efficiency of the LRT.

#### WHAT WILL HAPPEN WHEN TRAFFIC LANES ARE REMOVED TO ACCOMMODATE LRT?

Shifting Edmonton's transportation modes is one of the City's highest priorities. Edmonton's Transportation Master Plan (TMP), *The Way We Move*, supports this goal. By providing LRT service to more areas of the city, the City aims to shift trips currently made by car to transit. Reducing the capacity of roads along the LRT alignment will cause traffic to find alternate routes to avoid congestion. Since mode shift is gradual and not every Edmontonian can take LRT for every trip, allocating road space to transit will temporarily put greater pressure on adjacent roads.

#### HOW WILL PARASITIC PARKING BE ADDRESSED?

<u>Residential Parking Permit Programs</u> are managed by the Traffic Control group at the City of Edmonton on a neighbourhood basis. This will not be examined for communities abutting the LRT alignment until after the system is in service operation. The main reason for delaying the review for Residential Parking Permit Programs is that the parking patterns and resultant impacts will not be fully known until the LRT is in operation. There is a variety of parking programs that the City can implement to help with parasitic parking concerns - the type of program used depends on the specific situation (e.g. Stadium area implements more of a time-of-day parking ban and University area implements a permit program). For more information, visit the <u>Residential Parking Permits</u> webpage.

#### HOW WILL EXISTING TRANSIT ROUTES CHANGE ONCE THE VALLEY LINE IS IN OPERATION?

Where the LRT is available, its service will replace major bus service routes to provide greater capacity and frequency. Some transit service may also be adapted to provide created connectivity with the LRT. An integrated transit operations plan will be developed before the new system becomes operational.

#### WILL THE LRT SYSTEM BE NOISY?

Components of LRT can sometimes emit noise - these include wheels on rails, crossing bells at intersections, and basic operations. When a City transportation project is being planned, noise measurements are taken to determine existing base noise levels emitted from vehicle traffic, machinery such as residential lawnmowers, and other general urban noise. Computer modeling compares these measurements, the noise expected to be generated from proposed infrastructure changes, and projected future traffic volumes (over the next 20 years) to predict future noise levels.

The City has an Urban Traffic Noise Policy (C506) to determine if and where noise attenuation (noise barriers) should be provided.

More information is available at www.edmonton.ca/TrafficNoise





BRINGING OUR CITY VISION TO LIFE

# PUBLIC INVOLVEMENT

# HOW CAN I BE INVOLVED IN THE PRELIMINARY DESIGN PHASE OF THE PROJECT?

All members of the public are invited to join sessions about Preliminary Design for the Valley Line. Public Involvement for this phase will include all 27 km of the line. Understanding this is a large area, and that stakeholders will have specific interests and concerns, we've broken the study area into six consultation areas. Though information sharing and consultation on the entire 27 km will be a part of every meeting in every area, each meeting will be tailored to the specific area it's in. For detailed information, visit www.edmonton.ca/LRTprojects or call 780.496.4874.

# WHAT CAN I INFLUENCE IN THE PRELIMINARY DESIGN PHASE OF THE PROJECT?

For the Valley Line (SE to W LRT) Preliminary Design project, you can expect to provide feedback on:

- Structural aesthetics (Visual integration of the system into the existing landscape and adjacent communities)
- LRT stop/station aesthetics
- Landscape architecture aesthetics
- Public Art opportunities
- Connectivity to the existing transportation network across all modes of transportation
- Aesthetics for noise attenuation mechanisms, where identified per the City of Edmonton Urban Traffic Noise Policy 506<sup>1</sup>
- Understanding the impacts to stakeholders and working together to mitigate issues where possible

For more information on the public involvement process for this project, please refer to the <u>Public Involvement Plan</u> <u>Highlights</u>.

# CONSTRUCTION

# WHEN WILL THE VALLEY LINE BE CONSTRUCTED?

While there is no official timeline for construction of the first stage of the Valley Line (Mill Woods to Downtown), if the remaining funding for this stage is secured by Spring 2014, the line could see construction begin as early as 2016 and be open to the public by 2020.

# WILL THE ENTIRE 27 KM BE CONSTRUCTED AT ONCE?

Staging plans for the project are currently only known at a conceptual level. Once funding is secured, the portion from Mill Woods to Downtown could be operational four years after construction begins. The SE leg, from Mill Woods to downtown's Centre West stop, is the City's next LRT priority.

# HOW MUCH WILL IT COST TO BUILD?

Construction costs for the Valley Line (SE to W LRT) project are only known at a conceptual level and are subject to change. The conceptual-level cost estimate for this project is \$3.2 billion.

City Council has approved a funding strategy for the new line, starting with the \$1.8 billion Mill Woods to City Centre leg. The City of Edmonton continues to pursue funding partnerships with federal and provincial governments, and has received partial funding for the project through Public-Private Partnerships (P3) Canada, a federal Crown Corporation.

For further information about P3 funding, please refer to our P3 FAQ.

<sup>&</sup>lt;sup>1</sup> In the case of an existing residential area, where noise mitigation measures are appropriate and supported, the City will seek to involve community stakeholders in the selection of suitable materials and the design of the structure.





# TRANSFORMING | EDMONTON

BRINGING OUR CITY VISION TO LIFE

#### WILL THE CITY ACQUIRE LAND TO CONSTRUCT THE VALLEY LINE?

One of the Council-approved evaluation criteria directs the City to minimize private property acquisition in selecting the preferred alignment. However, in some cases, privately-held land must be acquired in order for a project to proceed. When this occurs, the City prefers to acquire land that has been placed up for sale.

If the City of Edmonton identifies a property, or a piece of a property, as necessary for a project, and that property is not currently up for sale, the owner will be contacted by a property agent from the City. City of Edmonton property agents negotiate in good faith and reflect fair market value for the property. For more information on property impacts, please see the <u>Property Acquisition</u> fact sheet.

# WHAT IS TRANSIT ORIENTED DEVELOPMENT (TOD) AND HOW DOES IT RELATE TO THE VALLEY LINE?

Transit oriented development (TOD) is urban development that is *planned* and *integrated* with an LRT stop/station or transit centre at its core, with housing, shopping and jobs concentrated in a walkable and bikeable community. For more information on TOD, please see the <u>TOD Guidelines</u> fact sheet.

#### HOW WILL THE VALUE OF MY PROPERTY BE AFFECTED BY PROXIMITY TO LRT?

A number of factors influence the value of your property (e.g. market supply, demand, highest best use, location, condition). However, studies in Edmonton and other cities have shown that more transportation options around a property can increase the value of that property (e.g. light rail transit). Experience from Toronto, Vancouver, Portland, Los Angeles and Dallas suggests such a rise in property values along with growing public interest in transit oriented development in general. More information can be found in the <u>Building a City Around LRT</u> fact sheet.

# WILL LRT CONSTRUCTION COINCIDE WITH SCHEDULED NEIGHBOURHOOD REHABILITATION?

The City is working to coordinate neighborhood rehabilitation with the construction of the LRT to minimize costs and impacts to surrounding areas.

# HOW WILL ACCESS BE AFFECTED BY CONSTRUCTION?

A constructability review of access impacts to pedestrians, cyclists, and vehicles will determine how to best maintain access throughout construction. When temporary access impacts are expected during construction, advance notice and detour information will be provided.

# WILL THE ENVIRONMENT BE CONSIDERED DURING AND AFTER CONSTRUCTION?

Minimizing the disturbance of green space is a priority for this project. Environmental impact assessments are being conducted on aspects including rare plants, bird and wildlife habitats, animal corridors, groundwater and the North Saskatchewan River. Geotechnical studies of ground conditions are being used to assess the stability of slopes and the suitability of ground for construction. The City of Edmonton's Tree Management policy is referenced when determining how trees are replaced, when possible.

#### HOW MANY ...

**Bridges**: 6, including one pedestrian bridge at Connors Hill **Tunnels**: 1

Integrations with Transit Centres: 5

Park and Ride sites: 2 Operations and Maintenance Facilities: 1

For more information on the Valley Line, please visit <u>www.edmonton.ca/LRTprojects</u> or call 780.496.4874.

