# MACLEOD TRAIL CORRIDOR STUDY

# A balanced approach to transportation planning



# 100 YEARS OF MACLEOD TRAIL: PAST, PRESENT, FUTURE



Photo of Macleod Trail circa 1970. The City of Calgary, Corporate Records, Archives.



Photo of Macleod Trail circa 2005. The City of Calgary, Corporate Records, Archives

Macleod Trail, as we know it today, has remained much the same since the 1960's. It was, and continues to be, characterized by low-rise buildings accompanied by paved parking lots and poor infrastructure for pedestrians. The development of low-density land use and long distances between destinations or areas of interest has encouraged driving as the primary way for people to get to and from key destinations along Macleod Trail.

# What will Macleod Trail look like over the next 50 years?

Many of the older buildings along Macleod Trail are approaching the end of their lifecycle. Now is an opportune time to put in place conditions that will help guide a different type of land use and development along Macleod Trail for the next 50 years.

Some of that work has already been done; guided by more than 18,000 citizens' vision of a better, more sustainable city in the imagineCALGARY Plan\*, Calgary's 60-year Municipal Development Plan (MDP) envisions Macleod Trail to redevelop into an "urban boulevard" over the next few decades.

#### Characteristics of an Urban Boulevard include:

- New buildings along the street to provide different housing choices for Calgarians.
- Street-front shops that provide residents access to daily amenities within walking distances (i.e. mixed-use developments).
- Green spaces that help enhance safety by providing a buffer between vehicles and people.
- A comfortable street environment in addition to a commuter route.
- A well-maintained roadway and public realm that people will frequent, creating a vibrant area where businesses can thrive.

Because people will be living within walking or cycling distances to businesses and major activity centres (e.g. shopping centres), there will be a need for quality sidewalks, bikeways, and green spaces that help enhance safety of road users and improve the overall streetscape.

### PEOPLE WILL HAVE ACCESS TO SAFE, CONVENIENT TRANSPORTATION OPTIONS THAT BEST SUIT THEIR TRAVEL NEEDS, WHEN THEY NEED IT.

Providing a balanced approach to transportation infrastructure means people will have access to safe, convenient transportation options that best suit their travel needs, when they need it.

For people who live in the area and need to visit nearby shops and destinations, walking or biking may be a convenient option. Taking transit may be a suitable option when travelling to areas with frequent bus or LRT service. For longer distances or for situations where a vehicle is needed to carry heavy loads, people may choose to drive.

To support the transportation choices of people who will live and work along the future Macleod Trail, and those who need to drive through the area to another destination, The City's 60-year Calgary Transportation Plan identifies Macleod Trail as an "urban boulevard" – a complete street that provides a balance of transportation needs for all road users.

<sup>\*</sup>imagineCALGARY is an award winning initiative that represents the voice of 18,000 Calgarians. Together, Calgarians created a shared vision for our city and a detailed plan for how to get there. The Plan puts all Calgarians on a shared path towards urban sustainability in the 21st century (source: www.imaginecalgary.ca).

# MACLEOD TRAIL AS AN URBAN BOULEVARD

Calgarians told us that they want a transportation system that serves the access and mobility needs of all people through a choice of convenient, comfortable, affordable, and efficient transportation modes (source: imagineCALGARY).

An Urban Boulevard is a street-type in the Calgary Transportation Plan that accomplishes just that – it provides a balance for all transportation modes from walking to cycling, taking transit, transporting goods, and supporting reasonably high volumes of vehicle traffic (source: Calgary Transportation Plan).

Macleod Trail as an Urban Boulevard provides a balance for all transportation modes that supports a vibrant streetscape. Public feedback early in the study also demonstrated a desire for many characteristic of an Urban Boulevard including wider sidewalks and dedicated space for cycling, better connections to LRT stations, and more trees and landscaping to improve aesthetics and enhance safety.

IT'S ABOUT GIVING PEOPLE OPTIONS TO DECIDE HOW THEY WILL GET FROM POINT A TO B, WHETHER THEY ARE YOUNG OR OLD, WHETHER THEY CHOOSE TO WALK, BIKE, TAKE TRANSIT, OR DRIVE, SOME OF THE TIME, ALL OF THE TIME. IT'S ABOUT MOVING PEOPLE.



# MACLEOD TRAIL AND THE SOUTH CALGARY TRANSPORTATION NETWORK

Macleod Trail is one of many north-south roadways that accommodate a high volume of vehicles each day. It is part of a larger transportation network – a network of roads, streets, and transit that work together to help get Calgarians to and from their destinations.

Macleod Trail currently carries between 55,000 and 65,000 vehicles each weekday. This daily volume has not changed for over 30 years. Traffic volumes are forecast to remain between 55,000 and 65,000 vehicles per day with implementation of the Urban Boulevard Plan.

Improvements to the south Calgary transportation network through new transit service and roadway expansions will help create capacity for future traffic in the road network and enable Macleod Trail to support reasonably high volumes of vehicle traffic as an Urban Boulevard.

#### A network view

To provide a more complete view of Macleod Trail's function within the larger south Calgary road and transit network, a map of the south Calgary transportation network is included on the next page.

The map highlights the key skeletal roads and arterial streets as well as current and planned transit service. It shows how Macleod Trail as an Urban Boulevard will be supported by the adjacent road and street network and future transit service planned for south Calgary.

#### South Calgary road and street network

Within the south Calgary road network, there are six north-south skeletal roads/expressways designed to carry the highest capacity of vehicle traffic over long distances:

- Sarcee Trail/West Calgary Ring Road
- Crowchild Trail S.W.
- 14 Street S.W.
- Deerfoot Trail S.E.
- Barlow Trail
- Stoney Trail (East)

These skeletal roads are further supported by arterial streets—collector roads that are also heavily focused on moving vehicular traffic. Some examples of these collector roads include:

- Elbow Drive
- Blackfoot Trail
- Bonaventure Drive
- Fairmount Drive
- Acadia Drive
- 11 Street

#### Road network improvements

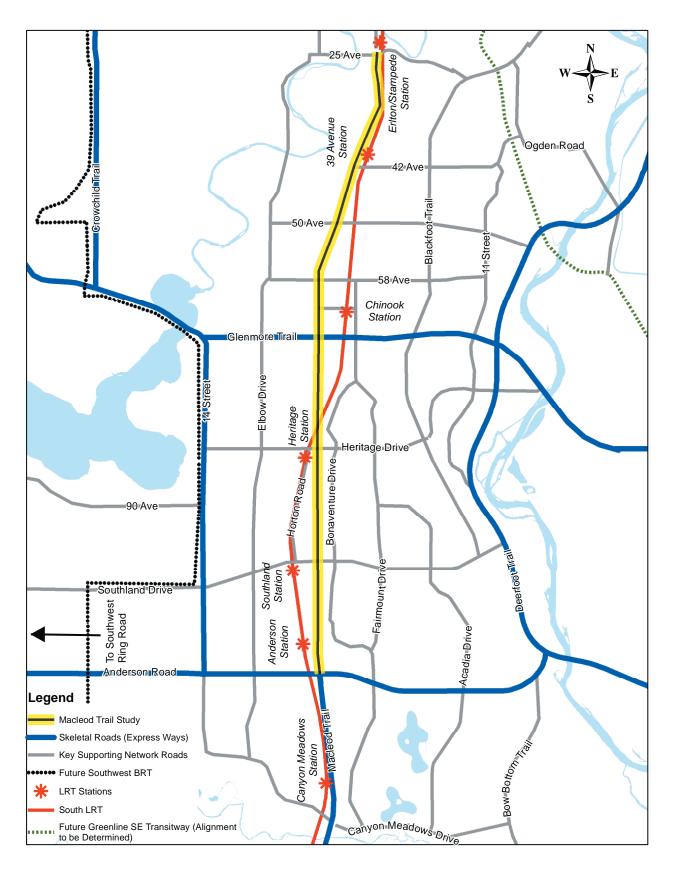
Improvements to the road network will help accommodate future vehicle volumes and provide a number of alternative routes for those driving in and around south Calgary. Key examples of planned improvements include:

- Widening of 14 Street from Canyon Meadows Drive to Anderson Road.
- Connection of 25 Avenue to Blackfoot Trail.
- Connection of 50 Avenue to Deerfoot Trail.
- Completion of the South West Ring Road in six years (by 2021).
- Future improvements to Deerfoot Trail, pending a corridor study to start in 2015.

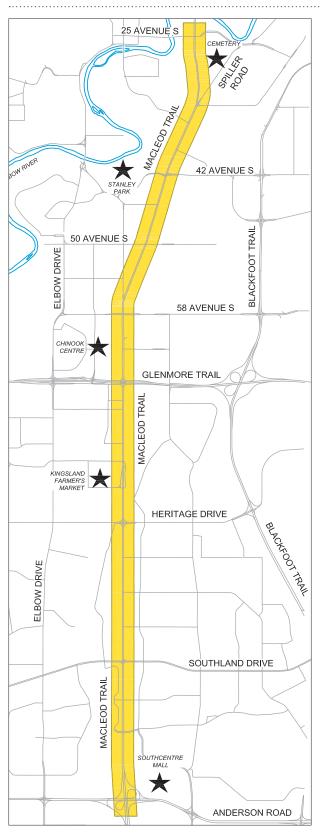
#### Transit network improvements

Improvements to the transit network will further alleviate the vehicular demand along Macleod Trail. This will redevelop Macleod Trail into an Urban Boulevard that provides a comfortable street environment for those who live and work in the area, in addition to a commuter route. Key examples of planned transit improvements include:

- Southwest Transitway and South Crosstown BRT service along Crowchild Trail S. and 14 Street S.W.
- South LRT line and future Southeast Transitway.
- Additional transit investments along 24 Street S.E., 36 Street S.E., 14 Street S.W., and Crowchild Trail S. (see RouteAhead plan).



## STUDY OVERVIEW



Transportation Planning conducted a study of the Macleod Trail corridor between 25 Avenue and Anderson Road S. The study looked at how best to provide people who will live and work along Macleod Trail, and in surrounding neighbourhoods, with the transportation infrastructure they will need 10 to 30 years from now as the area redevelops into a mixed-use corridor where people live, work, and play.

# Study Goal: To determine the right-of-way required for a future corridor

Determining how much space is needed to accommodate the necessary transportation infrastructure enables The City to put in place redevelopment conditions (e.g. setback bylaw) that will protect the right-of-way required for the Macleod Trail corridor as an Urban Boulevard in the future.

Future studies will be conducted to confirm the detailed design of the roadway and other transportation infrastructure in the corridor.

#### Approval of the Macleod Trail corridor study will:

- Enable The City to move forward with developing more detailed plans needed to protect lands where additional right-of-way is required (i.e. between 34 Avenue to 58 Avenue S).
- Enable The City to establish development setbacks that will provide developers with certainty when looking at redevelopment opportunities.
- Demonstrate to Calgarians that decisions being made today will help build toward their vision for a better, more sustainable, city, as described in the imagineCALGARY Plan.

## Summary of the recommended plan

- Recommends a consistent 42 metre wide right-of-way from 34 Avenue to 58 Avenue S.
- Continues to provide for a high-capacity vehicle roadway while providing infrastructure that helps improve safety for people who drive, take transit, bike, and walk along Macleod Trail.
- Continues to encourage the use of the existing adjacent LRT line as the primary transit route serving Calgarians in south Calgary.
- Aligns with Council's recent decisions to invest in transit infrastructure and service in south Calgary, which will help reduce the demand for road capacity in south Calgary's overall road network, including Macleod Trail.
- Provides a balanced approach for supporting the travel needs of people who will live and work along Macleod Trail and in adjacent neighbourhoods as redevelopment occurs over time, and those who drive through it.
- Identifies the amount of space required and, if approved, enables The City to move forward with protecting the right-of-way required for the corridor in the future.

## KEY BENEFITS OF THE RECOMMENDED PLAN FOR THE MACLEOD TRAIL CORRIDOR

#### **Balances transportation needs**

• Provides infrastructure for people who drive, take transit, bike, and walk along Macleod Trail as redevelopment occurs.

#### Aligns with Calgarian's vision for a better city

• Provides Calgarians a choice of convenient, comfortable, affordable, and efficient transportation modes (source: imagineCALGARY).

#### **Provides certainty for redevelopment**

• Confirms the width of the right-of-way for the future corridor to guide redevelopment plans.

#### Plans for the safety of all road users

 Reduces driveways along Macleod Trail and installs green spaces to lessen conflict between people who drive and people who walk, bike, and take transit in the public space adjacent to the roadway.

#### **Supports Council's Direction**

 Aligns with Council-approved 2013 RouteAhead Plan, 2014 Complete Streets Guide, and 2009 Calgary Transportation Plan.

#### **Incorporates feedback**

 Stakeholder and citizen feedback incorporated as much as possible while being consistent with study goal and objectives.

#### **Financial stewardship**

• Enables The City to acquire land on an opportunity basis and return surplus lands for other uses in the short-term.

INVESTING IN SAFE, CONVENIENT, AFFORDABLE TRANSIT SERVICE HAS A REAL IMPACT ON HOW PEOPLE TRAVEL—THERE ARE NOW 34,000 PEOPLE WHO CHOOSE TO RIDE THE WEST LRT LINE EACH DAY INSTEAD OF DRIVE. MORE PEOPLE CHOOSING SUSTAINABLE MODES OF TRANSPORTATION MEANS THAT THERE WILL BE MORE ROAD CAPACITY FOR THOSE WHO HAVE TO DRIVE.

# KEY CONSIDERATIONS OF THE MACLEOD TRAIL CORRIDOR STUDY

#### **Current function and existing conditions**

- Mostly low-density retail/commercial land uses that separate major destinations like Chinook Centre, Anderson Station and Southcentre Mall.
- Parallels adjacent LRT line from Victoria Park to future Silverado stations.
- Inhospitable conditions for people who do not drive.
- # of vehicles during peak hours vs. non-peak hours.
- Six-lane roadway that serves commercial and commuter traffic.

#### **Physical constraints**

- Narrow right-of-way from 25 Avenue to 58 Avenue that will require additional land to provide infrastructure for all road users.
- Location of cemeteries and LRT tracks limits the ability to widen Macleod Trail from six lanes in the constrained section between 25 Avenue and 34 Avenue.

 Widening Macleod Trail from six lanes south of 34 Avenue would create a funnel effect where vehicles lanes are reduced to six lanes over cemetery hill and into the downtown core.

#### Future land use and developments

- Many of the older buildings along Macleod Trail are approaching the end of their lifecycle and land/ property owners may have redevelopment interests.
- Future mixed-use developments envisioned along Macleod Trail will require infrastructure that enables people to walk, ride bicycles, take transit, and drive.

#### **Network consolidation**

 Macleod Trail will remain an important north-south corridor. It will still need to continue to accommodate high volumes of vehicular traffic, specifically in the range of 55,000 to 65,000 vehicles per weekday.



# HOW PUBLIC INPUT WAS CONSIDERED

Key themes of what we heard	Incorporated?	How public input was considered		
<ul> <li>Concerns over traffic delays</li> <li>Signal timing/ intersections</li> <li>Road capacity for vehicles</li> <li>Chinook Mall accesses</li> </ul>	YES	<ul> <li>Considers improvements to the entire south Calgary transportation network.</li> <li>Maintains the interchanges at 25 Avenue and Heritage Drive to help reduce delays resulting from the LRT crossing.</li> <li>Reduces the number of driveway accesses along Macleod Trail and moves them to cross streets to improve traffic flow.</li> </ul>		
Macleod Trail is an important roadway and needs to accommodate commuters	YES	<ul> <li>Macleod Trail will continue to accommodate a high volume of vehicles similar to today, with eight lanes of traffic north of Anderson Road S. and six lanes of traffic north of 58 Avenue S.</li> <li>Considers future improvements to the transit and road network in south Calgary that would help Macleod Trail accommodate future vehicular traffic as an Urban Boulevard.</li> </ul>		
Widen Macleod Trail to accommodate more vehicular traffic	NO	<ul> <li>Location of cemeteries and LRT tracks limits the ability to widen Macleod Trail in the constrained section between 25 Avenue and 34 Avenue.</li> <li>Widening Macleod Trail from six lanes south of 34 Avenue creates a funnel effect where vehicles lanes are reduced to six lanes over cemetery hill and into the downtown core.</li> </ul>		
Improve traffic safety to reduce risk of vehicle collisions.	YES	<ul> <li>Uses green medians and boulevards to create a buffer between vehicles and people.</li> <li>Provides protected sidewalks, bikeways, and pedestrian crosswalks to reduce conflicts between road users and vehicular traffic.</li> <li>Moves driveway accesses to cross streets to reduce conflict points.</li> </ul>		
Provide cycling infrastructure along the LRT right-of-way	YES	<ul> <li>Includes a bikeway along the LRT line.</li> </ul>		
Macleod Trail is not suitable for pedestrians and cyclists	YES	<ul> <li>No on-street cycle tracks.</li> <li>Makes better use of the green space within the existing right-of-way to include sidewalks and bikeways that are protected from vehicular traffic where possible.</li> <li>New pedestrian crossings to reduce conflicts between vehicles and people at intersections.</li> </ul>		
Better walking and cycling connections to LRT stations	YES	<ul> <li>Provides continuous north-south protected sidewalks, bikeways, and pedestrian crosswalks to improve connections to LRT stations and future destinations (e.g. street-level shops, etc.) along Macleod Trail.</li> </ul>		
Dedicated lane for transit and HOV (high-occupancy vehicle)	YES	• Considers the existing LRT line that parallels Macleod Trail to be the primary transit route.		

## RECOMMENDED PLAN

The goal of the study is to identify the right-of-way required for the future Macleod Trail corridor as redevelopment occurs over time. The recommended plan provides conceptual designs of cross-sections that considered the physical constraints along the corridor and land previously protected for potential interchanges.

**Study recommendation:** Standardize the right-of-way width of 42 metres from 34 Avenue to 58 Avenue S., while maintaining the existing right-of-way width of 60 metres from 58 Avenue to Anderson Road S.

Protecting this right-of-way means there will be sufficient space along the roadway to include infrastructure in the public realm (e.g. green spaces, sidewalks, bus stops, etc.) that works well with adjacent land uses in the future. How the width of the right-of-way is allocated for what uses will be reviewed and confirmed in subsequent detailed plans.

Project goal and objective		Achieved	
		No	
Determine the width of the right-of-way needed for Macleod Trail as it redevelops over the next few decades.			
Identify the future transportation infrastructure needed for people living, working, and traveling along Macleod Trail.			
Balance the transportation needs of people who will live and work along Macleod Trail with the needs of people who drive through the study area (25 Avenue to Anderson Road).			
Help create a safe, comfortable environment for all people whether they choose to walk, bike, take transit, or drive along Macleod Trail.	1		



# FREQUENTLY ASKED QUESTIONS

# What is a transportation corridor study and why does it matter to me?

A corridor study is a long-term transportation analysis which examines the current and future transportation planning needs for a specific area of the city.

Transportation corridor studies are important because they help shape how people get to work, how they travel through their neighbourhoods, and how goods are transported across the city for years to come.

# Why is the Macleod Trail Corridor Study important?

The Macleod Trail Corridor Study is being conducted to ensure future plans for the roadway align with the Calgary Transportation Plan.

The primary goal of the study is to confirm the width of the right-of-way required for the roadway as it develops overtime into an Urban Boulevard. Confirming the rightof-way is important because:

- The City can then put in place set-back bylaw(s) to protect the land needed for future transportation infrastructure as redevelopment occurs.
- It identifies the requirements that guide redevelopment plans along Macleod Trail.
- It identifies surplus lands that The City had previously protected that can now be identified for other uses.

### What is an Urban Boulevard?

Urban Boulevards form the backbone of higher-density Corridors and Activity Centres. These streets are local and regional destinations, fully integrated with adjacent mixed land uses, and provide high levels of connectivity to surrounding communities.

While high volumes of vehicular traffic are expected along Urban Boulevards, the highest priority is given to walking, cycling, and transit users. This is necessary to support the transportation needs of those who live and work along these higher-density corridors where key destinations are often located within shorter distances. Thus, it makes walking or cycling more desirable and convenient travel options. Urban Boulevards make up some of the Primary Transit Network. High quality urban design and green infrastructure are critical components of Urban Boulevards.

# Why is Macleod Trail identified as an Urban Boulevard?

Macleod Trail is identified as an Urban Boulevard because of the following:

- High potential for redevelopment to higher density, mixed-used developments.
- Proximity to the south LRT line.
- Proximity to adjacent communities.
- Existing key destinations that draw a high number of visitors (e.g. Chinook Centre, Southcentre Mall).

Improvements to the south Calgary transportation network through new transit service and roadway expansions will help Macleod Trail accommodate future vehicular traffic as an Urban Boulevard.

# Why does the recommended plan not include widening Macleod Trail?

Widening of Macleod Trail is not recommended because of the physical constraints over cemetery hill.

Location of cemeteries and LRT tracks limits the ability to widen Macleod Trail from the current six vehicle travel lanes in the constrained section between 25 Avenue and 34 Avenue.

Widening Macleod Trail from six lanes to eight lanes south of 34 Avenue would create a funnel effect. Vehicles spread over eight traffic lanes would be constrained into six lanes as Macleod Trail approaches 25 Avenue, over cemetery hill, and into the downtown core.

### How will Macleod Trail accommodate population growth and the travel needs of those in South Calgary?

Macleod Trail is, and will continue to, move a high volume of vehicular traffic.

Macleod Trail is supported by six skeletal roadways that are specifically designed to move a large volume of vehicle traffic within the overall road network.

Future expansions of the transit and road network will help accommodate the travel needs of a growing number of Calgarians, while enabling Macleod Trail to develop into an Urban Boulevard that will also continue to move a high volume of vehicle traffic.

# Why is cycling being looked at along Macleod Trail?

Cycling is one of many transportation choices. It is convenient and affordable, and is an easy way to connect with destinations that may be too far or don't allow enough time to walk to.

As redevelopment occurs over the next decades along Macleod Trail, there will be more and more people who choose to live and work in higher-density, mixed-use developments along Macleod Trail. For people who live in the area and need to visit nearby shops and destinations, biking would be a convenient option.

### What is the study's key recommendation?

The Macleod Trail Corridor Study recommends acquiring an additional 12.2 metres of land between 34 Avenue and 58 Avenue to create a standardized a 42 metre wide rightof-way between 34 Avenue and 58 Avenue S. The study also recommends maintaining a 60 metre wide right-of-way from 58 Avenue S. to Anderson Road.

# What are the next steps after this corridor study?

If Council approves the recommended right-of-way, then The City will conduct a functional planning study for the section north of 58 Avenue S. to confirm how space for the roadway and the public realm (e.g. green boulevard, sidewalk, etc.) will be allocated within the 42 metre right-of way.

To conduct the functional planning study, The City will develop a project plan and identify opportunities for public input to influence decision-making throughout the functional planning study.

