



"My country was never so rich that it could afford bad roads."

William the Conqueror, 1066



"Mobility is the most pressing issue for Calgarians today."

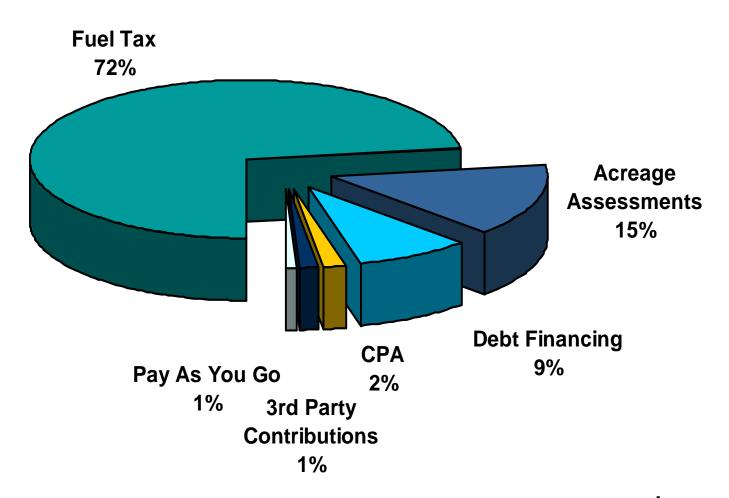
Mayor Dave Bronconnier, 2005



2005 - 2009

- Available funding
- City of Calgary program
- Issues

Funding Sources 2005 - 2009



TOTAL \$612 M



2005 - 2009

Recent Provincial Grant \$886M

Transportation share \$700M*

TOTAL Transportation \$1312M

Approximately \$260M/year

Split approximately equally between Roads and Transit

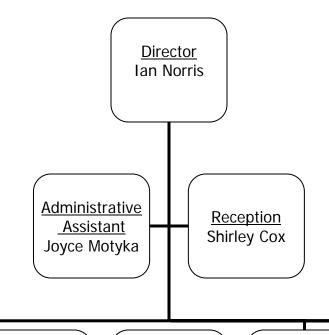
(* not yet approved)



Focus 2005 - 2009

- NE & NW LRT Extensions
- Corridor improvements on the skeletal network of arterial and major road
- 7th Ave Transit corridor
- Rolling stock purchases
- Increase in Road Maintenance programs

TRANSPORTATION INFRASTRUCTURE



Manager
LRT & Special
Projects
Rod Schebesch

<u>Manager</u> <u>Major Projects</u> Mario Prezelj

ects zelj <u>Manager</u> <u>Design /Drafting</u> Bernie Maimer Eddy Fong <u>Manager</u> <u>Structures</u> Jadwiga Kroman

Communications
Jana Sinclair
Gale Simpson

Office Manager Real Estate Larry Brown <u>Finance</u> Susan Potts Karen Hewitt Nizar Merani

Activities

Project
Management
NE LRT
NW LRT
7th Ave SW
Glenmore/Elbow
/5 St
Interchange

Activities

Project
Management
Beddington Tr
Country Hills Bd
Bow Tr
Glenmore Tr
Inner City
52nd St SE
16th Ave North
McKnight Bd

Activities

Roads Design Design Reviews Road Standards Geometrics Drafting Graphics **Activities**

Structures
Design Reviews
Standards
Constructability
Inspections
Artwork
Research

Activities

Project
Communications
Citizen
Engagement
Web Site
Public Inquiries

Activities

Land
Coordination
Land
Development
Office Admin

Activities

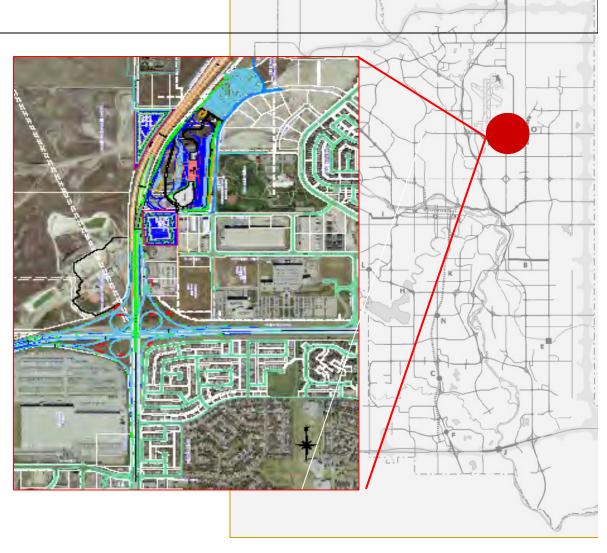
Financial Controls PO's Accounts Payable

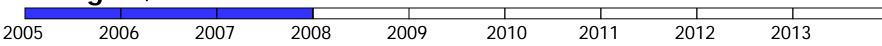
NE LRT Extension

Current project

- Extend NE LRT from Whitehorn Station to McKnight-Westwinds Station
- Interchange at 36 Street
 NE and McKnight Blvd
- Three bridge structures
- Station & Park 'n' Ride
- LRV storage and maintenance facility







Bow Trail Widening

Current Project

- Widen Bow Trail to six lanes west of 37 Street SW to Old Banff Coach Road
- Serves residential development in Cougar Ridge and West Springs
- Intersection improvements at Sarcee Trail & Bow Trail



Budget \$15 M

2005 2006 2007 2008

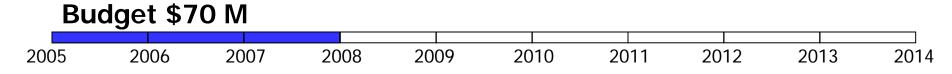
16 Avenue North Urban Corridor

- 10 Street W to 6 Street E

Current Project

- Upgrading of pedestrian corridors
- Creation of new look urban corridor
- Widening of 16 Avenue to six lanes
- Redevelopment opportunities





Traffic Calming and ICTS

Current Project

- Mount Royal/Elbow Park
- Sunnyside
- Signal Hill
- 4 Street NW
- Landsdowne Rd/Sifton Blvd
- Mission Road
- 33/34 Avenue SW







Glenmore Trail / Elbow Drive / 5 Street Interchange

Current Project

- Four new bridges
- Upgrading of Glenmore Trail to three lanes each way
- Elimination of signals on Glenmore Trail
- Two major interchanges
- Lowering of Glenmore
 Trail

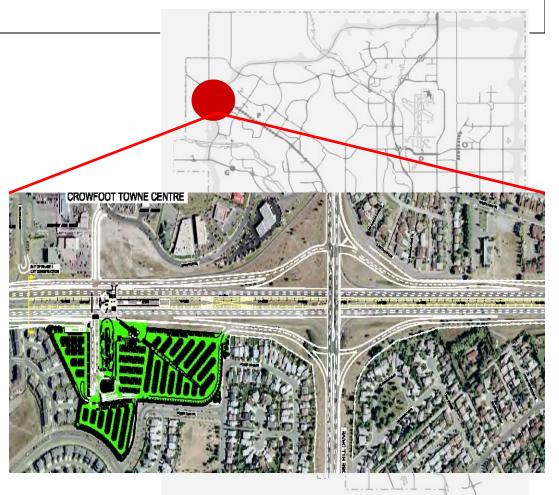


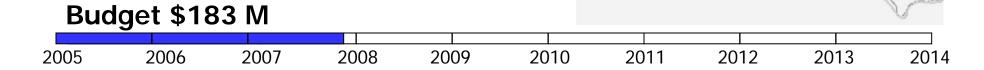
Budget \$110 M



NW LRT Extension and Crowchild Trail Improvements

- Extend the NW LRT line to Crowfoot Centre including twin Park 'n' Ride lots
- Crowchild Trail improvements with interchanges at Sarcee Trail and Nose Hill Drive
- With the Province's expansion of Stoney Trail including a new interchange at Crowchild Trail, this will be a free flow corridor from 24 Avenue NW





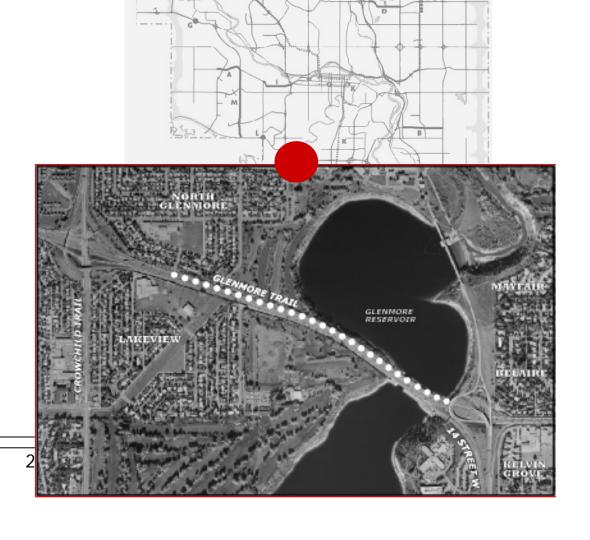
Glenmore Causeway Widening

New Project

- New Causeway bridges
- Facilitates expansion of westbound Glenmore Trail to three lanes
- In conjunction with the new GE5 interchange
- Provides capacity for causeway reconstruction to meet Provincial Government flood capacity requirement



2005 2006 2007 2008



Macleod Trail & Lake Fraser Gate Interchange

- New interchange serves the south Calgary
- Provides free flow between Anderson Rd and 162 Avenue
- Creates additional capacity for Canyon Meadows LRT Station area intensification



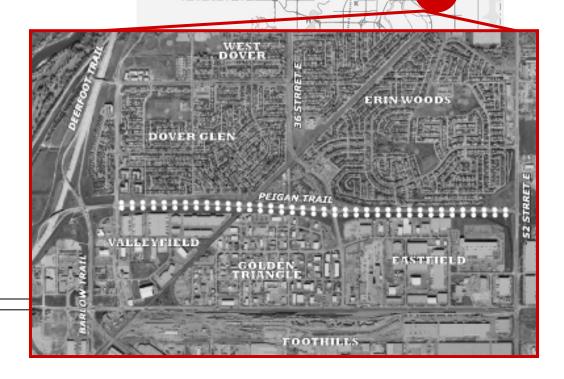




Peigan Trail Widening

New Project

- Twin to four lanes from Barlow Trail to 52 Street SE
- Serves commercial development in the SE industrial areas reducing existing intersection delays
- Potential to extend to East Freeway



Budget \$9 M

2005 2006 2007 2008

McKnight Blvd Corridor Improvements

New Project

Free

Flow

Corridor

 A continuous program of capacity upgrades

 Initial construction to widen to six lanes from Deerfoot Trail to 19 Street NE

- Potential in 2008-2009
 to construct three interchanges
- NE Calgary will be one of the strongest growth sectors of combined residential and commercial development







4 Street E / Olympic Way Underpass

- New road passing under CPR tracks connecting 9 and 11 Avenue SE
- Facilitates redevelopment of Stampede grounds, East Victoria
 Park and East Village
- Provides a direct pedestrian connection between the eastern neighbourhoods







Macleod Trail & Heritage Drive Interchange / Overpass

- New interchange to replace the signal and a grade separation of Heritage Drive from the LRT and rail lines
- Signal removal eliminates a significant point of congestion on Macleod Trail
- Provides additional capacity to support redevelopment of the Heritage LRT Station area
- Increased train frequency and expansion to four-car LRT trains will create delays on Heritage Drive

New Project



Budget \$60 M



52 Street SE Grade Separated Rail Crossing

- New bridge to take
 52 Street SE over CPR mainline
- CPR's intermodal yard is expanding
- Increased movements between CPR's yards will block 52 Street SE
- Industrial development will warrant expansion to six lanes, build bridge now







96 Avenue N (Deerfoot Trail to Harvest Hills)

- New four lane major road
- Connects Harvest Hills Blvd to Airport Trail
- Structures over Nose Creek and the rail lines
- Serves north Calgary and Aurora Business Park







Beddington Trail / Country Hills Blvd Interchange & Widening

New Project

- Widening of Beddington
 Trail from Deerfoot Trail to
 CHB
- Widening of CHB from Beddington through Shaganappi Trail
- Shaganappi Trail from Edgemont Blvd to Hidden Valley Drive
- CHB from Beddington to Stoney Trail



Budget \$65 M

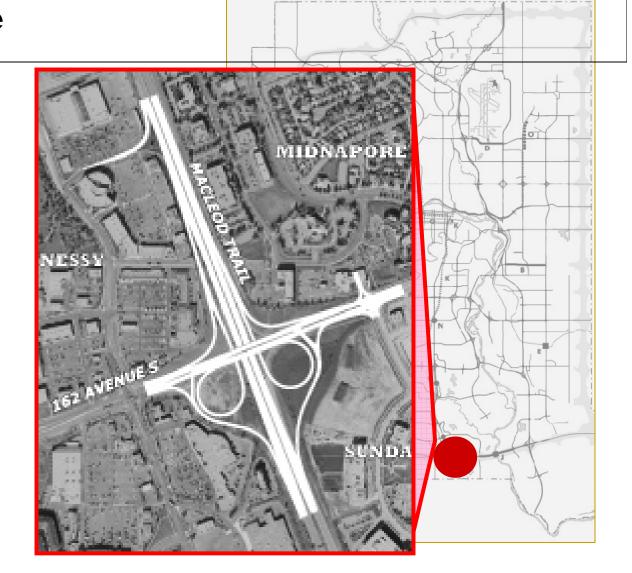


Macleod Trail & 162 **Avenue Interchange**

- New grade separated interchange
- Serves south Calgary
- Provides free flow between Anderson Rd and 196 Avenue
- Creates needed capacity for: Shawnessy, Sundance business developments

Budget \$27 M

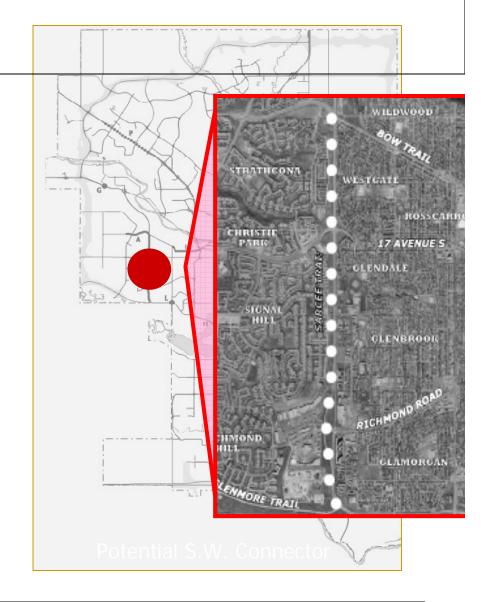




Sarcee Trail SW - Corridor

New Project

- Widening Sarcee Trail and potential interchange at Bow Trail -Under Review
- Serves southwest Calgary and acts as a cross town commuter route
- Widening must work around power towers and significant grades
- Construction of the SW Connector will significantly increase traffic here

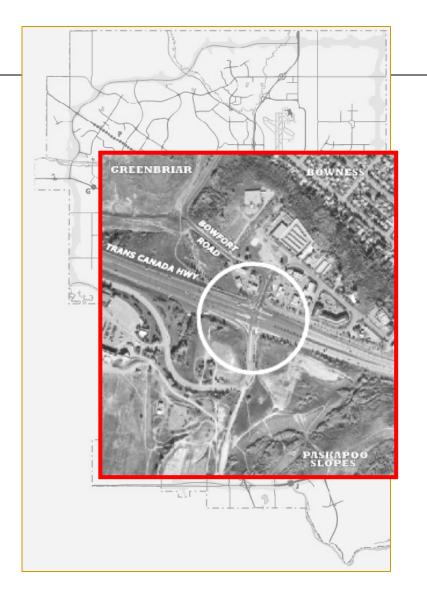


Budget \$55 M



Trans Canada Hwy & Bowfort Road Interchange

- New overpass to remove existing signals
- Serves Canada Olympic Park and their proposed expansion and office redevelopment area
- Supports development of the Greenbriar vacant lands







Glenmore Trail: Ogden Road to Bow River



- New river bridge
- Upgrading of Glenmore Trail to three lanes each way
- Ties into Glenmore/18th St interchange







Other Projects

36 Street NE to 64 Avenue	\$8M
22X: Macleod to Bow River	\$6M
■ Crowchild Tr: Sarcee to Nose Hill	\$13M
■ 14 St SW: 90 Avenue to Anderson Rd	\$12M
■ 44 Street NE: 64 Ave to 80 Ave	\$9M
Pedestrian Overpasses	\$12M
Miscellaneous	\$20M
 Infrastructure Maintenance 	\$30M



Transit Projects

LRV purchase	\$130M
New Buses/Shuttles	\$35M
Articulated Buses	\$28M
■ 7 th Ave corridor	\$60M
SLRT Platforms	\$20M
■ Life Cycle Rehabilitation	\$30M
Bus Rapid Transit	\$9M
 Infrastructure upgrades 	\$15M



Total Funding Requirement

Current and future projects 2005 - 2009

\$1.5B



2009 ...

- West LRT Extension
- Crowchild Trail: Kensington to Bow River
- Bow Trail downtown connector
- SW Connector related improvements
- East industrial area
- McKnight/John Laurie Corridor
- Transit system improvements



Issues

- Cost escalation
- Increase in raw material costs
- Volume of work/capacity of industry
- Shortage of skilled labour



Actions

- Gather all current information and revisit major project cost budget estimates
- Assign revised escalation rates from the start and throughout multi-year projects
- Monitor cost increases closely and regularly to identify industry trends
- Optimize construction schedules and tender early in year



Actions

- Schedule tenders to ensure different closing dates in conjunction with other owners. e.g., Province, CHR
- Focus on appropriate procurement strategies and design choices which provide some flexibility.
- Continue ongoing discussions with the contracting industry and work together to reduce risks



Actions

- Plan, Plan, Plan
- Manage projects for scope creep
- Effective project management
- Media campaigns
- Effective detours