

### Welcome

### Whyte Avenue to Mill Woods

November 25, 2010



# **Tonight's Meeting Purpose**

- Present Recommended Concept Plan
  - alignment
  - station locations
  - neighborhood access
  - noise study results
- Build on what we heard in September
- Recommendation is going forward for Committee of Council (TPW) consideration at non-statutory public hearing on December 8



# Proposed Agenda

- Welcome and Introductions
- Project Background
- Overall Southeast LRT Recommended Alignment
- Segment walkthrough of alignment, stations, and neighborhood access
- Noise Study Results
- Question and Answer





# **Project Background**



# **Council Approvals**

www.edmonton.ca/LRTProjects

### Council Approvals to Date

- LRT Network Plan (June, 2009)
- Southeast and West LRT Corridor (December, 2009)
- Downtown Corridor (June, 2010)

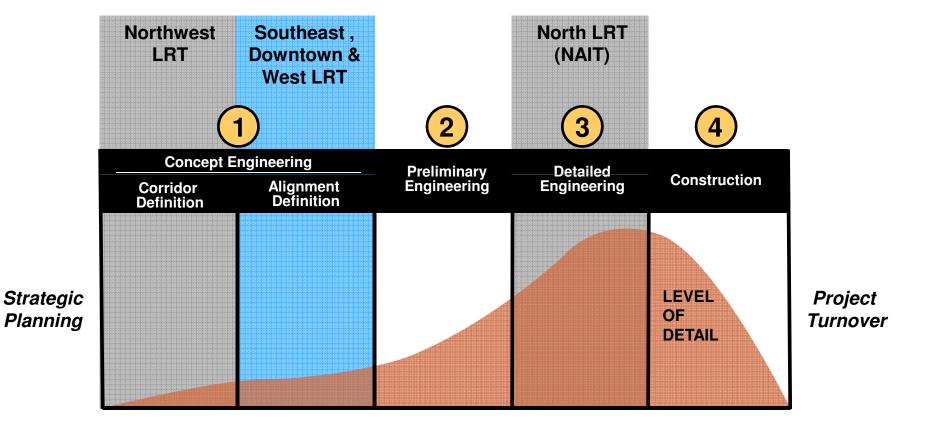


### **Upcoming Council Considerations**

- Concept Plan Review (December 8, 2010)
- Council Concept Plan Consideration (January 19, 2011)



# **LRT Development**





# Where we are in the process today

www.edmonton.ca/LRTProjects

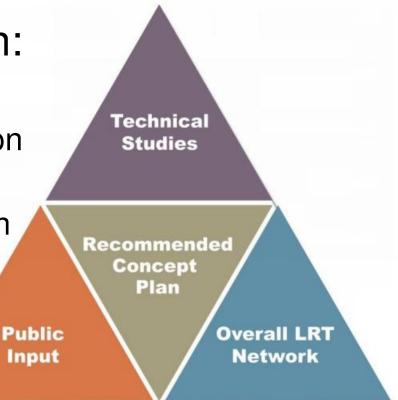
Presenting information on:

Recommended Alignment

 Recommended Station Location and Configuration

 Neighbourhood and Pedestrian Access

 Urban Traffic Noise Policy and Noise Study Results

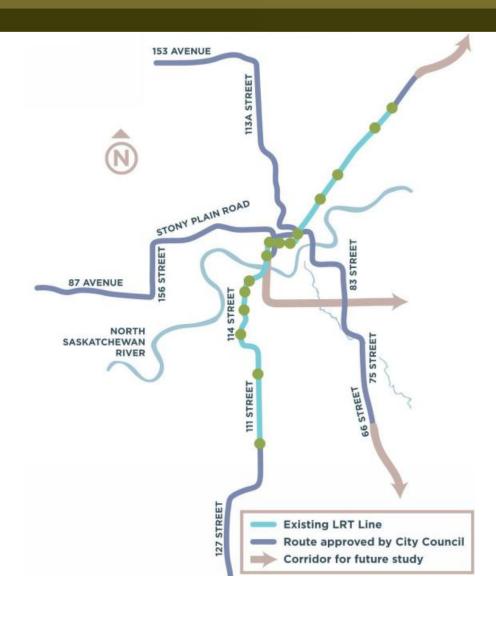




# Where We Are Going

www.edmonton.ca/LRTProjects Summer 2009 Fall 2009 Winter 2010 Spring 2010 Summer 2010 Fall 2010 Winter 2011 Corridor Identification **Corridor Workshops Corridor Open Houses** City Council Corridor Approval Alignment Identification **Alignment Workshops Concept Engineering Concept Engineering Open Houses** November **Concept Engineering Information Sessions Concept Plan Review** December Non-Statutory Hearing **Council Consideration Preliminary Engineering** 

# **LRT Network**



# Urban Style LRT









# **Station Typologies**

www.edmonton.ca/LRTProjects



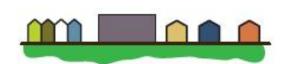
# Mixed Use / Town Centre Stations





**Employment Centre Stations** 

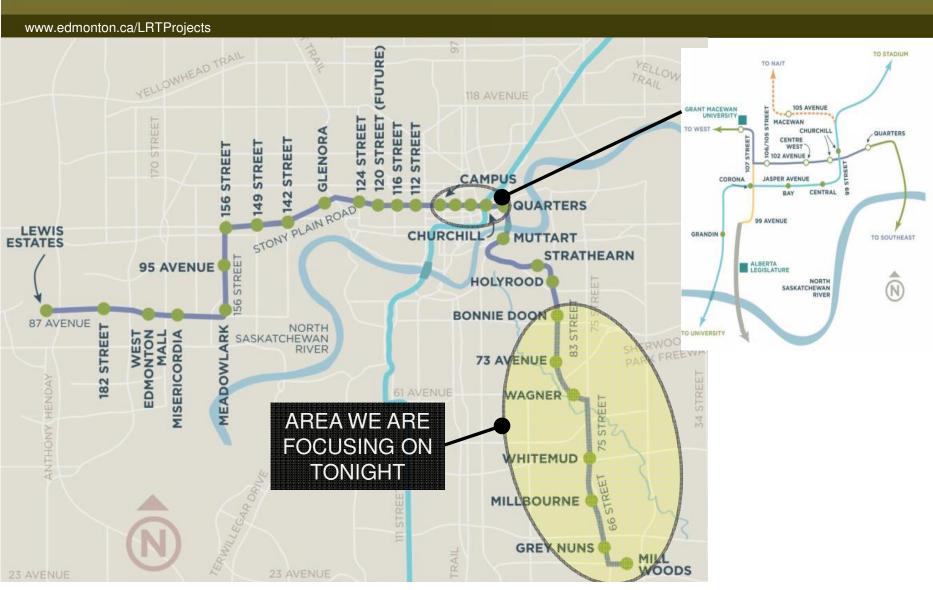




Residential Centre
Stations



# **Southeast and West LRT Corridors**





# Public Involvement Process & Update



### **Process**

Review and Evaluate Options  Community/neighbourhood-based workshops  Stakeholder meetings and presentations	May/June 2010
Present Draft Concept Plan for Feedback  Open Houses with questionnaire	September 2010
Info Sessions with Recommended Plan	November 2010
Public Hearing/Council	December 2010



### What We Heard

www.edmonton.ca/LRTProjects

#### Competing Themes:

ensure easy access into neighborhoods



reducing travel lanes

station location



intersection operations

pedestrian access across the roadways



vehicle travel times

neighborhood access



neighborhood short-cutting



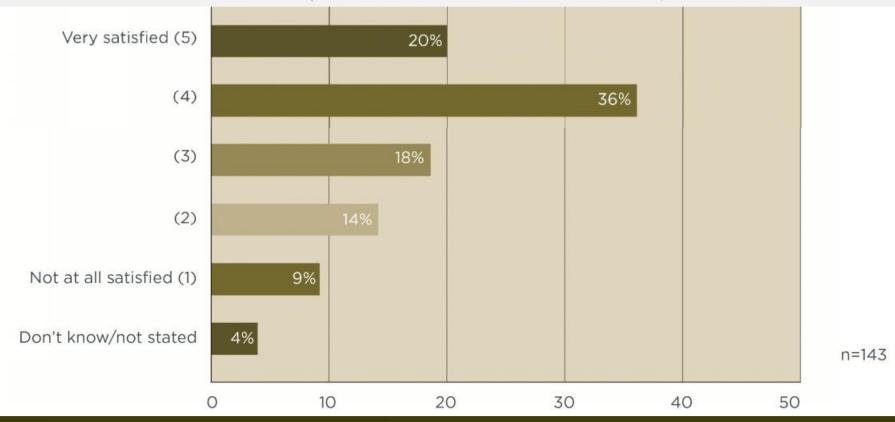




# **Concept Plan Satisfaction**

www.edmonton.ca/LRTProjects

#### How satisfied were you with the Draft LRT Concept Plan?

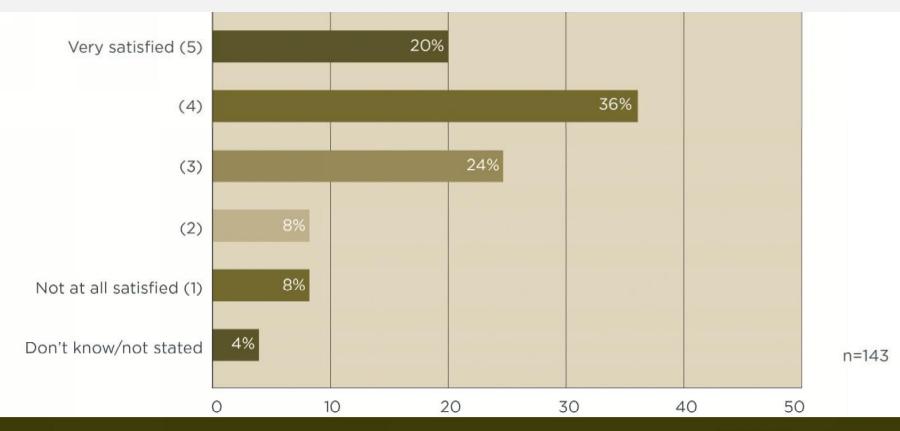




# LRT Alignment

www.edmonton.ca/LRTProjects

How satisfied are you with the proposed track location within the LRT Corridor?

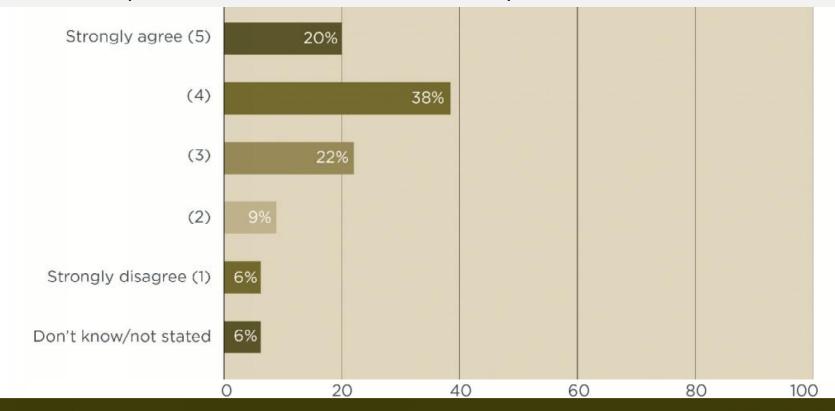




# **Station Locations**

www.edmonton.ca/LRTProjects

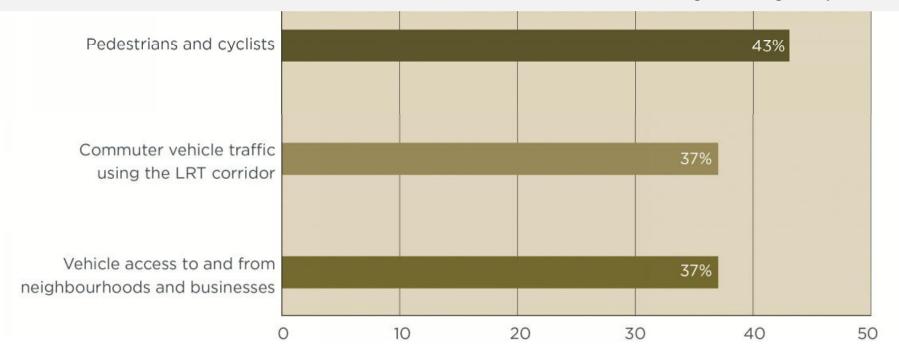
Agreement that the proposed LRT station locations will provide convenient access to important destinations?





# Access

#### Satisfaction with efforts to accommodate the following user groups





# Southeast LRT Information Session Whyte Avenue to Mill Woods www.edmonton.ca/LRTProjects

# Recommended Alignment

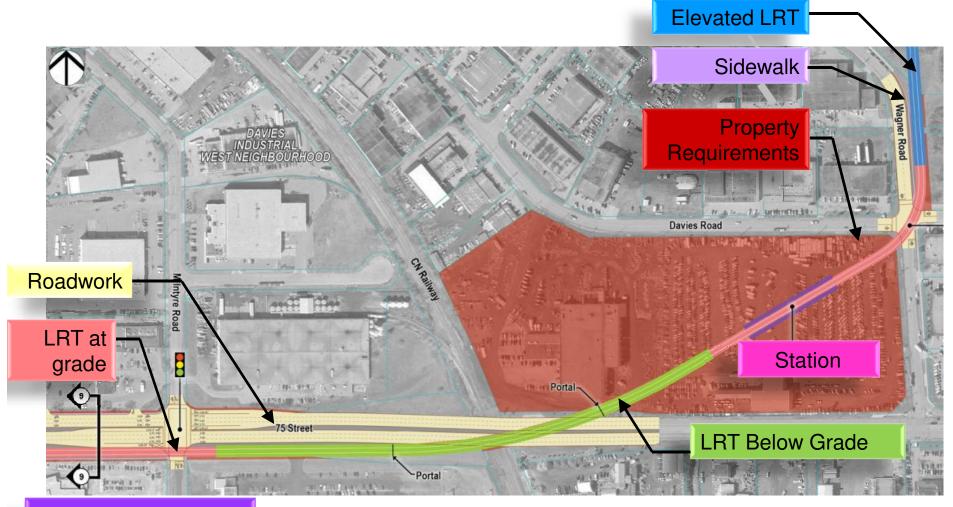
## Highlighted Changes Since September

- The Jasper Avenue/95 Street intersection reconfigured as 4 legged intersection
- Right in right out access at 88 Street/95 Avenue intersection
- New connection for the emergency service building to intersection at Bonnie Doon traffic circle
- Reduced property requirements around 69A Avenue
- Wagner Road alignment
- Bus access ramps to future transit centre at Whitemud Drive
- New signalized intersection on 66 Street, north of 28 Avenue
- Mill Woods LRT Station and Transit Centre location



# Legend / Key

www.edmonton.ca/LRTProjects



Bike Trail (not shown)

# Alignment / Stations – Bonnie Doon

www.edmonton.ca/LRTProjects

subject to change

Potential roadway improvements
on 82 Avenue between
83 Street and 85 Street

Proposed Bonnie Doon
Station

83 Street

83 Street

West Running LRT



# Access – Bonnie Doon



### Alignment / Stations – Avonmore / King Edward Park

www.edmonton.ca/LRTProjects

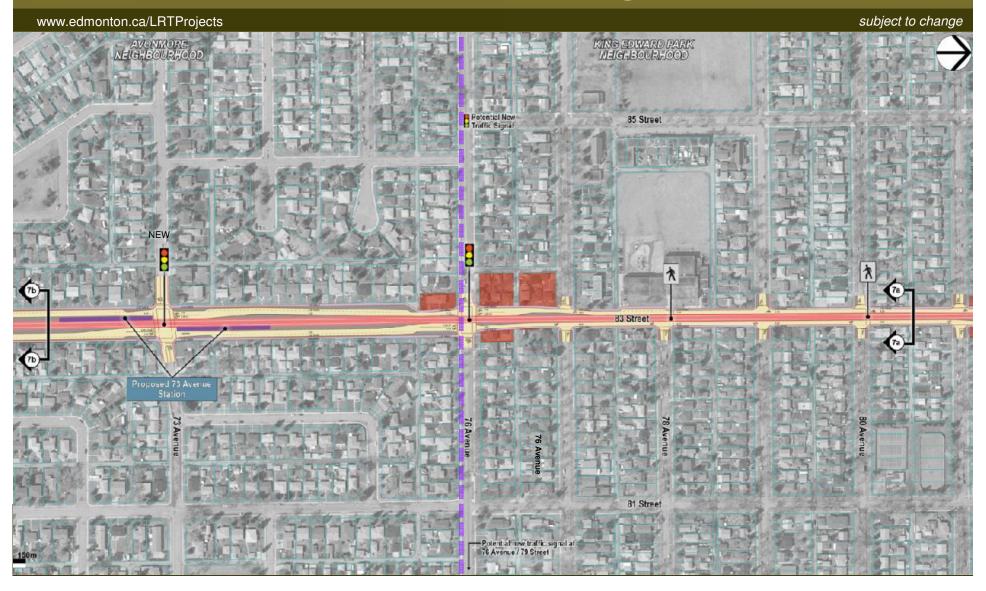
subject to change

### Centre Running LRT



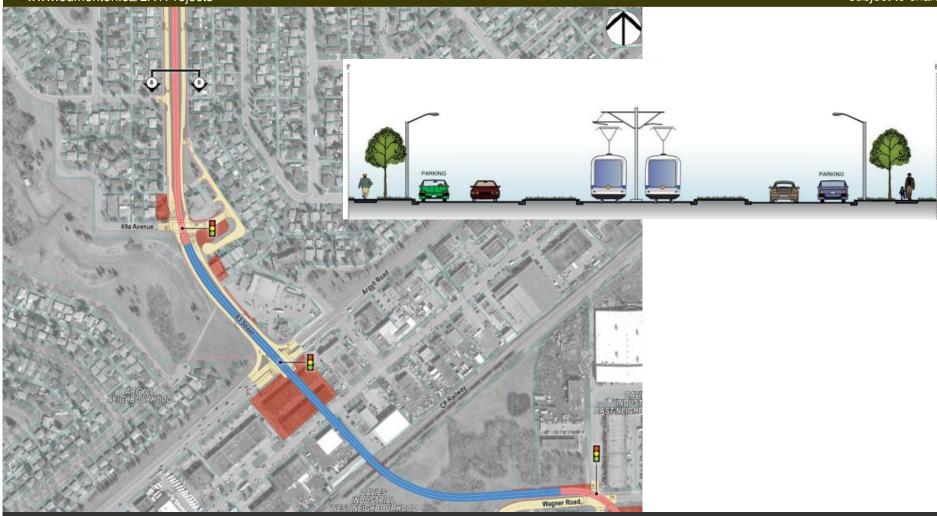


# Access – Avonmore / King Edward Park



# Alignment / Stations – Argyll

www.edmonton.ca/LRTProjects subject to change



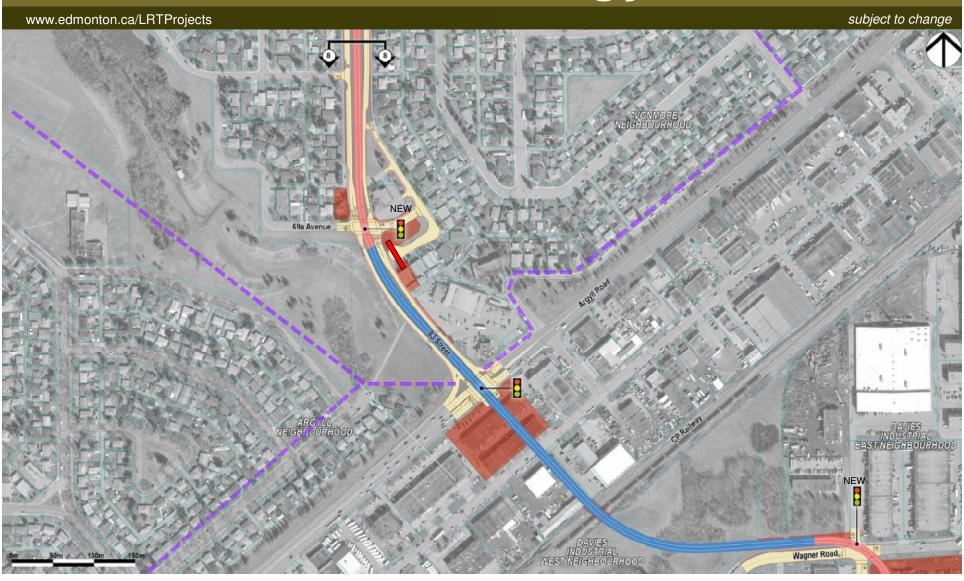
Centre Running LRT

# **Elevated LRT**





# Access – Argyll



# Alignment / Stations – Wagner



LRT Below Grade

# Access – Wagner



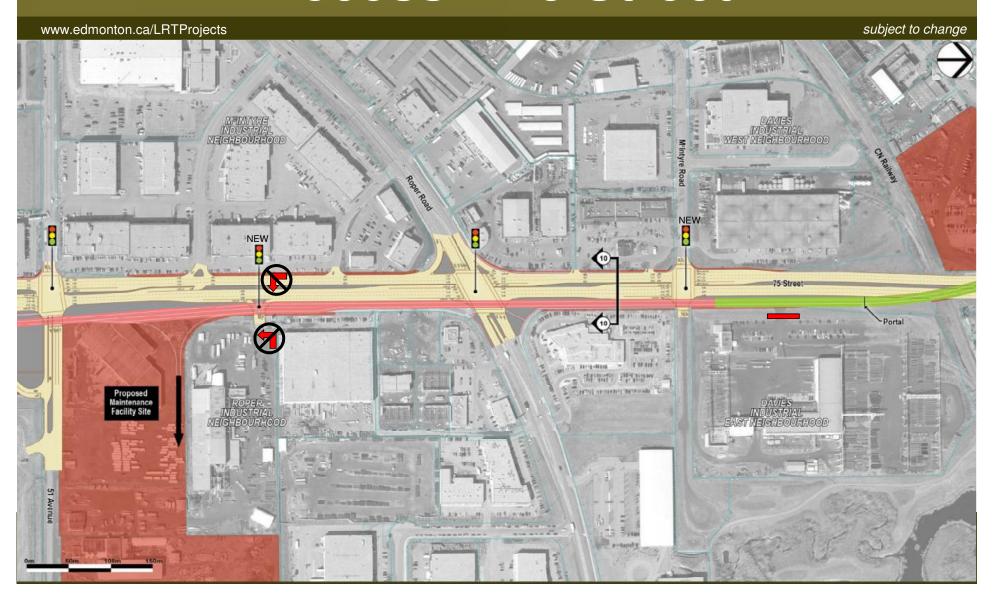
# Alignment / Stations – 75 Street



### East Running LRT



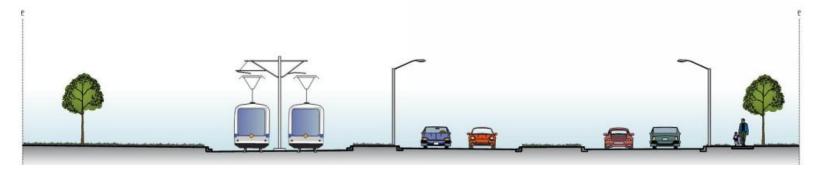
# Access – 75 Street



# Alignment / Stations – Whitemud



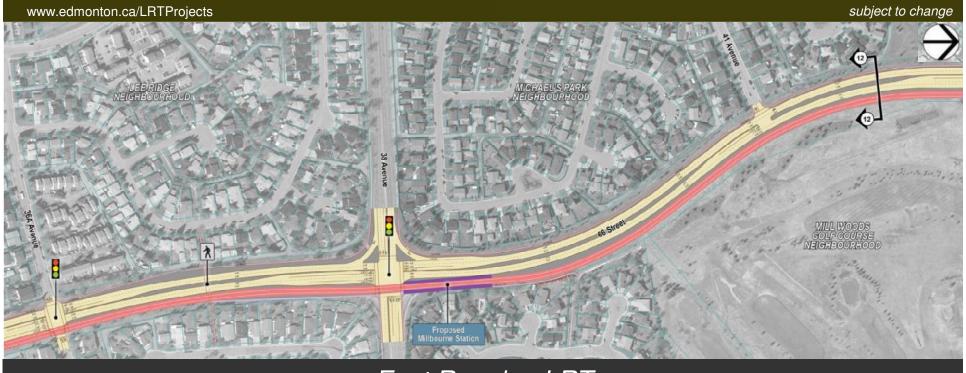




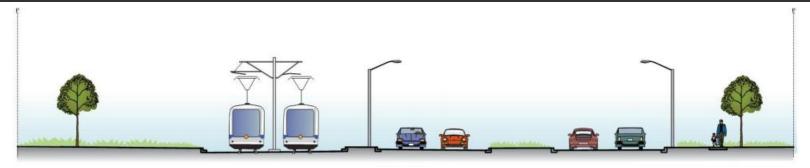




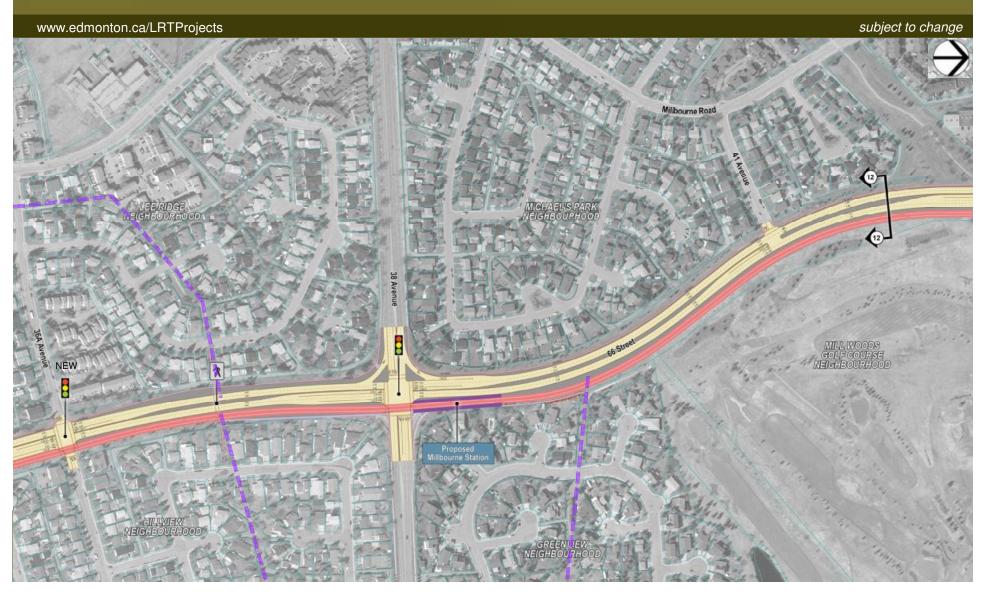
# Alignment / Stations – 66 Street







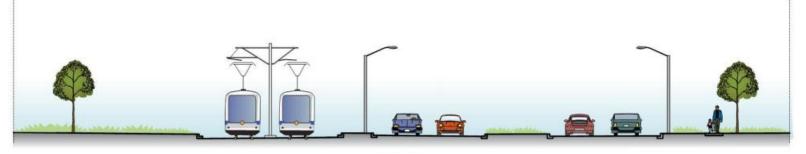
## Access – 66 Street



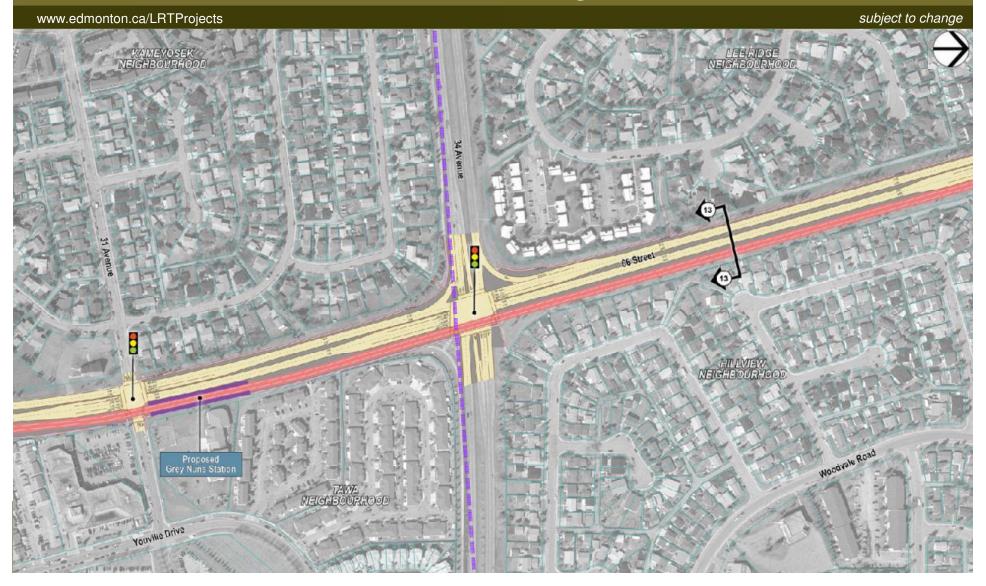
## Alignment / Stations – Grey Nuns



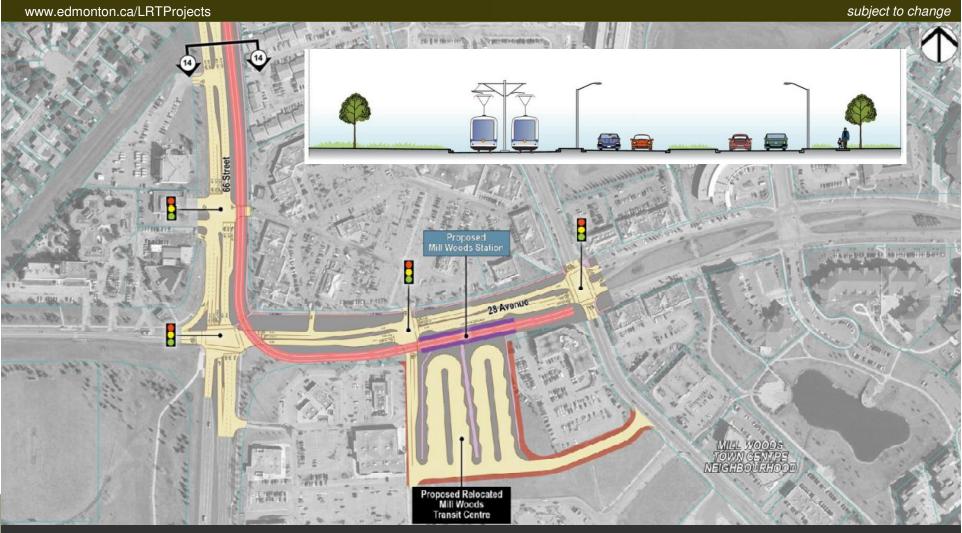
#### East Running LRT



# Access – Grey Nuns

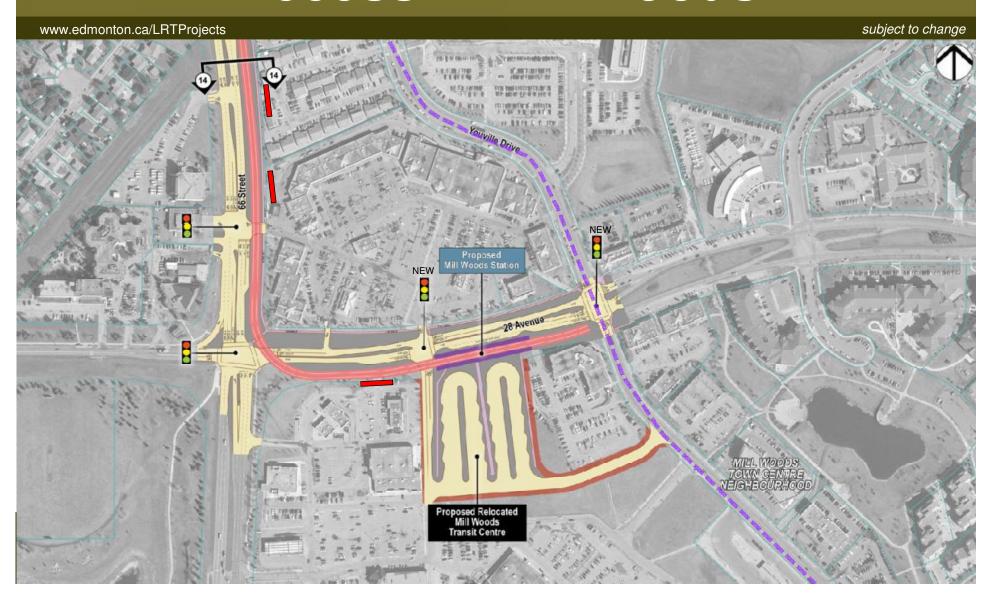


## Alignment / Stations – Mill Woods



Side Running LRT

## Access – Mill Woods





# Urban Traffic Noise Policy and Study Results



### **Urban Traffic Noise Policy (C506)**

- City policy determines if noise attenuation is to be built with LRT
- A noise model is built to project future traffic noise with LRT and future traffic growth (20+ years)
- Future traffic noise levels must exceed 65 dBA <sub>Leq24</sub> to be considered for attenuation
- Noise attenuation needs through Capital or Retrofit projects



### **Urban Traffic Noise Policy (C506)**

- Applies to backyard of adjacent properties (centre of backyard)
- Minimum 60% support by adjacent property owners
- Stakeholders are involved in the determining the appearance of the proposed treatment
- Noise attenuation must be technically, administratively and economically practical

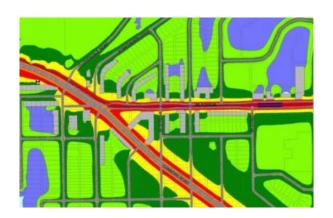




## How is Noise Modeling Done

- Measure existing noise levels along corridor and develop model
- Projected 2041 volumes, proposed lane configuration and the addition of LRT
- Assess the projected noise levels against the UTNP





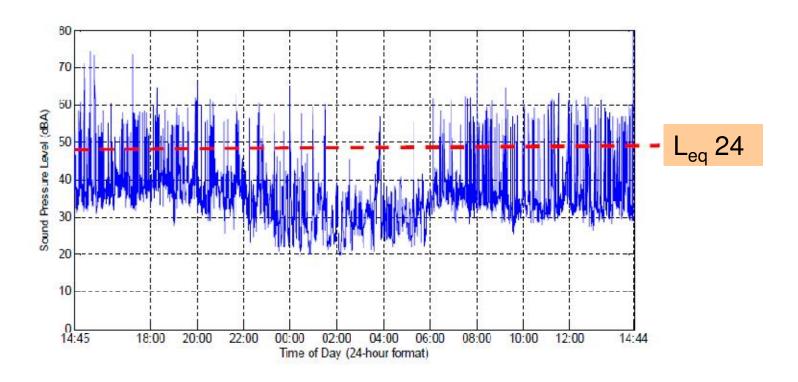


## **Energy Equivalent Level (Leq)**

- Accounts for the fluctuating levels
- Is sensitive to the peak sounds
- Is NOT the average sound level
- Is used in the majority of sound regulations (City of Edmonton UTNP)



# Energy Equivalent Level (L<sub>eq</sub>)



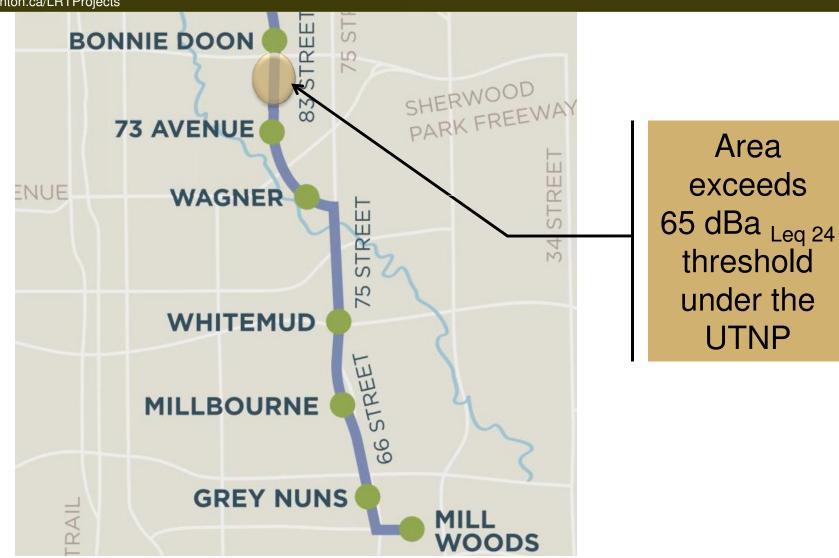


#### **Noise Study Results**

- Sound levels ranging from 51.3 to above 65.0 dBA <sub>Leq24</sub> (as measured in the rear outdoor amenity area)
- Noise climate was dominated by either local traffic on the main or adjacent roads
- Noise climate was generally broadband in nature, with no tonal components and no dominant stationary sources



#### **Noise Study Results**

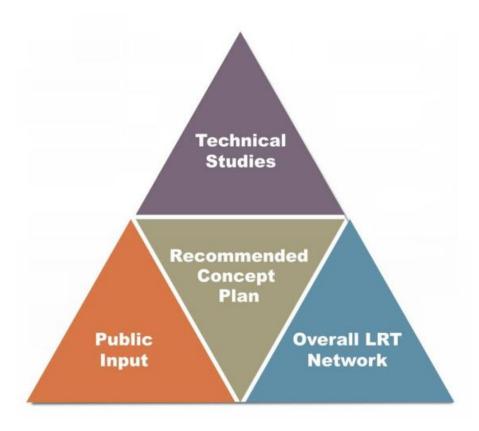




#### **Next Steps**



#### **Overall Process**





## **Next Steps**

www.edmonton.ca/LRTProjects Summer 2009 Fall 2009 Winter 2010 Spring 2010 Summer 2010 Fall 2010 Winter 2011 **Corridor Identification Corridor Workshops Corridor Open Houses** City Council Corridor Approval **Alignment Identification Alignment Workshops Concept Engineering Concept Engineering Open Houses** November **Concept Engineering Information Sessions Concept Plan Review** December Non-Statutory Hearing **Council Consideration Preliminary Engineering** 

#### **Ongoing Considerations**



- Available parking programs
  - Commercial (Bylaw 5590 signs, Private Parking Agency Enforcement)
  - Residential
     (Residential Parking Programs, localized parking restrictions)
  - Additional engineering and study is required
- Safety/Security
- Traffic circulation within neighbourhoods
- Station Area Planning



#### **Ongoing Considerations**

www.edmonton.ca/LRTProjects



Funding

 Traffic accommodation during construction

Geotechnical / Environmental / Utilities

 Community/business impacts





#### **Question and Answer**



#### **Question and Answer Session "Ground Rules"**

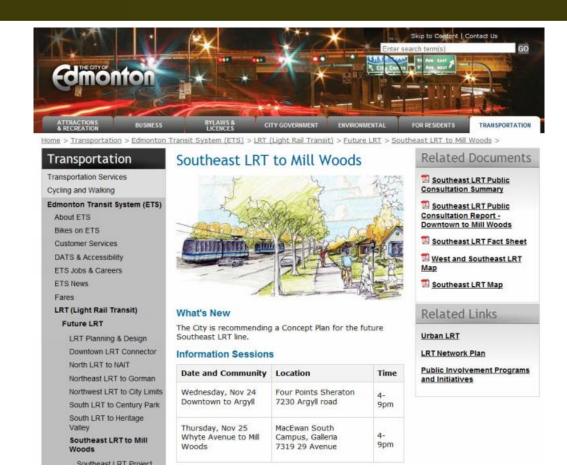
- 2 minutes for each participant to ask a question or make a comment
- One follow-up question (1 minute)
- Will recognize 3 people for each round of questions; persons with microphones will go to those participants to ask their questions
- 3 rounds of questions
- Additional questions from same person not recognized until no new participants are wanting to ask questions
- Questions and responses will be recorded; please use microphones



#### Conclusion

www.edmonton.ca/LRTProjects

Presentation available on website:



#### Conclusion

www.edmonton.ca/LRTProjects

Register to speak at Public Hearing

#### WEDNESDAY, DECEMBER 8, 2010

#### AT TRANSPORTATION AND PUBLIC WORKS COMMITTEE

- Register to speak on www.edmonton.ca/meetings or call the City Clerk's office at 780-496-8178.
- Following the non-statutory public hearing, the LRT Concept Plan recommendation will be forwarded to City Council for review and consideration in January 2011



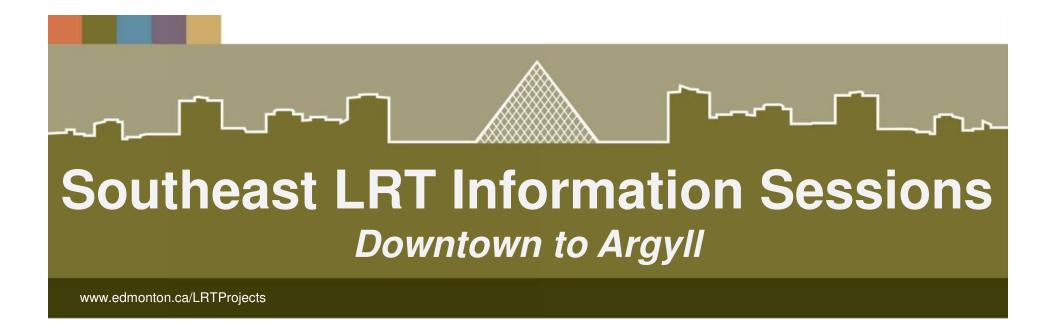
#### LRT Information Session Schedule

www.edmonton.ca/LRTProjects

Southeast LRT	
November 24, 2010	Downtown to Argyll Road
November 25, 2010	Whyte Avenue to Mill Woods Town Centre

West LRT		
November 29, 2010	Lewis Estates to Stony Plain Road/149 Street	
November 30, 2010	Stony Plain Road/149 Street to Downtown	





### Thank you!

