



Welcome to the Airport Transit Study **Open House**





Thank you for attending.

At this Open House you will be able to learn about the study, share your concerns and ideas, and provide input that will be used to form project goals and evaluation criteria.

Team members are available to answer your questions.



Study purpose and outcomes

The City of Calgary is undertaking a study to develop functional-level plans for a cross-town transit connection between the Green Line and Blue Line, with a connection to the Calgary International Airport (YYC).

The Airport Transit Study will provide recommendations for:

- A transit technology
- station and 19 Street N.E.
- Land requirements
- A staging plan and cost estimates

We are conducting this study now to ensure the future airport connection is:

- extension (ongoing)

- (ongoing)

There is currently no funding for the design or construction of this connection.

The alignment, as well as number and location of potential stations, between the future 96 Avenue N.E. Green Line

Location for a storage and maintenance facility

Coordinated with the pre-design planning for the Blue Line

Aligned with the updated functional plan for Green Line Accommodated in the Aurora Business Park Outline Plan update Included with the Airport Authority Master Plan update







Study area



LEGEND

Future planned stations	
 Approved alignment	

Study area for alignment and station locations



Future Green Line extension

Future Blue Line extension



Study background

There are two Council-approved functional plans that determined the alignment and station locations from approximately 19 Street N.E. to the eastern boundary of the study area.

- Deerfoot Trail to Stoney Trail (2017, 2012)





• 96 Avenue N.E. (Airport Trail) Functional Planning Study —

• Northeast LRT Functional Plan — Saddletowne Circle to Stoney Trail (2012)

The Airport Transit Study began in 2017. To understand the scope of the study and ensure we are able to engage the public in a meaningful way, we:

- Built a relationship with the Calgary International Airport and worked with them to understand their future plans
 - The Calgary Airport Authority Master Plan is currently being updated
- Conducted research to:
 - Understand the unique ridership projections associated with airport travel
 - Investigate airports across North America with rail connections to understand their peak periods and ridership
- Consulted industry experts in airport transit
- Conducted technical analysis and screening to:
 - Understand technical constraints unique to the airport (e.g. Nav Canada requirements, Airport Tunnel)
 - Screen technology options to short-list those that can accommodate future ridership, have been proven to operate in similar weather conditions as Calgary, and address technical constraints



Green Line

A transit connection to the Airport was referenced in the planning for the future Green Line as a connection from the station at 96 Avenue N.E.

During engagement with adjacent communities and the public in 2016-2017, the following top concerns were heard:



Pedestrian safety



Traffic flow 3







Airport Transit ridership (today and future projections)



Calgary's Route 100

Timeline

Daily ridership



Toronto UPE



Canada Line. InTransitBC. 2018 http://thecanadaline.com

Vancouver Canada Line

TODAY	SHORT-TERM	MEDIUM-TERM
800–900	8,000–15,000	17,000–29,000



LONG-TERM (60+yrs)

36,000+

entire line)

Airport section)



Engagement process

The City of Calgary is undertaking a study to develop functional-level plans for a cross-town transit connection between the Green Line and Blue Line, with a connection to the Calgary International Airport (YYC).



ISSUES	
GOALS	P
IDEAS	F/
TECHNICAL REVIEW	

The Airport Transit Study team is seeking input on:

Phase 1

- Study goals
- Criteria for determining:
 - Transit technology
- Concerns and opportunities

Phase 2

- Confirmation of study goals
- Concept evaluation

The final recommendations will be shared with the public in Phase 3. It is anticipated the study will be complete by the end of 2018.



• Alignment and station locations between Green Line and 19 Street N.E.

SHARE FINAL RECOMMENDATIONS



Study goals

Through City policy and planning initiatives, we are directed by:

Transportation Corridor 1 **Policy Goals:**

- Preserve integrity of adjacent communities
- Identify community improvements
- Minimize negative impacts to land use and open spaces

Study Process



Transit Customer 2 **Commitment:**

- Safe
- Reliable
- Helpful
- Informative
- Easy-to-use
- Clean



• To be determined through Phase 1 engagement

Calgary



Technology

Several technologies used around the world were screened and short-listed using the following criteria (among others):

- Capacity: can the technology meet ridership demands in the future?
- Proven technology: is it reliable? can it operate in a climate like Calgary's and is it being used elsewhere successfully?
- **Technical constraints**: does it meet Nav Canada restrictions? does it integrate with existing LRT technology and can it fit in the Airport Tunnel?

Moving forward



Automated People Mover (APM), Miami

Not moving forward



Automated buses/vehicles, *Wageningen, Netherlands* Souza, Karena de. "Planes-Trains-Auto-Ligier_EZ10-IMG_8151." Futurecasting, 05 April 2017, http://thekarenaarena.com/5-future-work-driverless-20170405/planes-trains-auto-ligier_ez10-img_8151/.



Group rapid transit, Amsterdam, Netherlands "An Existing Vehicle by The Company." ME Construction News, 15 March 2017, http://meconstructionnews.com/21604/dutch-firm-wins-dubai-automated-bus-contract



Automated People Mover (APM), Toronto Secondarywaltz. "LINK train at Toronto Pearson Airport." Wikipedia, 10 May 2012, https://upload.wikimedia.org/wikipedia/commons/e/e6/GTAA_LINK_train_clip.JPG.

M., Patrick. "Portland Aerial Tram." Flickr, 25 January 2015, https://www.flickr.com/photos/ppix/16176596870/in/album-72157625803785518/.



Light Rail Transit (LRT) (high or low floor), Calgary Neufeld, Brenda. "A CTrain travels through Calgary." Global News, 18 September 2017, https://globalnews.ca/news/3752680/more-calgariansdriving-than-taking-the-train-downtown-2017-report

Aerial tram/cable car, Portland



Monorail, Las Vegas W., Jimmy. "Las Vegas Monorail Company." Yellow Pages, 21 July 2015, https://www.yellowpages.com/las-vegas-nv/mip/las-vegas-monorail-company-457336175/gallery?lid=457336175



Bus Rapid Transit (BRT) (mixed or dedicated ROW), Calgary Ajraddatz. "A Calgary Transit Novabus LFS (Route 20)." Wikipedia, 17 May 2011, https://upload.wikimedia.org/wikip Calgary_Transit-Nova_LFS40102_8106.JPG.

Personal Rapid Transit, Heathrow Moshrunners. "An Ultra Pod at Heathrow Airport, London." Wikipedia, 16 February 2012, https://upload.wikimedia.org/wikipedia/commons/a/af/ULTraPodHeathrowAirport.jpg.





Use a sticky note to share your ideas.

What else should we consider when evaluating technology, and why?



Alignment and station locations

The alignment for the connection between the Green Line and Blue Line has been set east of 19 Street N.E. through Council-approved functional plans.

The alignment from 19 Street N.E. to the Green Line will be recommended as part of this study.

Some of the criteria that will be used to evaluate alignment options include (among others):

- Impacts on adjacent lands
- **Design and constructability**



Financial capacity: such as capital, operating and maintenance costs

Transportation: ride time, catchment area, integration with existing LRT systems and station locations

Transit-oriented development opportunities

Transit customer commitments: safe, reliable, helpful, informative, easy-to-use, clean





Why is Airport Transit a separate line?

Cost Effective:

- platforms to accommodate 4-car-trains

Customer Experience:



Service planning and operations are flexible and scalable to meet demands Allows for stations to be sized to meet Airport Transit Connection demands. A spur forces the Airport Transit Connection station

• The frequency of service is maintained for the communities north of Airport Trail on both Green Line and Blue Line • The frequency of service for the Airport Transit Connection is not limited to mainline service • The system is easy-to-understand as it reduces customer confusion about which train to take at the mainline stations





What else should we consider when evaluating alignment and station locations, and why?

Use a sticky note to share your ideas.

Place sticky notes here



Please share your thoughts to help us build the public, customer and community goals.

Do you have any concerns about a future Airport Transit **Connection between the Green Line and Blue Line?**

Do you have any ideas you would like to share?







Thank you for coming!

calgary.ca/AirportTransitStudy

Next Steps

- What Was Heard reports for Phase 1 posted online following engagement events Project team will review all input to: • Develop the public, customer and community goals • Develop criteria for evaluation • Complete technical review • Develop concepts with potential alignment(s) and station locations

Please check calgary.ca/AirportTransitStudy for Phase 2 engagement events in the Fall.

- Please complete a comment form before you leave.
- Stay informed about the project by signing up to receive project updates by email at