

Terwillegar Drive Concept Plan Update

North of Anthony Henday Drive to Whitemud Drive

Edmonton

Public Event

Today 4:30 p.m. – 8:00 p.m.



Terwillegar Drive Concept Plan Update

North of Anthony Henday Drive to Whitemud Drive

Edmonton



Public Event

January 24, 2018

4:30 p.m. - 8:00 p.m.

Today you can:

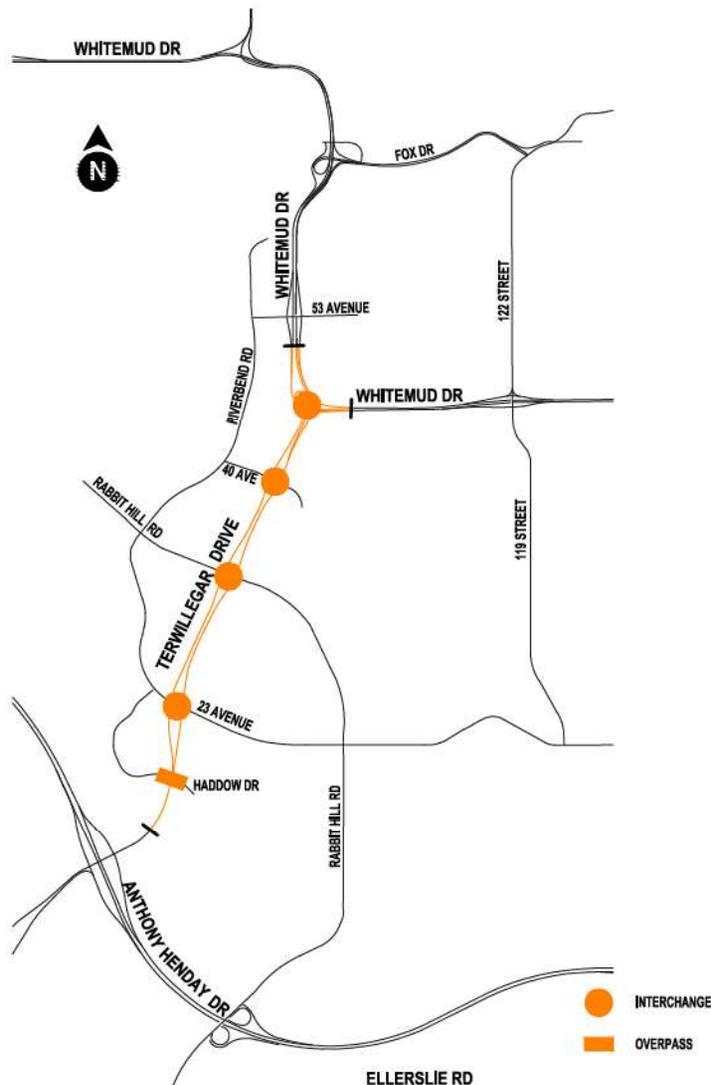
- Learn about the Terwillegar Drive Concept Plan Update
- Ask questions of the project team
- Provide input on the design options being considered



Terwillegar Drive Concept Plan Update

North of Anthony Henday Drive to Whitemud Drive

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Project Purpose

The City is developing a plan for a free-flow freeway configuration (no traffic signals) for Terwillegar Drive from Whitemud Drive to Anthony Henday Drive.

Interchange plans will be reviewed and updated for:

- Terwillegar Drive/Whitemud Drive
- 40 Avenue/Bulyea Road
- Rabbit Hill Road
- 23 Avenue

Overpass plans will be reviewed and updated for Haddow Drive

The Concept Plan is scheduled to be presented to City Council in mid 2018.



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Project Need

Terwillegar Drive is an important roadway for movement of goods and services, transit and commuters. It is also an important connector to 170 Street (Terwillegar Drive south extension), south of Anthony Henday Drive, which is planned to be a freeway to Leduc.

The travel demand already exceeds capacity, causing users to experience delays, collisions, and emit more greenhouse gases.



Terwillegar Drive over Anthony Henday Drive



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Project Details

The goals of converting Terwillegar Drive to a freeway are to:

- Alleviate congestion
- Provide for the efficient, safe movement of all users, locally and regionally (passenger vehicles, transit, trucks, and cyclists)

This study will acknowledge previous planning and bring the 2001 freeway concept plan to current roadway design standards and capacity, considering current analysis of future travel demand.

The 2001 Concept Plan will also be refined to reduce construction and maintenance costs.

This study will confirm if the 40 Avenue/Bulyea Road interchange construction will be recommended for the 2019-2022 Capital Budget cycle.



Terwillegar Drive at 40 Avenue/Bulyea Road



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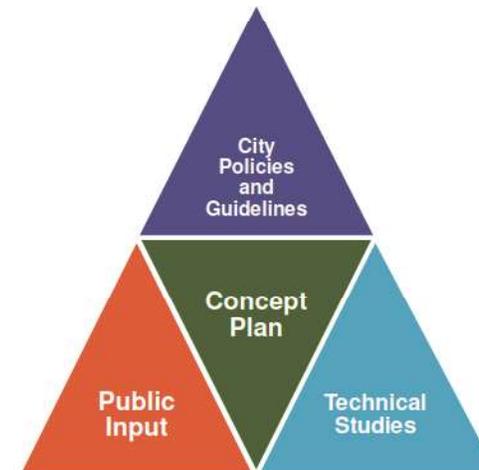
Public Engagement

Share your Voice. Shape our City.

Your input will be considered in the development of a detailed free flow freeway concept plan for Terwillegar Drive.

How Decisions are Made

Project decisions are made by considering City policy and guidelines, technical studies and engineering, and public/stakeholder input.



PROCESS



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Terwillegar Drive Freeway History

Terwillegar Drive was built in the 1980s with the intention of a free-flow freeway configuration in the long term.

The City's Transportation Master Plan and Transportation Systems Bylaw 15101 both support the conversion of the corridor to a freeway.

Previous studies were conducted and plans developed in 2001, 2007 and 2012.



Terwillegar Drive at Whitemud Drive



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Haddow Drive Overpass History

Current and future growth in Southwest Edmonton has necessitated significant road network planning updates.

This includes the 2012 planning study which indicates the following be developed as free-flow freeways:

- Anthony Henday Drive
- 170 Street south of Anthony Henday Drive (south extension of Terwillegar Drive)
- Terwillegar Drive

With 170 Street/Terwillegar Drive and Anthony Henday Drive as freeways, the interchange at Anthony Henday Drive will be a full freeway-to-freeway systems interchange*

- The result means access to/from Terwillegar Drive at Haddow Drive needs to be removed or restricted
- This will take place when the Terwillegar Drive freeway and/or Anthony Henday Drive/Terwillegar Drive interchange are operational
- This is anticipated in the long-term

* No traffic signals on any movement and all movements high speed



Terwillegar Drive at Haddow Drive



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Terwillegar Drive: Now and Future

Currently, Terwillegar Drive has four travel lanes (two in each direction) with signalized intersections.

The future design will have six lanes without traffic signals (three in each direction), auxiliary lanes and ramps. The final configuration is being determined, but could have ramps, service roads, or both. The below images show two existing locations on Whitemud Drive where different approaches are used to provide access to and from arterial roads.



Conventional Option: Existing Whitemud Drive between 156 Street and 142 Street showing ramps (and not service roads) to access interchanges.



Service Road Option: Existing Whitemud Drive between 111 Street and 99 Street showing service roads to access interchanges.

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Previous Terwillegar Drive Studies

Four major studies are shaping how Terwillegar Drive will be constructed.

Year	2001	2007	2012	2018
Study Name and Location	Whitemud Drive/Terwillegar Drive Facility Planning Study (23 Avenue to Whitemud Drive)	West/Southwest Transportation Implementation Study (40 Avenue to Whitemud Drive)	170 Street SW Functional Planning Study (41 Avenue SW to 23 Avenue NW)	Terwillegar Drive Concept Planning Study Update (Anthony Henday Drive to Whitemud Drive)
Access to Terwillegar Drive	Combination of ramps and service roads	Revised interchange plans at 40 Avenue and at Whitemud Drive	Removed interchange connection from Terwillegar Drive to Haddow Drive	Refining connections from Terwillegar Drive to both Haddow Drive and 40 Avenue Reviewing service road concepts
Interchange at Whitemud Drive and Terwillegar Drive	Interchange planned with three levels	Interchange elevations reduced	No change from 2007 plan	To be determined, not anticipated to change
Construction Detour Strategy	Interchange construction detours planned to use local arterials	Interchange construction detours within Terwillegar Drive and Whitemud Drive Right-of-Way	No change from 2007 plan	To be determined, not anticipated to change



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Previous Engagement

Consultation with the public and stakeholders took place as a part of the previous studies in 2001, 2007 and 2012.

Key themes include:

- Concern about construction detours
- Increased traffic noise
- Location of proposed pedestrian bridge (142 Street across Whitemud Drive)
- Potential impacts on public transit
- Aesthetics and light intrusion
- Impacts of timing of Anthony Henday Drive construction on Terwillegar Drive construction



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Considerations

The concept plan will consider:

- safety
- traffic accommodation
- access to neighbourhoods and businesses
- all travel modes including
 - passenger vehicles
 - transit
 - trucks
 - bicycles
 - pedestrians

The following will also inform project decisions:

- Traffic analysis - current estimates of future traffic demand (Year 2050)
- Long-term traffic impacts, including 170 Street extension and neighbourhood access
- Freeway standards (speeds, weaving, etc.)
- Broader transportation network
- Environment, historical resources and geotechnical
- Overhead and underground utilities
- Stormwater and drainage
- Noise and vibration
- Existing pedestrian overpass (30 Avenue)
- Implementation, staging and detours
- Other City projects in southwest Edmonton, including Rainbow Valley Bridge Rehabilitation, neighbourhood paving
- Restricted right-of-way

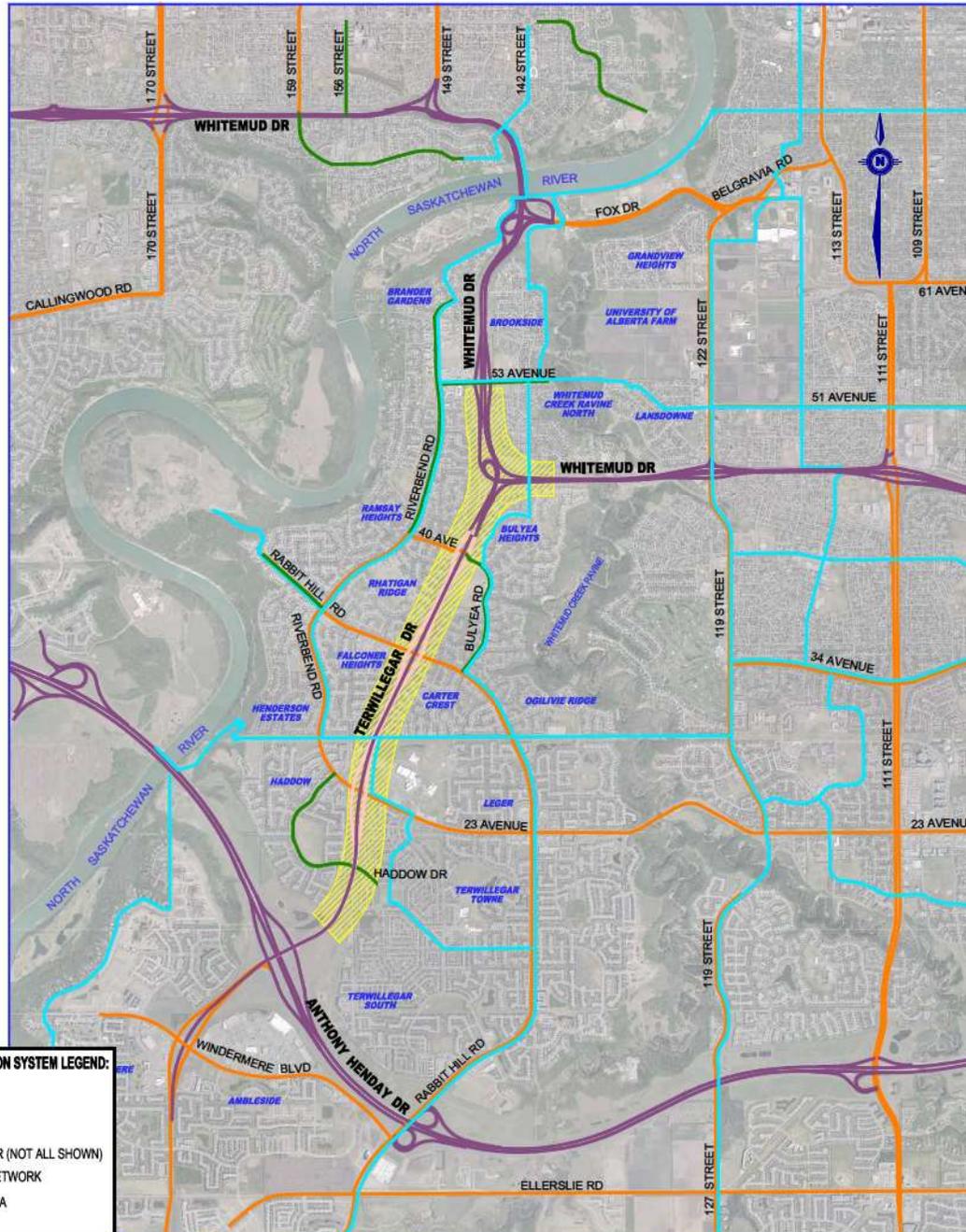


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Transportation Network Map



EXISTING AND PROPOSED TRANSPORTATION SYSTEM LEGEND:

-  FREEWAY
-  ARTERIAL
-  COLLECTOR (NOT ALL SHOWN)
-  BICYCLE NETWORK
-  STUDY AREA



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Design Options for Consideration

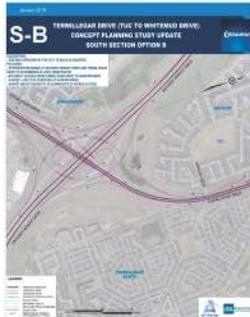
The project area has been split into three major segments to aid in developing lane and interchange configuration strategies. Several options have been developed for the South Segment (Anthony Henday Drive to 23 Avenue), the Central Segment (23 Avenue to 40 Avenue), and the North Segment (40 Avenue to Whitemud Drive).

Small versions of all options are shown below as a summary. Large plans of all options are provided on the table and provide details about each option.

Share your voice: leave your comments on sticky notes on the large plans.

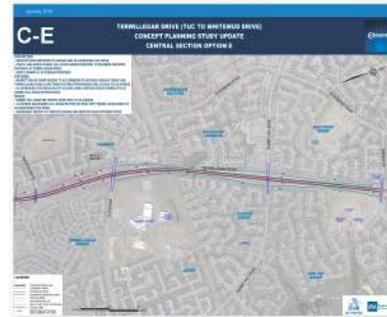
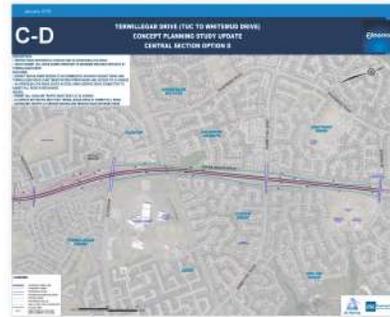
South Section

Anthony Henday Drive to 23 Avenue



Central Section

23 Avenue to 40 Avenue



North Section

40 Avenue to Whitemud Drive



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Construction

This study will provide staging, duration and cost estimates to inform capital planning and therefore anticipated construction timelines.

This study will confirm that 40 Avenue/Bulyea Road interchange construction will be recommended for the 2019-2022 Capital Budget cycle.

Consideration of construction detours is part of this study.



Terwillegar Drive at 40 Avenue/Bulyea Road



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Cycling

Bike lanes will not be provided along the freeway as per transportation standards and safety.

Cyclists will be accommodated on roads crossing Terwillegar Drive and cycling facilities such as shared-use paths or neighbourhood routes will be considered.

Future cycle accommodation includes a pedestrian/cyclist shared-use bridge across the Whitemud Freeway between the communities of Bulyea Heights and Brookside.

Transit

Bus Rapid Transit (BRT) is considered as a potential enhancement to the existing city-wide transit system.

The Terwillegar Drive freeway update will consider the provision for BRT along the corridor.

The possibility of implementing precursor BRT will be fully examined in the Bus Network Redesign project, which is anticipated to be completed in 2018.



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Noise Study

A noise study will be conducted as a part of this planning study.

If it is determined that future traffic noise levels will exceed the maximum level outlined in the City's noise policy, mitigation options will be explored and attenuation techniques will be included as part of the concept plan.

Traffic Noise

- Double the traffic volume does not result in double the noise
- 2x traffic volume results in only a 3 dBA* increase, which is barely noticeable
- 10x traffic volume results in a 10 dBA increase (perceived as approximately twice as loud)
- Terwillegar Drive free-flow lanes are proposed to be lowered for all options, which may reduce traffic noise impacts to adjacent landowners

*A-weighted decibels. The expression of the relative loudness of sounds in air as perceived by the human ear.



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Landscaping and Aesthetics

Some trees will be removed as a result of future construction along Terwillegar Drive and Whitemud Drive.

This project will adhere to the City of Edmonton Corporate Tree Policy, which ensures that all trees are adequately protected from destruction, loss or damage. If not possible, compensation may be provided, in part, by planting new trees.

Consideration will be given to the naturalization of the corridor.

Light Intrusion

Light intrusion will be considered as part of the planning work and mitigation implemented if required.



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Thank you for Attending

Please leave your comments directly on the drawings of the draft design options tonight.

Complete our survey tonight or online at edmonton.ca/terwillegardrivestudy before February 7, 2018.

We will ask for your input again in April 2018 when we share the draft freeway concept plan for final feedback.

If you have questions after tonight, visit our website for an online Question and Answer.

edmonton.ca/terwillegardrivestudy

