Eastern Alberta Trade Corridor
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Transportation Infrastructure Update

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Topics

• Broad vision

• Long term Transportation Strategy

• Spatial modelling

• Future Developments
Transportation Strategy

• **New Mandate**
  – *To ensure the transportation system supports Alberta’s economic, social and environmental vitality.*

• **Long Term Transportation Strategy**
  – *Built on partnerships and long-term, transparent planning, Alberta’s multi-modal transportation system enables economic growth and a high quality of life for all Albertans.*
Transportation Strategy - Goals

• **Goals, outcomes and actions** have been developed to serve as the foundation of the Strategy.

• The goals fall into two categories:
  – The “what” goals – what will ultimately be achieved:
    • Goal 1: Connected and Active Communities
    • Goal 2: Competitiveness, Market Access and Economic Growth
  – The “how” goals – how will we get there:
    • Goal 3: Safety and Security
    • Goal 4: Environmental Stewardship
    • Goal 5: Innovation and Technology Integration
    • Goal 6: Long-term Sustainability and Affordability
Spatial Modelling

• Key to achieving the Goals of the Transportation Strategy

• Economic Benefit Measures
  – Prices, transportation costs
  – Accessibility
  – Connectivity
  – Productivity growth
  – Economic agglomeration
  – Business attraction

• Employment and Population Changes
Alberta Spatial Economic Modelling Project

PECAS: Production, Exchange, Consumption Allocation System
SEM: Spatial Economic Model
TDM: Travel Demand Model
ASET: Alberta Spatial Economic and Travel Demand Model
Current Planning Decision Criteria

Direct Impacts on Users

User Benefits
- Safety cost saving
- Travel Time Saving
- Vehicle Operating Cost Saving

User Costs
- Emissions
- Noise
Systems and Linkages: Economy, Land Use and Transport

Economy

Land Use

Transport

Travel choices and network conditions affect location choices and vice versa.

Source: Connecticut Academy of Science and Engineering (CASE): Analyzing The Economic Impacts of Transportation Projects
Wider Impacts – [Future] Planning Decision Criteria

Direct Impact on Industry
- Construction Activity
- Economic Stimulus

Direct Impacts on Users
User Benefits
- Safety cost saving
- Travel Time Saving
- Vehicle Operating Cost Saving

User Costs
- Emissions
- Noise

Non-Market Values
- Human Health
- Visibility
- Biodiversity

Impacts on Other Industries
- Industry Activity
- Changes in cost of doing business
- Changes in production and accessibility to market
- Changes in productivity
- Changes in competition and centralization
- Changes in land values

Impacts on Households
- Household Activity
- Changes in disposable income
- Changes in spending
- Housing and employment choices
Where we are right now

• The spatial economic model can be used to identify the provincial and regional economic impacts of transportation improvement/maintenance.

• The spatial economic model can be used to track development activities of land and construction over time.

• More calibrations are under way with better economic forecasts by industry and household.

• Integration of provincial travel demand model and spatial economic model will provide a complete picture for impacts from economic, land use and transport policies.
Future Direction

- **Assess the cross ministry strategies**
  - Timing
  - Access/infrastructure needs
  - Lead time needed to achieve a smooth transition
  - Land requirements
  - Environmental issues
  - Indigenous consultation and negotiations

- **Economics**
  - Capital costs
  - Economic benefits
  - Operating costs

- **Capital Plan**
  - Predictability
  - Flexibility
Broad strategic view

• The great challenge
  – The speed of change
  – The nature of the change
  – Anticipating the future state
    • Trade patterns
    • Infrastructure needs
    • Effective and efficient transportation systems
    • Impact of technology
    • Impact of demographic shifts
    • Impact of globalization

• Designing and building tomorrow’s transportation system today

• Hub and corridor concept
“That’s the way we’ve always done things is the biggest hurdle we face going forward successfully into the future”

“In the past, it was important to change. Now it’s no longer enough to change … in fact to change is to fail. We need to transform”