Question	City Response
Roadway Design	
On Terwillegar Drive northbound, is it correct that four lanes narrow to one lane to enter the on-ramp to Whitemud Drive going west?	Following Stage One construction, Terwillegar Drive northbound will transition from three motor vehicle travel lanes to one lane eastbound and one lane northbound on Whitemud Drive. The design of Stage Two is underway, however, it is anticipated that the three motor vehicle travel lanes will transition to two lanes eastbound and potentially up to two lanes northbound on Whitemud Drive. Appropriate lane transitions will be provided until Stage Two construction is completed.
Shouldn't the Whitemud Drive interchange be expanded before the Terwillegar Drive South construction?	Terwillegar Drive Stage One design is further advanced than the Whitemud Drive interchange, and is a logical initial stage for the overall project. Careful planning and staging considerations will minimize temporary construction and transitions.
Why won't there be a proper clover-leaf interchange at Anthony Henday Drive? That alone would reduce congestion.	The interchange configuration at Anthony Henday Drive will be developed during the Terwillegar Drive Stage Three project. A full clover-leaf style interchange tends to be avoided in current design practice, as it does not have the capacity of more modern designs
What will the Haddow Drive/Terwillegar Drive intersection look like when completed?	The Haddow Drive/Terwillegar Drive intersection will be modified to be similar to other intersections along Terwillegar Drive. The changes will

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	result in improved operation and safety at the intersection.
Will the Haddow Drive intersection still have dedicated left turn lanes?	Yes, the Terwillegar Drive/Haddow Drive intersection will have dedicated turn lanes.
Will a left turn signal be added at the Haddow Drive intersection?	The Haddow Drive Intersection will have northbound and southbound left turn lanes, along with two westbound lefts and an eastbound left through lane. It is anticipated that all left turn movements will have protected phases however, this is subject to the further analysis and confirmation by the City of Edmonton traffic group.
Are there any future plans to change Terwillegar Drive to be a grade separated freeway?	Terwillegar Drive is planned to be an expressway; there are no plans to develop it as a grade separated freeway. More details on the concept planning process can be found here.
As the lanes do not go under bridges at the intersections, will these remain intersections and not become interchanges?	Yes, all intersections along Terwillegar Drive will remain as intersections. To improve traffic flow, additional capacity will be provided with dedicated through lanes and dedicated right and left turn lanes.
Will the right turn lane onto 40 Avenue (southbound Terwillegar Drive to westbound 40 Avenue) be any closer to the houses?	No, the new west curb will essentially be in the same location and alignment as the existing curb line.
Will the road elevation stay the same as it is today?	Yes, the road elevation will generally stay the same as it is today.
Currently Terwillegar Drive has hard curbs with no shoulder, which can be an issue for disruptions such as vehicle breakdowns. Will this expansion include a shoulder (left or right) to address safety /fluidity concerns?	Shoulders are not proposed on Terwillegar Drive. With three vehicle travel lanes and a separate bus lane in each direction, there is sufficient space for traffic flow to be only minimally impacted by a stalled vehicle.
What are the upgrades to the Whitemud Drive/Terwillegar Drive interchange?	The Whitemud Drive/Terwillegar Drive interchange upgrades include ramp upgrades and transit priority measures. The ramp upgrades include widening the northbound Terwillegar Drive to eastbound Whitemud Drive and westbound Whitemud Drive to

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	southbound Terwillegar Drive ramps. Transit priority upgrades being considered include possible traffic controls such as bus-only signals and potential transit lanes along Whitemud Drive for bus service to and from South Campus LRT Station. Plans for Stage Two are under development and will be shared in fall 2021.
Why was 40 Avenue to Bulyea Road not built straight in the first place?	Early plans for Terwillegar Drive anticipated an interchange at this location, the road was constructed as it is now to allow for traffic flow to be maintained during future construction.
With the considerable changes south from the Whitemud Drive/Terwillegar Drive interchange and increased traffic flow, are there any plans to accommodate increased volume of traffic north of 53 Avenue toward Fox Drive and the Quesnell Bridge?	This area is in the Stage Two project area. Plans for this stage are under development and will be shared in fall 2021.
Operations / Traffic Signals	
Will drivers be able to turn right onto Terwillegar Drive from 40 Avenue to travel southbound toward Anthony Henday Drive?	Yes, this traffic movement will be possible following construction. Drivers will need to cross the dedicated bus lane and merge into southbound traffic.
How will drivers connect from northbound Terwillegar Drive to Brookside on 53 Avenue? Will drivers need to detour to Riverbend Road northbound and then through the Brander Gardens school zone on the west side of Whitemud Drive 53 Avenue?	Access to and from 53 Avenue is currently accommodated only from Whitemud Drive. Access will be the same following construction.
How will the expressway design affect driving time from 23 Avenue to Whitemud Drive and later in the summer, towards Anthony Henday Drive?	The upgrades to Terwillegar Drive will add an additional motor vehicle lane and bus lane, as well as higher capacity turning movements at intersections. From these additions, traffic congestion and delays are expected to be reduced along Terwillegar Drive. By 2030, the expressway will lead to about 4 minutes of travel time savings, compared to if no upgrades were completed. During construction, there will be minor road impacts and two lanes will be open for the majority of construction. Any lane closures will be done during

	off-peak times. The speed limit in construction zones will be reduced to 50 km/hour. Please watch for construction crews and follow signs in the area.
Currently, many of the right turns onto Terwillegar Drive are dedicated lanes with yield signs. Will these change to signalled right turns or remain as yield sign dedicated lanes?	This will vary along the corridor and each intersection will be analyzed based on traffic volume.
idites.	A signalized double right lane is proposed at Rabbit Hill Road westbound to Terwillegar Drive northbound.
Will the congestion on Terwillegar Drive on the off ramp onto Anthony Henday Drive going south and north improve with the proposed changes?	Implementation of Terwillegar Drive Stage Three will address congestion at the ramps to Anthony Henday Drive.
Periodically I see drivers come off Bulyea Road to go north towards Whitemud Drive and race/cut across three lanes to get on the exit. I am concerned this dangerous behaviour will continue following the upgrades.	The distance between Bulyea Road and the Whitemud Drive interchange is short and is currently the reason for this behaviour. The improvements proposed on Terwillegar Drive should reduce the incidence of this behaviour.
What type of signalling changes can we expect turning left from Rabbit Hill Road onto the expressway northbound? Will signals along the new expressway be synchronized along its length (from Henday to Whitemud)	It is anticipated there will be a protected left-turning signal at this location. The design of the signals will be based on travel demand.
The left turns from 40 Avenue and from Rabbit Hill Road onto the expressway are high collision areas. What will the traffic signalling and traffic control look like in these areas after completion of Stage One?	It is anticipated there will be a protected left-turning signal where there are two turning lanes, and protected/permitted signalling where only one turning lane is planned. A protected signal gives priority to left-turning vehicles, whereas a permitting signal requires left-turning vehicles to yield to oncoming traffic.
I am concerned about the Haddow Drive access from both directions of Terwillegar Drive and the opposite, access to Terwillegar Drive from Haddow Drive. Will there be traffic signals at this intersection?	Yes, traffic signals will remain at the Terwillegar Drive/Haddow Drive intersection, as well as each of the other intersections along the corridor.
	The Terwillegar Drive/Haddow Drive intersection will also be divided into two intersections similar to the other intersections along the corridor, which will allow for more efficient traffic movements.

Once all the program stages are constructed, will all the traffic lights between Anthony Henday Drive and Whitemud Drive be eliminated?	No. The expressway design retains all traffic signals at the intersections. To provide additional capacity, Terwillegar Drive will be expanded from two lanes to four lanes in each direction, three for motor vehicles and one dedicated lane for buses, along with new left and right turning lanes at the intersections.
Will there be upgraded signage at the Bulyea intersection (northbound) to inform drivers of which lane to be in to exit west or south along Whitemud Drive?	Additional guide signage will be included as a part of this project to assist drivers in navigating the new road infrastructure.
What are Adaptive Traffic Signals (i.e., smart signals)?	This technology allows traffic signal timings to be adjusted in real time based on actual traffic flow conditions.
	The system along Terwillegar Drive is planned to be semi-actuated, meaning the signals will be pre-programmed to respond to typical travel patterns and also use detection technology to detect vehicles and respond to irregular travel demands for more minor and infrequent movements. Semi-actuation prioritizes heavier, mainline traffic flow to optimize system efficiency.
There previously was talk of using Adaptive Traffic Signals on Terwillegar Drive. Is this still the plan?	A recent pilot revealed that more testing is required prior to a more broad scale implementation of Adaptive Traffic Signal Control Technology, such as on Terwillegar Drive. The system along Terwillegar Drive is planned to be semi-actuated.
Can we obtain a copy of the evaluation of the Adaptive Traffic Signals?	The City's evaluation of the Adaptive Traffic Signal Controls (sometimes called smart signals) was presented at the December 1, 2020 Urban Planning Committee meeting.
Pedestrian/Cyclist Bridge	
Will there be access for pedestrians and cyclists over the Anthony Henday Drive bridge?	Yes, pedestrian and cyclist accommodation across Anthony Henday Drive is anticipated to be included as a part of Stage Three.

Will you be preparing the access routes to the pedestrian/cyclist bridge in this stage?	As a part of Stage One construction, the shared-use path is anticipated to be completed up to the location of the pedestrian/cyclist bridge that will cross Whitemud Drive in Bulyea Heights. The pedestrian/cyclist bridge is anticipated to be constructed in 2025.
Will the pedestrian bridge that currently exists across Terwillegar Drive remain the same?	Yes. No changes are proposed to the existing pedestrian bridge across Terwillegar Drive.
Transit	
What is an enhanced bus stop?	The enhancements include longer bus pull outs, connections to the shared-use path, lighting and amenities. The amenities are being confirmed.
The new design includes dedicated bus lanes in each direction, but the new bus system does not include one bus route between 40 Avenue and 23 Avenue. Why?	The dedicated transit lanes are planned to support new rapid bus transit services anticipated to be in operation once construction is complete.
Is there space for a future LRT path from Windermere going north?	There are no plans for LRT along Terwillegar Drive. Rapid bus transit has been chosen for this section of the city.
Trees/Landscaping	
Why were so many trees removed in preparation of construction? Will they be replaced as part of project landscaping?	Trees were removed to allow for construction of the shared-use path on the east side of Terwillegar Drive.
	Preserving the natural area along Terwillegar Drive is a key component to this project.
	A robust replanting and re-landscaping plan will be implemented, which includes trees, shrubs, beautification and naturalization both along the corridor, as well as in the boulevard of all crossing roadways
Is the tree removal now complete along Terwillegar Drive between Whitemud Drive and Anthony Henday Drive?	Yes, the tree removal along Terwillegar Drive for this project is complete.
With the naturalized replacement trees, does that mean that no replacement trees will be planted?	Trees to replace those that were removed and additional trees will be

	planted along the corridor during final landscaping.
Will the replacement trees be small or will they be similar in size to the ones removed?	The trees will be younger/smaller than the ones that were removed.
What guarantees are there that replacement tree planting will not be removed from the project in an effort to manage the budget?	Funding has been secured for all stages of this project from both the City of Edmonton and the Government of Alberta, and includes new and replacement tree planting. Additionally, the project must follow all policies, procedures and guidelines related to the preservation and protection of trees.
What plans are in place for "robust" planting of trees on the west side of Terwillegar Drive between 40 Avenue and Rabbit Hill Road to assist in noise mitigation?	On the west side of Terwillegar Drive decorative landscaping will be added around bus stops and the sidewalk connections to the bus stops. The strategy for the corridor overall is for naturalized landscaping. No major tree planting is planned.
Will the green space southwest of the Terwillegar Drive/Whitemud Drive interchange, be excavated to make the new roads or will it be untouched?	This area is in the Stage Two project area. Plans for this stage are under development and will be shared in fall 2021.
Are there any plans to upgrade the vacant/parkland located to the north and east of Whitemud Drive adjacent to the Brookside neighbourhood?	This area is in the Stage Two project area. Plans for this stage are under development and will be shared in fall 2021.
Funding / Budget	
This program has an extremely long delivery, what mitigations are in place to ensure there is enough funding in place to deliver the project through to the end of Stage Three.	Funding has been approved for all stages of this project from both the City of Edmonton and the Government of Alberta.
What is being done in the project plan to mitigate cost overruns or the impact of unexpected costs?	The overall Terwillegar Drive expansion is being managed according to City of Edmonton policies and program management best practices. This includes oversight of the overall program resources, budget, schedule, scope and risks. As individual stage budgets are refined through the planning and design phases, each stage of the expansion program is reviewed in

the context of the program goals and budget, with either adjustments to scope made as necessary to align with available budget or additional funds released to other stages. Risk management is also done throughout each phase of each stage of the program to mitigate unexpected difficulties. **Shared-use Path** The west side of Terwillegar Drive has a much lower The shared-use path on the east side of residential density than the east side. Why then is the Terwillegar Drive is more compatible shared-use path planned for the east side, up against with the area bike network plan and people's backyards? provides better connectivity at the north end to the proposed 142 Street pedestrian/cyclist bridge over Whitemud Drive. The east side was also determined to have fewer technical challenges related to grades and tree removals. East-west connectivity will be provided at each road crossing Terwillegar Drive. Is there funding for the shared-use path as part of the Funding for the shared-use path is in 142 Street pedestrian/cyclist bridge? place and construction is planned to be completed as part of Stage One up to the point of the connection in Bulyea Heights to the pedestrian/cyclist bridge over Whitemud Drive. The bridge, which is part of Stage Two, is anticipated to be constructed in 2025. Will the shared-use path be routed through the The shared-use path will go around the neighbourhood before crossing Whitemud Drive or will it Bulyea Heights neighbourhood and run border the roads and stay out of the community? along both Terwillegar Drive and Whitemud Drive before crossing Whitemud Drive to the north. A connection into Bulyea Heights is also being assessed as part of the pedestrian/ cyclist bridge planning study.

The retaining walls will be offset from backyard fences and the area of disturbance will be no closer than half a metre from any fence. The half metre landscaped strip will be on a level with the bottom of the fence. The half meter of frontage between the shared-use path and fence will be landscaped with grass and could potentially be accessible by users, similar to other shared-paths on arterial roadways in Edmonton.
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A noise study was completed which revealed that the current berms and fences along Terwillegar Drive provide sufficient noise mitigation to meet the requirements of the Urban Traffic Noise Policy C506A under both current and future traffic conditions. Additional noise attenuation measures are therefore not planned as part of Stage One. Noise measurements will be done after the roadway is in full operation to verify that noise levels are below the mitigation threshold.
The noise study that was conducted along Terwillegar Drive based on the concept plan expansion can be found at edmonton.ca/TerwillegarDrive. The results of the noise study were shared during engagement in September 2019.
Noise modelling completed during the concept planning study suggests that noise levels will continue to meet the City of Edmonton Urban Traffic Noise Policy C506A), therefore no mitigation will be required. Noise measurements will be done after

	that noise levels are below the mitigation threshold.
What security is planned for the shared-use path and at the bus stops?	While security personnel are not planned along the shared-use path or at the bus stops, safety was an important consideration to designing both the path and bus stop updates. Safety features include the connections into the community and pedestrian-oriented lighting.
Will there be any help or safety phones (the ones with the blue lights) installed along the shared-use path?	There is currently not a plan to install safety phones along the shared-use path.
	The shared-use path and the connections into the neighbourhoods will include pedestrian-oriented lighting.
Speed Limit & Enforcement	
What will the speed limit be after completion of Stage One and once the construction is complete?	The speed will be 70 km/h, the same as it is today.
Will there be any enforcement especially for motorcycles that currently use the roadway as a speed ramp up to 40 Avenue.	Concerns related to excessive vehicle speed and noise from vehicles can be directed to Edmonton Polices Service.
Construction	
As many residents are housebound due to Covid-19, will any adjustments be made to the 9 p.m. end time for construction?	As the construction season in Edmonton is limited by weather and the expansion of Terwillegar Drive is on a tight schedule, the hours of construction are required to complete the project on time.
During construction, what will the impacts be to pedestrian access?	Current pedestrian movements will all be maintained, but may be detoured. Where there are currently two pedestrian walkways (such as at Rabbit Hill Road), one will be open at any given time. Where there is currently one walkway (such as at 40 Avenue) that walkway will be maintained until a new walkway is available. When an intersection (or a direction at an intersection) is being closed for night paving, pedestrians may be detoured or

	escorted through the work area as best as meets the need.
What can we expect in terms of noise and dust from the construction? What mitigations are in place to minimize the impacts?	Construction will take place following the City of Edmonton's noise bylaw - which directs noise from construction during the hours of 7 a.m. and 9 p.m. daily, with the exception of Sunday, which is 9 a.m. to 7 p.m.
	If work is required outside of these hours, the contractor must apply for an extension.
	Some overnight paving work may be required, but will likely only require two to four days at each intersection.
	Dust from construction activities will be monitored. Water trucks / street sweepers will be used, as needed, to minimize the impact to residents and motorists.
Material	
There has been some deterioration on the quality of material used on Anthony Henday Drive. What will the roadway materials be for Terwillegar Drive?	The roadway material to be used on Terwillegar Drive will be similar to a typical freeway which has better rut mitigation qualities than standard asphalt mixes. The project will not use concrete
	pavement as was used on the southwest Anthony Henday project.