



CORRITEK

An Extensible CVO* Platform
for Canada's Trade Corridors

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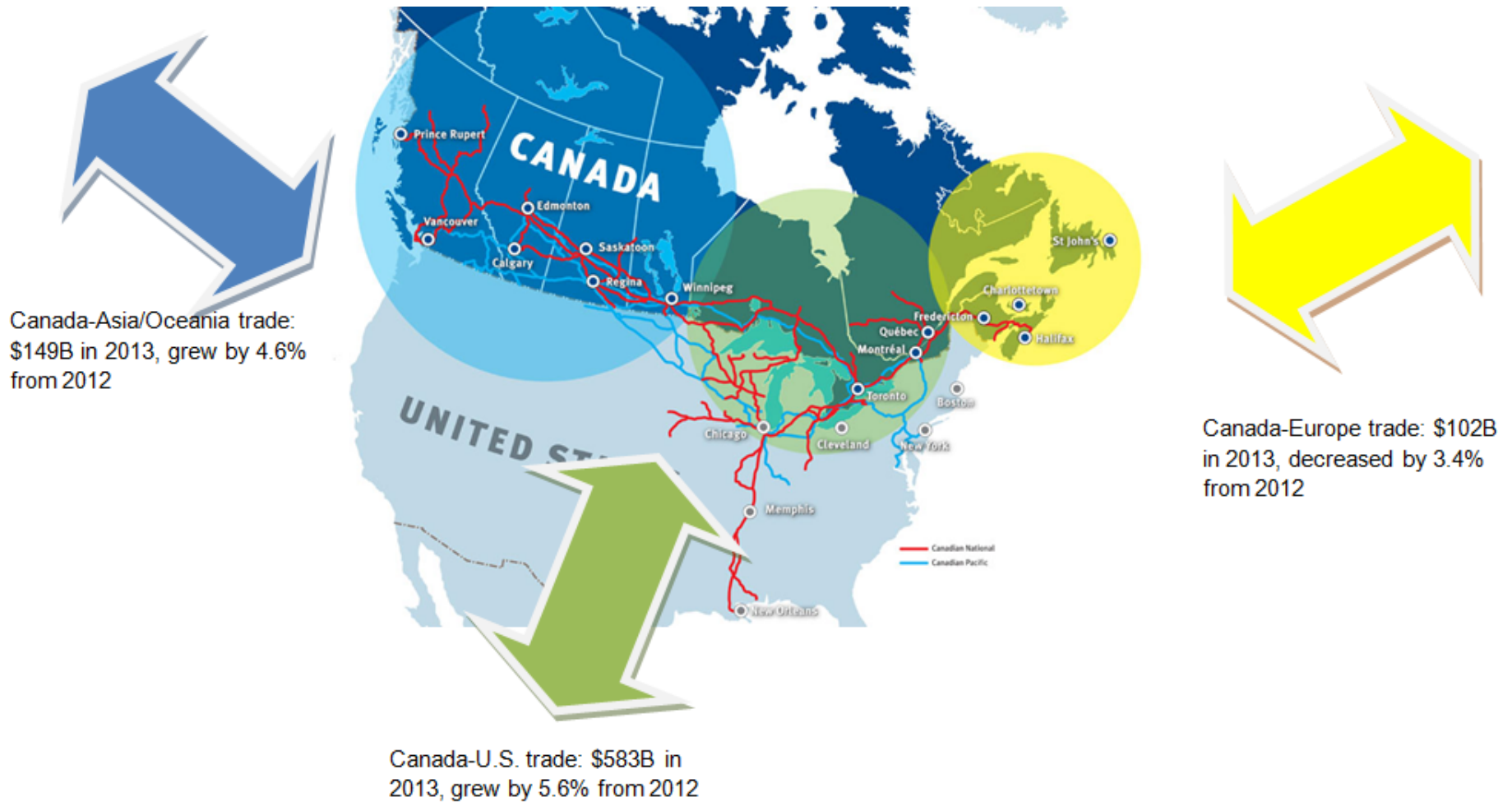
UNIVERSITIES OF REGINA
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* Commercial Vehicles Operations

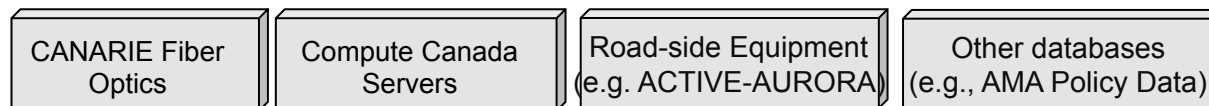
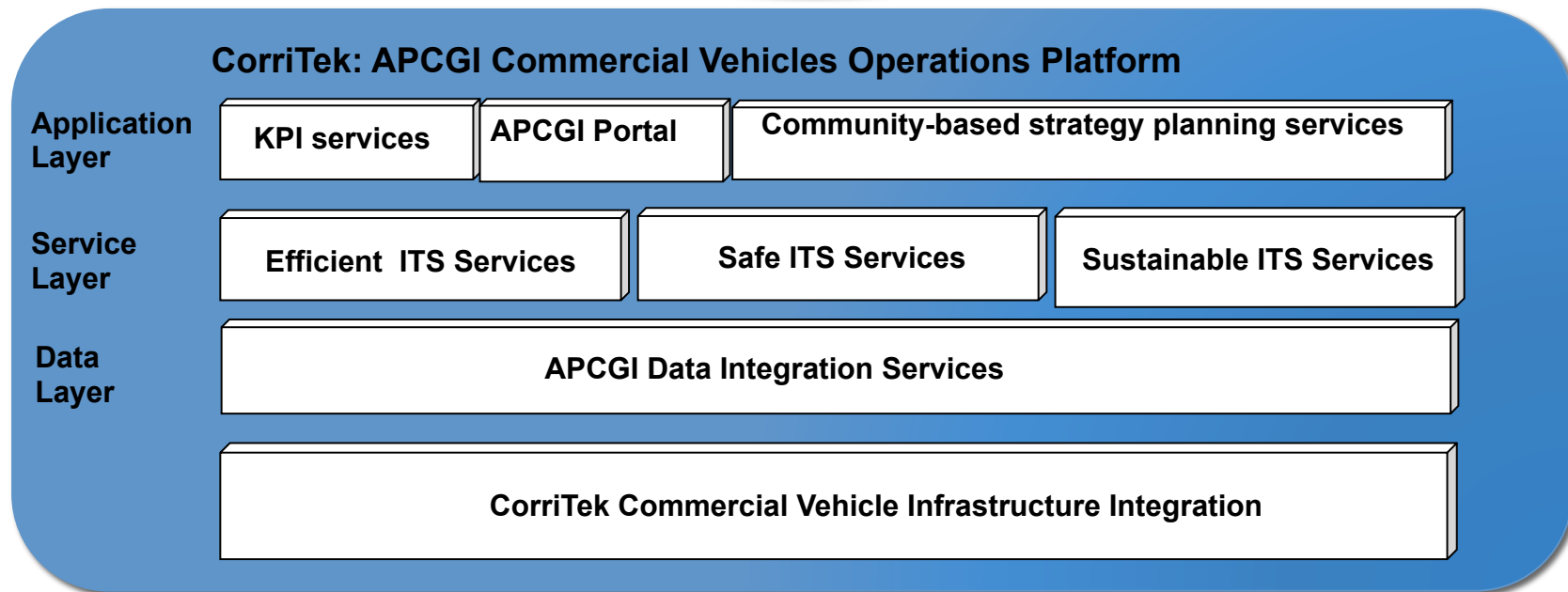
Today we will present:

- Objectives and Scope of CorriTek
- Application Components of CorriTek
 - A comprehensive Commercial Vehicle Traveller Information System (CVTIS)
 - Sustainable CVO
 - Safe CVO
 - Extendable Data Management Services
 - Strategic Planning Forum & Exchange
- Potential Benefits

Objectives and Scope



Platform: Application and Services



1. CVTIS: Commercial Vehicle Traveller Information Systems

- CorriTEK will provide snapshots of real-time performance of the Canadian trade corridors.
- Snapshots are captured through:
 - Web-Based “Dashboard”
 - Performance indicators over longer periods of time
 - used by decision makers and strategic planners
 - “information portal”
 - Real-time performance measures
 - used by Truckers and operational engineers

2. Performance Measures and indicators

- Economic competitiveness/ mobility and connectivity
- Quality of life/ environmental stewardship
- Safety and security
- Service maintenance and sustainability



3. Sustainable CVO

- Monitoring fuel consumption and emissions
- Gathering and analyzing fuel consumption and emissions based on:
 - accelerometer and driving behavior parameters such as traveled speed, braking, gear shifting, idle time, cold start, etc.
- Providing customized traveled speed, length of idle time and routing recommendation to reduce fuel consumption, cold start and GHGs emissions..”
- Develop a smartphone app and centralized software service



5. Data Management

A one-stop shop for APCGI data!

Historical Freight Database:

- shipment origin and destination,
- commodity characteristics,
- Weight
- modes of shipment,
- routing and time of day,
- vehicle type and configuration
- Type of equipment

Real time Integrated Freight Traveller Information Systems, Data fusion and Dissemination:

- Open data for interprovincial network wide Monitoring (planned events, incidents, speed weight and height, restrictions, weather, etc.)
- Road side infrastructure: WIM, RWIS
- Cloud sourcing, CCTV, queue times at gates, etc...

6: Forum & Exchange

A national priority is to create critical mass in innovation via **connected centres of excellence**, research society, web tools to share data, applications, expertise etc.

- Effective coordination is required among APCGI stakeholders for:
 - revision of short and long-term transportation plans by the province and large municipalities;
 - definition of inter-provincial policies (e.g., truck weight and dimension limits where most current policies are intra-provincial);
 - involvement of the stakeholders in decision making activities;
 - analyze provincial governments' revenues from fuel taxes and expenditures on roads;
 - development of goals and objectives for the freight program
 - project list review and prioritization,
 - evaluation of commodity flows and industry logistics patterns,
 - identification of bottlenecks and other physical and operational deficiencies and impediments.
- CorriTek proposes a set of socio-technical software services
 - This expands on Lower Mainland Container Logistics Stakeholder's Forum
- The CorriTek portal acts as repository for online technical knowledge



ONE-ITS: Building on a strength

- ONE-ITS can provide a **virtual regional traffic management centre**



Potential Impacts

- Building a Platform for Commercial Vehicle to enhance Canada's trade corridor Competitiveness
- Realizing substantial road safety, economic and environmental benefits over the next few decades.
- Researching, developing and testing innovative solutions
- Training HQP