

# CAPITAL PROFILE REPORT

PROFILE NAME:	<b>TERWILLEGAR DRIVE EXPRESSWAY UPGRADES - ALTERNATE STAGING</b>	<b>FUNDED</b>
PROFILE NUMBER:	<b>19-22-9006</b>	<b>PROFILE STAGE:</b> Approved
DEPARTMENT:	<b>Integrated Infrastructure Services</b>	<b>PROFILE TYPE:</b> Standalone
LEAD BRANCH:	<b>Infrastructure Planning &amp; Design</b>	LEAD MANAGER: <b>Pascale Ladouceur</b>
PROGRAM NAME:		PARTNER MANAGER: <b>Craig McKeown</b>
PARTNER:	<b>Parks &amp; Roads Services</b>	ESTIMATED START: <b>January, 2019</b>
BUDGET CYCLE:	<b>2019-2022</b>	ESTIMATED COMPLETION: <b>December, 2027</b>

<b>Service Category:</b> Roads	<b>Major Initiative:</b>
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<b>GROWTH</b>	<b>RENEWAL</b>	<b>PREVIOUSLY APPROVED:</b>	<b>239,631</b>
80	20	<b>BUDGET REQUEST:</b>	-
		<b>TOTAL PROFILE BUDGET:</b>	<b>239,631</b>

## PROFILE DESCRIPTION

This profile is for the planning, design and delivery of an integrated, multi-modal roadway upgrading plan to accommodate the projected growth of travel demand in Southwest Edmonton. This plan consists of converting Terwillegar Drive to an expressway (Stage 1), upgrades to the Whitemud Drive/Terwillegar Drive interchange and the rehabilitating/widening the Rainbow Valley Bridges (Stage 2) and upgrading the Anthony Henday Drive /Terwillegar Drive interchange (Stage 3). This profile includes approved funding as part of the Fall 2019 Supplemental Capital Budget Adjustment (SCBA) for the Stage 1 upgrades between Rabbit Hill Road and Whitemud Drive and Stage 2, as well as funding from the Province of Alberta towards the completion of Stage 1, transit and active mode elements in Stage 2, and Stage 3.

Funding approved as part of the Fall 2019 SCBA includes a total of \$104 million towards the following scope of work:

- Stage 1: Planning, design and delivery of the widening of Terwillegar Drive to four lanes in each direction between Rabbit Hill Road and Whitemud Drive (three for motor vehicles and one dedicated lane for transit)
- Stage 2: Planning, design and delivery of supporting upgrades to the Whitemud Drive/Terwillegar Drive interchange, including transit priority measures.
- Stage 2: Planning, design and delivery of supporting upgrades to Whitemud Drive between Fox Drive and 122 Street, including widening and associated upgrades.
- Stage 2: Planning, design and delivery of rehabilitation and widening of the Rainbow Valley Bridges, including transit priority measures.
- Stage 2: Planning and design of the 142 Street pedestrian/cyclist bridge over Whitemud Drive.

In July 2020, the Province of Alberta announced additional funding allowing for the completion of additional stages of the Terwillegar Drive Expressway project, including:

- Stage 1: Delivery of the widening of Terwillegar Drive to four lanes in each direction between Anthony Henday Drive and Rabbit Hill Road (three for motor vehicles and one dedicated lane for transit).
- Stage 1: Delivery of a new shared-use path along the east side of Terwillegar Drive
- Stage 2: Delivery of the 142 Street pedestrian/cyclist bridge over Whitemud Drive.
- Stage 3: Planning, design and delivery of upgrades to the Anthony Henday Drive / Whitemud Drive interchange, including an additional northbound bridge, ramp upgrades, transit priority measures and Terwillegar Drive/170 Street widening.

## PROFILE BACKGROUND

Terwillegar Drive is a major arterial, constructed starting in the 1980s with the intention that it would ultimately become a freeway. Whitemud Drive was originally planned as a facility to accommodate the movement of goods, services and people by motor vehicles. A new plan centred around upgrading Terwillegar Drive to an expressway emerged in mid-2017. In October 2018, Urban Planning Committee approved a motion to advance the expressway plan for Terwillegar Drive.

In the Spring 2019 SCBA, funding was approved for Stage 1 of the plan as well as the planning and design of Stage 2. This funding included partnership funding through the Alberta Community Transit Fund (ACTF). In fall 2019, the ACTF was cancelled and this Capital Profile (19-22-9006) was prepared to account for the elimination of the Province's funding. Funding was approved for an alternate staging plan in the Fall 2019 SCBA. In July 2020, the Province of Alberta committed funding towards the plan, allowing for the completion of all three stages. This amended profile captures the originally approved scope of work and the additional scope of work included in the Province's funding commitment.

## PROFILE JUSTIFICATION

During peak hours, traffic along portions of Terwillegar Drive approaches the available capacity thresholds, resulting in congestion and delays for motorists and a reduction of the speed and reliability of transit services. Additionally, active modes are poorly accommodated along Terwillegar Drive, with major gaps and substandard east/west connections. Upgrades are required to accommodate the anticipated travel demand growth in Southwest Edmonton. This includes accommodating planned transit services and the planned active transportation network (District Connector Network), as well as addressing critical congestion and safety issues along Terwillegar Drive.

## STRATEGIC ALIGNMENT

This profile aligns with the strategic objective of making transformational impacts in our community by making a discrete and measurable impact on Council's four strategic goals: healthy city, urban places, regional prosperity and climate resilience, by creating a community to connect people to what matters to them.

## ALTERNATIVES CONSIDERED

The alternatives to this profile include the previously approved alternate staging plan (19-22-9006) and advancing the previous freeway plan for Terwillegar Drive. The alternate staging plan included the widening of Terwillegar Drive to four lanes in each direction between Rabbit Hill Road and Whitemud Drive, supporting upgrades to the Whitemud Drive/Terwillegar Drive interchange, supporting upgrades to Whitemud Drive between Fox Drive and 122 Street, the rehabilitation and widening of the Rainbow Valley Bridges, as well as the planning and design of the 142 Street pedestrian/cyclist bridge over Whitemud Drive. Completing only the alternate staging plan would potentially result in the loss of the Provincial funding and lost opportunity support the City's four strategic goals. The previously approved freeway plan would not reflect public priorities, achieve direction from Edmonton's City Council and align with emerging City plans and policies.

## COST BENEFITS

Tangible benefits include decreased travel time, decreased collision rates, decreased emissions, improved transit use and improved connectivity and access for active modes. Intangible benefits include maintained or improved citizen satisfaction with roadway capacity and transit service in the area.

## KEY RISKS & MITIGATING STRATEGY

The key risks for this program include the funding being approved prior to Checkpoint #3, potential budget and schedule issues due to the complexity of widening the existing Rainbow Valley Bridges and public perception of the project and construction impacts. Mitigation strategies include advancing the project to Checkpoint #3 as quickly as possible to refine the estimates of cost, budget and schedule, ensuring transparent project management to monitor and control the program's scope, schedule and budget, and information sharing with the public to share details about the project, including the construction impacts.

## RESOURCES

Planning and design will be completed using several consultants retained through a competitive procurement process. Construction will be completed by one or more contractors retained through the City's tendering process.

## CONCLUSIONS AND RECOMMENDATIONS

To address critical congestion issues along this corridor, improve the accommodation of transit, and advance planning and design of active mode upgrades, it is recommended that funding for this project be approved.

## CHANGES TO APPROVED PROFILE

2020 Spring SCBA (#20-11, CM-08): Transfer \$1.3 million of Pay-as-you-go funding from Profile 19-22-9004 (previously approved Terwillegar Drive Stage 1 profile) to the new alternate staging profile 19-22-9006 and apply against carry forward costs for planning and design from 2019 and earlier.

2022 Spring SCBA (#22-10, 3.2-2): This scope change is required to allow for integration of the renewal work for the Rainbow Valley Bridges with the bridge widening included in the Terwillegar Drive Expressway Upgrade project. The total cost of this work is estimated to be \$19,500,000, and would be funded with tax-supported debt. This funding is required now to allow the preliminary construction activities to advance without unnecessarily extending the overall construction schedule or adding additional expense by having it advance separately.

# CAPITAL PROFILE REPORT

PROFILE NAME: **Terwillegar Drive Expressway Upgrades - Alternate Staging**

**FUNDED**

PROFILE NUMBER: **19-22-9006**

PROFILE TYPE: **Standalone**

BRANCH: **Infrastructure Planning & Design**

## CAPITAL BUDGET AND FUNDING SOURCES (000's)

	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
<b>APPROVED BUDGET</b>												
Approved Budget												
Original Budget Approved	-	-	-	-	-	-	-	-	-	-	-	-
2019 Cap Council	35,900	35,300	23,500	8,000	-	-	-	-	-	-	-	102,700
2019 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	-
2020 Cap Administrative	1,300	-	-	-	-	-	-	-	-	-	-	1,300
2020 Cap Capital Budget Adj (one-off)	5,300	22,500	37,000	25,500	21,000	4,200	1,000	-	-	-	-	116,500
2020 Cap Carry Forward	-	-	-	-	-	-	-	-	-	-	-	-
2021 Cap Capital Budget Adj (one-off)	-135	-234	-	-	-	-	-	-	-	-	-	-369
2021 Cap Carry Forward	-22,427	22,427	-	-	-	-	-	-	-	-	-	-
2022 Cap Council	-	19,500	-	-	-	-	-	-	-	-	-	19,500
<b>Current Approved Budget</b>	<b>19,937</b>	<b>99,494</b>	<b>60,500</b>	<b>33,500</b>	<b>21,000</b>	<b>4,200</b>	<b>1,000</b>	-	-	-	-	<b>239,631</b>
Approved Funding Sources												
Pay-As-You-Go	2,010	-1,079	-	-	-	-	-	-	-	-	-	931
Provincial Grant	2,482	25,318	37,000	25,500	21,000	4,200	1,000	-	-	-	-	116,500
Tax-Supported Debt	15,445	75,255	23,500	8,000	-	-	-	-	-	-	-	122,200
<b>Current Approved Funding Sources</b>	<b>19,937</b>	<b>99,494</b>	<b>60,500</b>	<b>33,500</b>	<b>21,000</b>	<b>4,200</b>	<b>1,000</b>	-	-	-	-	<b>239,631</b>

<b>BUDGET REQUEST</b>												
Budget Request	-	-	-	-	-	-	-	-	-	-	-	-

<b>REVISED BUDGET (IF APPROVED)</b>												
Revised Budget (if Approved)	19,937	99,494	60,500	33,500	21,000	4,200	1,000	-	-	-	-	239,631
Requested Funding Source												
Pay-As-You-Go	2,010	-1,079	-	-	-	-	-	-	-	-	-	931
Provincial Grant	2,482	25,318	37,000	25,500	21,000	4,200	1,000	-	-	-	-	116,500
Tax-Supported Debt	15,445	75,255	23,500	8,000	-	-	-	-	-	-	-	122,200
<b>Requested Funding Source</b>	<b>19,937</b>	<b>99,494</b>	<b>60,500</b>	<b>33,500</b>	<b>21,000</b>	<b>4,200</b>	<b>1,000</b>	-	-	-	-	<b>239,631</b>

## CAPITAL BUDGET BY ACTIVITY TYPE (000's)

	Activity Type	Prior Years	2022	2023	2024	2025	2026	2027	2028	2029	2030	Beyond 2030	Total
<b>REVISED BUDGET (IF APPROVED)</b>													
Construction		9,787	99,194	60,500	33,500	21,000	4,200	1,000	-	-	-	-	229,181
Design		10,150	300	-	-	-	-	-	-	-	-	-	10,450
<b>Total</b>		<b>19,937</b>	<b>99,494</b>	<b>60,500</b>	<b>33,500</b>	<b>21,000</b>	<b>4,200</b>	<b>1,000</b>	-	-	-	-	<b>239,631</b>

## OPERATING IMPACT OF CAPITAL

Type of Impact:

Branch:																
	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE	Rev	Exp	Net	FTE
<b>Total Operating Impact</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-