## Department Business Plan Update

Transportation Planning and Engineering



## Department overview

Transportation Planning and Engineering is responsible for strategic transportation planning and major road construction projects of Strathcona County's transportation systems infrastructure. Transportation systems infrastructure is required for vehicular, pedestrian, and other active transportation modes. We primarily serve internal stakeholders with 36.6 full-time employees who plan, survey, design, and manage \$10 million in transportation system-related capital projects per year.

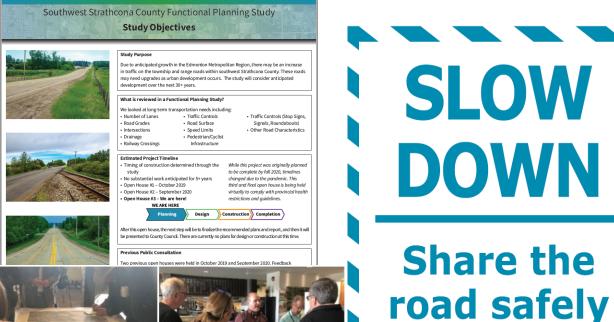


### **Core business functions**

- 1 Planning, Engineering and Safety
- 2 Engineering Services and Programming
- 3 Project Construction and Engineering
- 4 Transportation Network Management



- 1 Planning, Engineering and Safety
  - Transportation Planning
  - Transportation Modelling
  - Traffic Safety Education and Outreach



- 39 traffic studies were completed in the Urban Service Area
- 55 Electronic Driver Feedback signs were installed throughout the urban and rural areas for an average of 3-4 weeks
- One In Service Road Safety Review (ISRSR) is planned for Township Road 530 and Range Road 222 in 2021
- Minor injury collisions in both the urban and rural area were reduced (26% and 38% respectively) in 2020 from 2019
- Retirement of the "Give Our Kids a Brake" temporary sign program - replaced with Traffic Safety Education Sign Program (TES)



- 2 Engineering Services and Programming
  - Transportation Capital programming
  - Survey Services





- Prepared 22 business cases for the Budget Process
- Supported the upgrade to a new Levy Model with Corporate Finance and Planning and Development Services
- Eight design projects completed in house with 20 designs on the go
- Mobile LiDAR will produce approximately 4Tb of data
- 130 survey requests completed

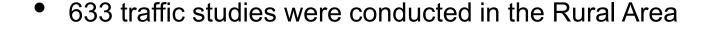


- 3 Project Construction and Engineering
  - Capital Road Construction Project Management
  - Outdoor Open Space Construction Management
- Completed procurement for eight roadway projects with three pending
- Construction progressing on time and on budget on all projects
- Construction expected to be completed soon for twoyear projects that started in 2020; Wye Road and Sherwood Drive
- Completed procurement for nine Open Space projects
- Collaboration with various departments to deliver projects, including TAS, RPC, Utilities and Facility Services





- 4 Transportation Network Management
  - Traffic engineering
  - Traffic and operations management



- Three new CCTV camera installations (24 total)
- Seven new traffic cabinet wraps (28 total)
- 126 traffic classification studies (Jan May)
- 24-hour traffic noise surveys
- Streetlight maintenance







## Successes and Challenges

- Partnering with ITS for communication upgrade of traffic signal network
- Collaboration opportunities with TAS: Communications support, capital project delivery, and development of an asset management charter.
- Decrease of fatal/major injury collisions for 2018 2020 surpassing targets in the Traffic Safety Strategic Plan.
- County Connect responses require comprehensive research/thorough responses
- Public engagement pivoted to online
- COVID restrictions impacted typical driving conditions and reduced traffic data collection opportunities
- Capital Projects delivery continued with new projects through provincial grants



## **COVID Impacts**

### • Staff impacts

 although 50% of our staff have been consistently working from home, we continue to meet deadlines, tender construction projects, undertake topographical surveys, conduct site inspections, undertake public engagement, and work with residents to address concerns

### Service impacts

- minimal impact to service levels
- with traffic returning to near-normal; the resumption of full traffic count program and traffic noise measurement studies

### Financial impacts

- minor increase in mileage expenses due to staff needing to drive separate vehicles to site
- decrease in professional development expenses



## Employee engagement

- Key Findings in 2021
  - Significant increases since 2019 in:
    - staff provide knowledgeable service to clients
    - staff feeling valued by their colleagues and the corporation
    - staff feeling inspired to do their best
    - staff feeling informed and engaged
  - Areas for improvement going forward:
    - opportunities for career growth
    - encouraging staff to be innovative
    - ensure staff have sufficient time to do their job



### **Annual Programs - Status**

#### **Overall initiative status**



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

#### Alignment to strategic goals

- Goal 9: Continuously improving the way we work, as one organization, in an agile and sustainable manner
- Result: Supports integrated planning
- Result: Supports infrastructure management

#### **Key deliverables**

- Providing pedestrian connectivity in existing business and industrial areas through the design and construction of concrete sidewalks
- Improved traffic safety including pedestrian crossing upgrades
- Reduced vehicle speeds and improved driver behaviour
- Improved public perception and quality of life

- Communication and coordination with adjacent businesses during construction including minor landscaping impacts in the boulevard
- Coordinate with Transit during impacts to bus stops
- Providing enhanced connectivity for pedestrians and transit users
- Ongoing evaluation and education support current and future initiatives

Risks	Mitigation
Adverse weather conditions stop/slow construction	Bad weather days built into the schedule; crews can work weekends if necessary
Delayed product deliver (i.e. traffic signals)	Order materials in advance; maintain contact with alternate suppliers
Ensure coordination with adjacent businesses is effective during construction phase.	Construction notices will be handed out prior to start of construction, with Project Manager and 24-hour Contractor emergency contact information.



### Class II Improvements - Rge Rd 210, Twp Rd 550 to Hwy 15 - Status

#### **Overall initiative status**



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

#### **Alignment to strategic goals**

- Goal 1:Build strong communities to support the diverse needs of residents
- Result: Opportunities for meaningful connections within communities
- Goal 6: Provide facilities and services that are available and accessible to residents
- Result: Diverse, affordable neighborhoods, amenities and housing opportunities

#### **Key deliverables**

- Construction to improve this section of roadway from a Class 3 roadway to a Class 2 roadway
- Design, land acquisition, construction

- Support the increase in vehicular traffic
- Creating an agricultural corridor to support residents in the area

Risks	Mitigation
Construction may be delayed by inclement weather or unforeseen construction issues	Project team will mitigate concerns proactively through the project and provide schedule updates as required throughout the project.
Design or land delayed/incomplete	Project team will work proactively through the project with both landowners and consultants and provide schedule updates as required throughout the project.



### Twp Rd 560, Rge Rd 214 to 800m East - Status

#### **Overall initiative status**



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

#### Alignment to strategic goals

- Goal 1:Build strong communities to support the diverse needs of residents
- Result: Opportunities for meaningful connections within communities
- Goal 6: Provide facilities and services that are available and accessible to residents
- Result: Diverse, affordable neighborhoods, amenities and housing opportunities

#### **Key deliverables**

- Upgrade 0.8 km of existing roadway east of Range Road 214 to a two lane rural industrial Class I standard
- Engineering, design, environmental permitting, tender and construction

- Links two previously upgraded roadways in the Alberta Industrial Heartland Area
- Provides improved access east to Highway 830
- Provides an unrestricted access point and serve as a detour route during future construction on Range Road 213

Risks	Mitigation
Construction may be delayed by inclement weather or unforeseen construction issues	Project team will mitigate concerns proactively through the project and provide schedule updates as required throughout the project.



### **Functional Planning Study Southwest Quadrant - Status**

#### **Overall initiative status**



Initiative status	Current status	Previous status
Time	Y	Y
Scope	Y	G
Budget	Y	G

#### Alignment to strategic goals

- Goal 2:Manage, invest and plan for sustainable municipal infrastructure
- Result: Efficient and effective multi-modal transportation network
- Goal 8: Foster an environment for safe communities
- Result: Transportation network, including trails, allows people and goods to move safely and efficiently

#### **Key deliverables**

- Roadways from Range Road 234 to Highway 21 and Township Road 510 to Highway 14 will be assessed due to the Decoteau Development in the City of Edmonton
- Public engagement with stakeholders
- Preliminary design and cost estimates for future infrastructure requirements
- Identify potential environmental and drainage impacts

- Public engagement has been impacted due to Covid-19, though three sessions have been completed to date
- Significant feedback was received from concerned residents and identified land constraints
- Completion may be delayed until T1 2022

Risks	Mitigation
External stakeholders are available and provide input in a timely manner.	Public engagement to offer a virtual option and other larger stakeholders will be proactively engaged during the process.



### **Bethel Way, Bison Way to Lakeland Dr - Status**

#### **Overall initiative status**



Initiative status	Current status	Previous status
Time	G	G
Scope	G	G
Budget	G	G

#### **Alignment to strategic goals**

- Goal 1:Build strong communities to support the diverse needs of residents
- Result: Opportunities for meaningful connections within communities
- Goal 6: Provide facilities and services that are available and accessible to residents
- Result: Diverse, affordable neighborhoods, amenities and housing opportunities

#### **Key deliverables**

- Construction of Bethel Way to an urban collector standard from Bison Way to Lakeland Drive
- Includes significant storm water management / storm sewer and two sidewalks

- Provides alternate access for the RCMP and Strathcona Emergency Services and the future developable lands in the area
- Promotes further development within the Strathcona Centre neighbourhood
- Connects pedestrians to/from the multi-use trails along Lakeland Drive

Risks	Mitigation
Construction may be delayed by inclement weather or unforeseen construction issues	Project team will mitigate concerns proactively through the project and provide schedule updates as required throughout the project.



# **Questions?**



