ECONOMICS AND TRANSPORTATION CLUSTER

1. OVERVIEW

a. Cluster Components

The Economics and Transportation Cluster (ETC) for Information and Information Technology supports the following ministries:

- Ministry of Economic Development and Trade
- Ministry of Labour
- Ministry of Research and Innovation
- Ministry of Consumer Services
- Ministry of Transportation.

b. Core Businesses

The cluster structure is shown in Exhibit ETC.1. Core businesses for each ministry are listed below along with a brief description of their mandate and programs.

- Ministry of Economic Development and Trade

  The Ministry of Economic Development and Trade (MEDT) provides leadership in promoting Ontario's economic growth and competitiveness by: supporting commercialization efforts to bring innovative ideas to market; supporting sector competitiveness and clusters; pursuing increased investment in Ontario; facilitating opportunities to boost Ontario exports; and providing advice and support services to small and medium sized businesses in Ontario.

  The ministry has eleven key priorities:

  - Attract and retain investment and jobs.
  - Build regional and local economic development capacity.
  - Ensure Ontario remains a leader in North American auto production.
  - Support the growth of an innovative, competitive economy.
  - Reduce the regulatory burden for business and modernize the provision of government services.

- Attract, expand and retain high-value, quality investment and jobs in targeted markets and sectors.
- Help Ontario firms begin to export or expand into new export markets.
- Promote economic immigration by increasing the flow of skilled workers and business immigrants.
- Provide business intelligence and strategic advice on investment and trade to decision-makers.
- Support the Ontario Government's economic plan by leveraging the province's strengths and enhancing Ontario's competitiveness.
- Develop and implement the strategy to market Ontario to the world as an investment location.

- Ministry of Labour

  Ministry of Labour's (MOL) mission is to advance safe, fair and harmonious workplace practices that are essential to the social and economic well being of the people of Ontario.

  Through the ministry's key areas of occupational health and safety, employment rights and responsibilities, labour relations and internal administration, the ministry's mandate is to set, communicate and enforce workplace standards while encouraging greater workplace self-reliance. A range of specialized agencies, boards and commissions assist the ministry.

  Three core businesses fulfil the mission of the Ministry of Labour:

  - Occupational Health and Safety - setting, communicating and enforcing occupational health and safety laws to reduce or eliminate workplace injury or illness in the workplace. This core business covers occupational health and safety primarily in the construction, mining and industrial sectors.
  - Employment Rights and Responsibilities - establishing and enforcing appropriate policies that will ensure that Ontario's workers are protected by minimum standards of employment in respect to working conditions and wages through administration of the Employment Standards Act, the Pay Equity Act and other related legislation.
  - Labour Relations - establishing appropriate policies and administering and enforcing the Labour Relations Act and other related legislation.

The key business priorities are to:-

- Make workplaces safer and healthier
- Protecting vulnerable worker
- Create and maintain stable labour relations.

- Ministry of Research and Innovation

The Ministry of Research and Innovation (MRI) was established to ensure that Ontario has a focused approach to competing and winning in the new ideas arena.

The Ministry of Research and Innovation key goals are to:

- Develop and lead an integrated and coherent innovation agenda to deliver excellence, performance and results;
- Align and deliver government-sponsored Research and Commercialization Programs;
- Engage all external partners, including the private sector, education and research communities in supporting and delivering on the research and innovation agenda;
- Showcase Ontario's Innovation Excellence;
- Inspire the Next Generation of Ontario Innovators.

The Ontario Research and Innovation Council (ORIC) was created to obtain the best advice from experts on strategies for accelerating Ontario's research and innovation strengths. The Council advises the Premier and the Ministry of Research and Innovation on developing and implementing a coordinated and comprehensive research and innovation agenda.

The key business priorities are to:-

- Supporting investments in all parts of the innovation ecosystem
- Supporting the Government's Next Generation of Jobs Fund, jointly administered with the Ministry of Economic Development.

- Ministry of Consumer Services

The Ministry of Consumer Services (MCS) supports programs that protect consumers, generate consumer confidence and promote economic growth. The Consumer Protection Branch (CPB) helps Ontarians understand the province's consumer protection legislation and directs them to the right information. The branch also mediates written complaints between consumers and businesses. The Policy Branch provides strategic policy and business analysis services to support the

ministry's diverse and broad mandate, with a particular focus on: ensuring fairness in Ontario's marketplace; enhancing consumer protection and public safety; removing obstacles to economic activity through modernization and harmonization of the province's corporate and commercial laws. The Sector Liaison Branch oversees the authorities that administer technical and electrical safety statutes and consumer protection legislation on behalf of the government in the areas of real estate, funeral services, new home warranties, travel industry, motor vehicle sales and Vintners' Quality Alliance wines. The Branch also develops policy for alcohol and gaming regulation and oversees the Alcohol and Gaming Commission of Ontario. The Ontario Film Review Board, which is also a Ministry agency, classifies movies, videos, DVDs, VCDs and video games before screening or distribution in Ontario.

The key business priorities are to:-

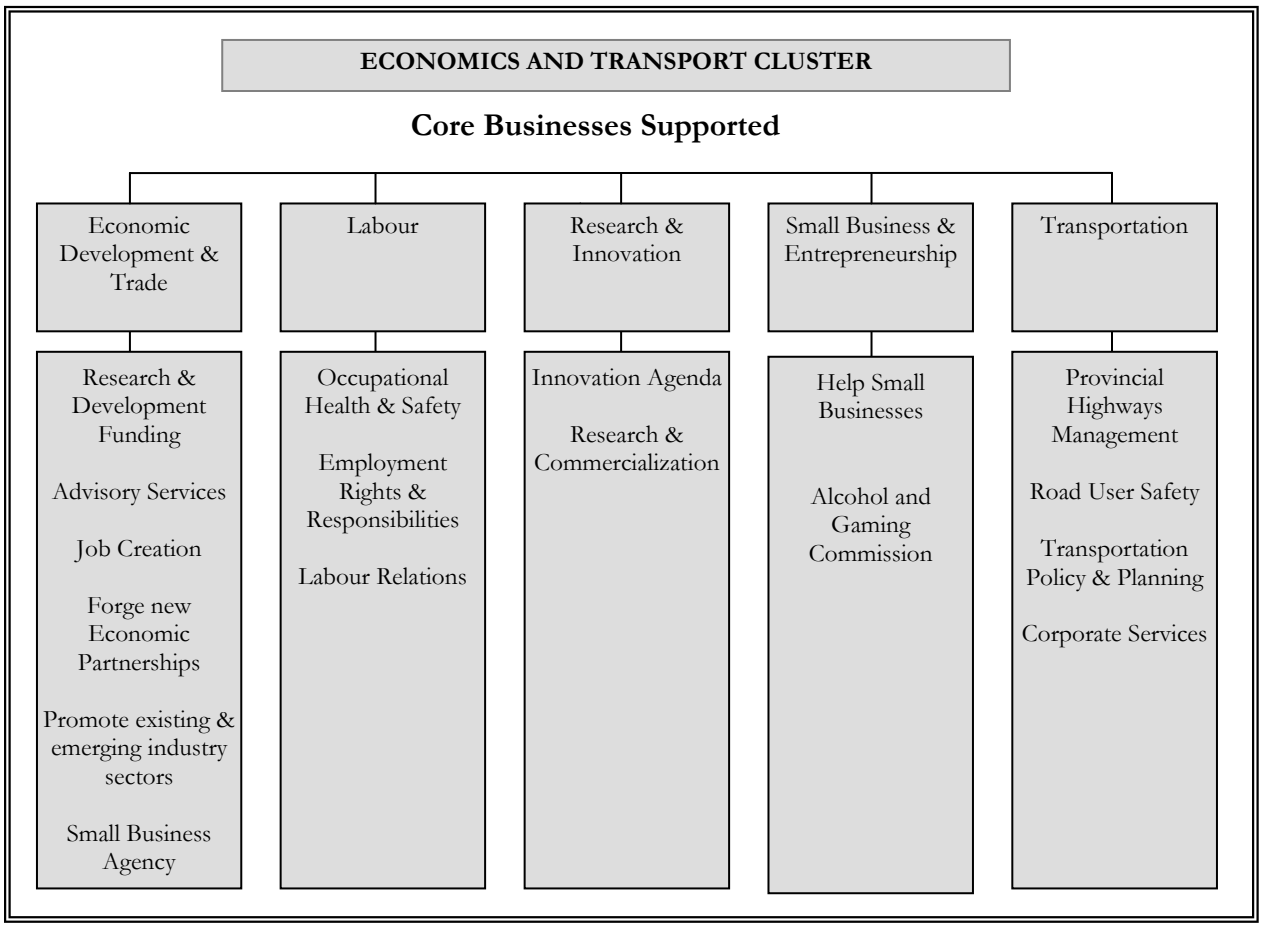
- Strengthening business development, consumer protection and public safety.
- Maintain a modern regulatory business environment that protects consumers and promotes economic growth.
- Regulate the sale, service and consumption of liquor in the public interest through the Alcohol and Gaming Commission of Ontario.
- Classify movies, videos, DVDs, VCDs and video games before screening or distribution in Ontario through the Ontario Film Review Board.

- Ministry of Transportation

The Ministry of Transportation (MTO) supports a positive business climate by planning, managing and maintaining a safe, efficient, reliable and integrated transportation network. The ministry sets safety standards and establishes/enforces regulations relating to road user safety. In addition, the ministry sets design and maintenance standards and manages construction and maintenance activities on the provincial highway network. The ministry also works with other governments to coordinate and integrate transportation networks to promote harmony in policies and regulations. Promoting a safe and efficient multi-modal transportation system that protects the public's investment in the provincial highways and advances sustainable long-term solutions that balance investments in public transit, roads and rail continues to be a key priority.

- Provincial Highways Management (PHM) - oversees the maintenance and operation of the provincial highway networks, and invests strategically in highway infrastructure to ensure that the system is safe, efficient and useable and supports the transportation needs of Ontario's economy and residents. PHM has reliable and secure information links with alternative service providers. Its application portfolio is fully aligned with the Assets Management Framework, and it has implemented an effective suite of electronic service delivery solutions.

EXHIBIT ETC.1



- Road User Safety (RUS) - is responsible for making Ontario's road users safer by developing effective user safety programs and ensuring efficiency in the delivery of its safety products and services. RUS has business services online, which are channel independent and linked to its service delivery providers. The systems environment is modern, flexible and adaptable to produce and deliver RUS information products and services with a significant reduction in time to market.

- Transportation Policy and Planning (TP&P) - focuses on planning and promoting a safe, efficient and reliable multi-modal transportation system. TP&P works with stakeholders and other jurisdictions to plan, support and enhance an integrated transportation system that promotes safety, efficiency and economic competitiveness. TP&P has appropriate information tools to enhance its information intensive decision making processes, and has populated a knowledge management repository that is capable of meeting both its current and future information needs.

- Corporate Services provides business and resources planning, management advice and direct services to MTO's three core businesses in the functional areas of finance, human resources, occupational health and safety,

acquisition/procurement, facilities management, internal audit, legal services, and communications.

The key business priorities are to:-

- Increase transit ridership
- Promote a multimodal transportation network to support efficient movement of people and goods
- Promote road safety in order to remain among the safest jurisdiction in North America
- Improve Ontario's highway, bridge and border infrastructure
- Align initiatives to all the MTO priorities above.

c. Organization

The Economics and Transportation I&IT Cluster is organized as shown in Exhibit ETC.2.

- Road User Safety Solutions Branch (RUSSB) - responsible for a variety of I&IT functions that support the licensing and registration of millions of drivers and vehicles. Driver and Vehicle Services are delivered by delivery partners such as ServiceOntario and Serco, through a province-wide network, to approximately 1,800 workstations in 400 store-front locations across the province. Information products and a selection of services are also distributed through a variety of delivery channels such as self-serve kiosks, electronic data transfer, interactive voice response and Internet.

- Road User Safety Modernization – responsible for meeting the I&IT planning and applications and development and support to the modernization of the RUS project.

- Highways and Economics Solutions - The Highways and Economics Solutions Branch (HESB) provides IT planning, application development, maintenance and support to several divisions of the Ministry of Transportation (Provincial Highways Management, Policy and Planning and Corporate Services.

- The Open for Business Office (OfBO) provides IT planning, application development, maintenance and support to the Ministry of Consumer Services, the Ministry of Economic Development and Trade, the Ministry of Labour and the Ministry of Research and Innovation.

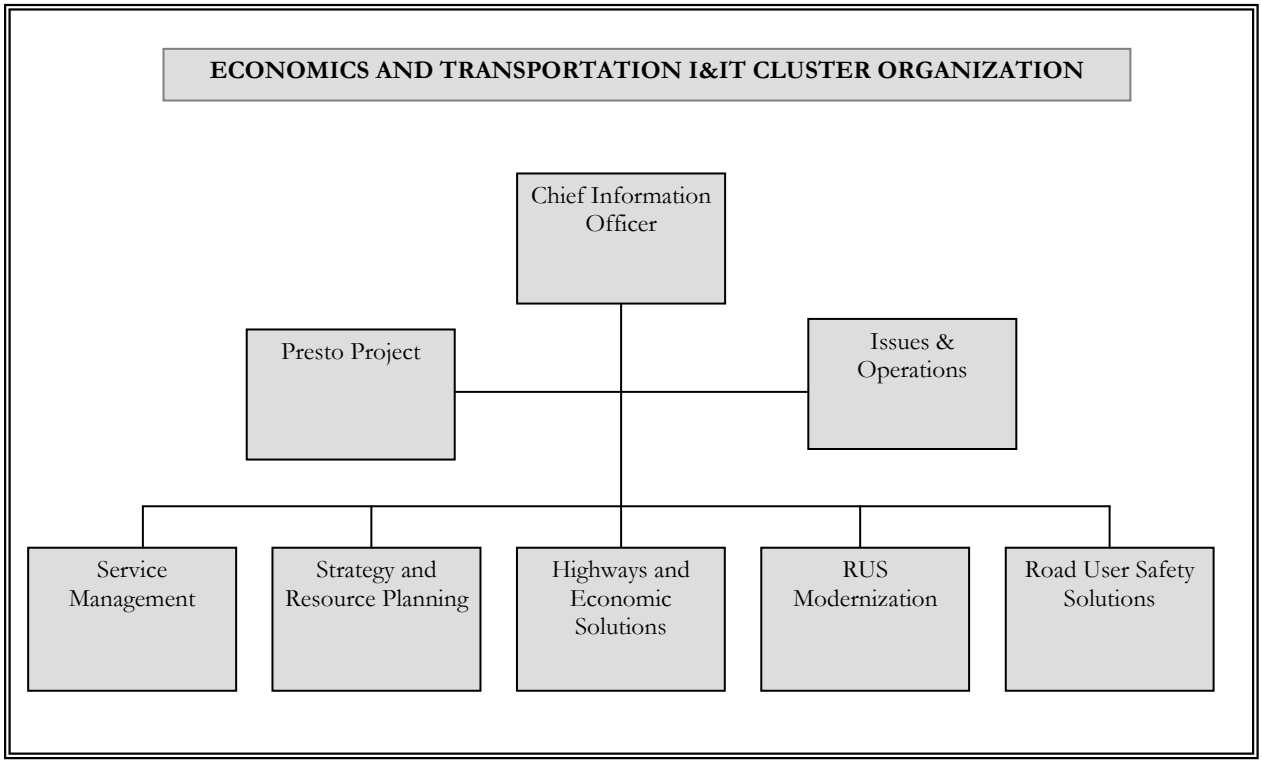
- The Strategy and Resources Planning Branch (SRPB) provides focus on policy, planning and architecture in order to provide strategic advice to business areas from a technology point of view. In addition, the SRPB leads the Cluster in strengthening financial controllership as well as project portfolio management and

provides an opportunity to build capacity for information management and governance.

- The Services Management Branch (SMB) focuses on ensuring that IT services are planned, defined, agreed to and measured with emphasis on performance measurements and managing end-to-end services in partnership with client ministries.

- Presto (Farecard) Project – Responsible for supporting GTA Fare System project to implement a common transit fare collection system based on contactless chip card technology in the Greater Toronto Area.

EXHIBIT ETC.2



d. Key Contacts

Chief Information Officer – Ken Kawall, 416-327-1955

Strategy and Resource Planning
Director – Mike Anderson, 416-325-7814

Open for Business
Executive Lead – Angela Forest, 416-212-6654

IT Service Management
Director – Dani Danyluk, 905-704-2838

Highways and Economics Solutions
Director – Howard Bertrand, 905-704-2488

Road User Safety Modernization
Director – Harp Ahluwalla, 416-235-6689

Road User Safety Solutions
Director – Bob Stephens, 416-235-4523

Presto Project
Projects Director – Jeffery Young, 647-780-0320 X 5162

e. Resources Available

- 2010-11 I&IT-Related Other Direct Operating Expenses ($ millions)

Professional Services	5.9
Hardware, Software Etc.	50.2
Sub Total	56.1
Salaries and Wages	33.8
Cluster Total	**$89.9**

- I&IT Cluster and Regional Staff 352

f. Technology Overview

The Economic ministry environment has been brought together with the Ministry of Transportation services.

- The Economic ministries current Information Technology Architecture supports the clients of the five ministries (MEDT, MOL, MRI, MCS, MTO) with local and remote network connections to their business applications from over 160 Ontario work locations. The cluster has a large mobile workforce, particularly within MOL, which means that communication requirements are very diverse. The OPS supports the network and provides WAN and LAN connectivity and VPN services.

- The Economic ministries use a centralized Technology Service Desk (help desk), which is outsourced.

- The Economic ministries have a major focus on Enterprise Architecture best practices and use Microsoft tools for Application Development.

- The cluster is the Centre of Excellence for .NET application development.

The Transportation ministry's current Information Technology Architecture includes three components: the general business environment, the engineering environment within Provincial Highways Management and the systems environment in Road User Safety.

- General Business Environment

  Within this environment, Infrastructure Technology Services computer centres provide mainframe and server services. The ministry LANs support business and engineering environments and the ministry knowledge workers use notebooks and desktop workstations. ITS provides the MVS/ESA mainframe platform which is used for high volume or large database corporate applications.

  - The ministry currently supports Windows XP Professional Operating Systems in the business and application development and support environments. As part of

the standardized desktop environment, each user has access to a standardized desktop office suite of programs and to an Internet browser.

- The ministry uses the TCP/IP protocol and a single, province-wide domain that allows LAN users to access services from all networked offices in the ministry. This greatly facilitates the use of client/server and Internet applications.

- Engineering Environment

  - The engineering environment leverages the same components as the general business environment: Windows XP notebooks and desktops connected using TCP/IP through a LAN to Windows 2003 servers, and through the WAN to the mainframe.

  - The engineering environment also includes Sun UNIX servers. The UNIX servers are utilized as database and application servers. File and Print services are provided by Windows 2003 Servers. The Windows XP desktops also connect to the seven UNIX servers using TCP/IP through the LAN and WAN environment.

- Road User Safety IT Environment

  - In addition to the cluster-wide Windows 2003 infrastructure, the RUS core business has a large and complex technical environment dedicated to legacy Driver, Vehicle and Carrier business applications. The current technical environment has evolved over the past three decades and is based on mature technology consisting of an ITS mainframe and IMS, DB2 and Oracle databases.

  - RUS uses Internet technologies to support channel independent, thin client delivery of Safety and Regulation core business and information services. Key to the RUS technical infrastructure is the wide-area network. The network is composed mainly of the ITS backbone using TCP/IP. However, substantial links are provided to other systems and jurisdictions across Canada.

  - This technical environment is home to all of the RUS applications (e.g. Driver, Vehicle and Carrier systems). These, in turn, are primarily transactional in nature and combine on-line, real time and overnight batch processing. The environment also includes a middle tier consisting of program-specific servers:

    - Workgroup LANs follow the ministry standard, including special purpose customer service workstations serving as the front-end to over-the-counter licensing;

    - Registration transactions have been transitioned to Microsoft Windows XP Professional.

- Presto Project

  - The Presto Project is implementing a common transit fare collection system based on contactless chip card technology in the Greater Toronto Area (GTA). The GTA is the 4th largest region in North America with a population of 5.5 million and covers an area of over 8,100 square kilometres. The GTA Fare System will be an important enabler of public transit integration in the GTA and will facilitate seamless travel across the GTA for public transit passengers.

- There are IBM business and Sun-based engineering environments used by the cluster with approximately 5,750 PCs and over 3,000 notebooks and 50 Sun Sparc units.

- In addition, over 2,000 customer service workstations running Windows XP Professional are installed in over 430 offices (Private Issuing and Driver Exam Centres) across the province. This environment delivers Road User Safety over-the-counter products and services utilizing a TCP/IP network and mainframe services.

- Sun Solaris platforms host electronic data transfer and photo licence applications.

- Nine Sun servers deliver 2nd and 3rd tier applications services to the Provincial Highways Management Division.

- 16 Sun servers deliver development and testing services.

- 125 Intel-based Windows 2003 servers deliver messaging services, n-tier business applications and file/print services.

2. TODAY'S PLATFORM AND APPLICATIONS

- Infrastructure Consolidation

  - The Office of the Corporate Chief Infrastructure Technology Services (ITS) is responsible for managing and delivering mandatory OPS I&IT infrastructure to all clusters and ministries. The hardware and software environments described below will change as consolidation continues and server virtualization is introduced more widely. The cluster will be participating in this and other shared initiatives such as the common components and services and common business applications.

- Mainframe Platform

  - The MVS/ESA production, development and test mainframe platform is provided by ITS in a shared facility. It is used primarily for high transaction volume or large database corporate applications.

  - Access is provided with an IMS/TM teleprocessing monitor, DB/DC and DB/2.

  - This platform is primarily used to support the major Road User Safety applications related to Driver, Vehicle and Carrier Licensing and Control core business as well as Information Services.

  - These applications are linked to all Canadian provinces and territories, Ontario's Police Forces, Courts, Municipalities, the RCMP, other ministries and business partners.

  - RACF security and TCP/IP network environment with NETVIEW are used.

  - A disaster contingency plan has been established in cooperation with ITS for critical applications.

- Client/Server Environment

  There are three client/server environments, one for business support applications, one for engineering applications and one for Road User Safety applications.

  - The business environment has approximately 5,750 PCs and 3,000 notebooks installed across the ministries.

    - The PCs operate with Windows XP Professional Operating System on the desktop.

  - The engineering environment leverages the same technology as the business environment.

    - Windows 2000 Professional desktops connect using TCP/IP through a LAN to Windows 2003 servers and through the WAN to the mainframe.

- The engineering environment also includes Sun UNIX servers. These UNIX servers are used as database and application servers.

– Road User Safety has over 2,000 Customer Service Workstations (CSWs) running Windows XP Professional utilizing a TCP/IP network and mainframe services, located in approximately 430 offices (e.g. Private Issuing and Driver Exam Centres) across the province. Peripherals include bar code scanners, POS pad devices, camera and digital signature equipment and printing devices.

  - These are used for product delivery for the Driver, Vehicle and Carrier system.

  - Lotus Notes/Domino is configured for Road User Safety for information products and services via the Internet.

  - RUS has a Sun UNIX server to support RUS mobile users.

  - MQ/SNA Gateway on mid-tier to support messaging with business partners.

  - CSWs supporting Driver/Vehicle/Carrier (D/V/C) programs are equipped with a point-of-sale device facilitating credit/debit card purchases.

  - Enforcement officers use rugged Panasonic mobile laptops within their patrol vehicles to retrieve vehicle, carrier and driver information via web-based applications using the Inquiry Services System (ISS).

– The Economic ministries are located at more than 160 physical locations. There is a large mobile workforce particularly within MOL, which means that communications are very diverse. All users have Internet access.

– The business server environment is currently based on Intel servers running Windows 2003.

  - TCP/IP is the LAN/WAN protocol and there is a single province-wide Windows 2003 domain for any-to-any connectivity.

  - 125 Windows 2003 servers are used primarily to share disk and printing for a number of workstations, to support file, print, directory, Exchange 5.5/Outlook 2000 in both the business and engineering environments.

  - A PC Fleet Management Program results in a one-third annual replacement.

– Server software currently includes Microsoft SQL Server and Oracle as RDBMS's.

– The Economic ministries support several environments that have been identified as Legacy and are working on plans for their replacement:

  - HP servers with Oracle and VMS for MOL legacy applications;

    - IBM Lotus Notes environment used by MEDT to capture content;
    - IBM Lotus Domino for MEDT websites.

- The Cluster is using Microsoft Systems Management Server to support its systems management requirements.
- ServiceOntario
    - ServiceOntario provides a cross-ministry delivery network for a range of services to a cluster of general public or "retail" customers. The initiative will result in a number of delivery channels being developed to provide routine transactions and information.
    - The current self-serve Kiosk facility is a MTO managed platform that delivers services to the public for the Ministry of Transportation, Ministry of Natural Resources and Ministry of Health. Over seventy Kiosks are now installed. Debit and credit card services are supported.
        - MTO transactions include vehicle sticker dispensing, driver, vehicle and carrier record searches, driver's licence renewal, vehicle registration, the Used Vehicle Information Package and Personalized Plate ordering.
- Web based Services
    - RUS and Corporate Service information product and services are provided using Lotus Notes/Domino as well as Windows 2003 IIS and Mid-tier application servers.
- Interactive Voice Response
    - Some RUS applications use Interactive Voice Response (IVR) technology to provide customer service. These applications include Road Test Booking. The Driver Licence Check for the Vehicle Impoundment program uses ICE^3 from ComputerTalk as the applications link with the Driver system. These services are provided via Synervoice platforms as well as GO-IVR.
    - Voice recognition capability is used for winter road condition reports and for summer road construction and maintenance reports.
- AS/400 Platform
    - An AS/400 platform comprised of two systems supports an imaging application for medical review files in the Downsview Driver Improvement Office.

- Sun Solaris Platform
  - An application system with special message handling tools and software is used for delivery of an Electronic Data Transfer (EDT) service using Oracle as the database.
  - It supports the photo card system for the Ontario Driver Licence System.
- Electronic Service Delivery
  - Currently, the customer service workstations supporting the Driver and Vehicle systems are equipped with a point-of-sale device that facilitates customer transactions using VISA, MasterCard or debit card. Credit and debit card services are in place for both Kiosk and over-the-counter (OTC) services.
  - The RUS core business is also delivered via an e-commerce application operating using a secure environment with up to 128 bit encryption. Customers can access a catalogue of RUS publications through a Web browser and place orders using VISA or MasterCard for payment.
    - There are second-generation e-commerce transactions with online fulfilment capability in RUS, such as Driver Licence Check and Red Light Camera, currently using CyberCash/Global Payment system card services, and are connected to the Driver/Vehicle database.
  - MTO systems interface to key programs and initiatives such as Integrated Justice, DriveClean, ServiceOntario, Family Support, International Registration program, Interprovincial Record Exchange, insurance partnerships, Retail Sales Tax collection and the used Vehicle Information Package.
- Communications Environment
  - Wide Area Network services are provided by Telus across 38 MTO business locations. This network delivers business services using TCP/IP and Data-Link Switching (DLSw).
  - The ITS-managed TCP/IP network, which is part of the Telus provided network, supports and provides data communications to the Vehicle and Drivers Registration System (VRS) located in 430 offices (e.g. Private Issuing and Driver Exam Centres) across the province. Terminal emulation is supported for TSO, IMS and CICS. In addition, the Cluster uses TCP/IP protocol to support custom applications running on over 2,000 customer service workstations located in the D&V issuing offices.
  - LAN Services for 8,500 ports are provided by Telus for the 38 MTO business locations. Additionally the 430 D&V office LANs have also been transitioned to the Telus service. The cluster uses the TCP/IP protocol and a single, province-wide domain to enable and host n-tier web-based applications.

- Remote access to the MTO applications is provided by an in-house RAS infrastructure (to be phased out over the next fiscal year).

- The Government Mobile Communications Network is implemented for MTO's Enforcement Officers and the road maintenance operations.

- External Network Access (ENA) services are provided by Telus. This securely connects the MTO infrastructure/applications to external customer data centres. This currently includes IBC, CGI, Protect Air, IBM/Kiosks and a connection to the wireless Enforcement inquiry service.

- A Video Conference infrastructure provides video and voice services to each Regional office as well as Queen's Park, Downsview and St. Catharines.

- The MobiText network provides application services to the MTO Enforcement Officers by integrating into MTO mainframe services.

- Development Environment

  - The Economic ministries have standardized on the Microsoft development toolset.

  - A variety of Vendors of Record are currently being used for acquiring professional services.

- Major Business Applications

  Cross-Economic Ministry Applications

  - ETC in-house support systems include In-Vision for project management, Remedy for Incident and Problem Management; Fax-on-demand (RightFax platform) is used to distribute information to clients as well as staff. eRoom (EMC Documentum) is a service provided by CAC to ministry clients supporting a collaborative environment that enables people to work closely together.

  - The Online Correspondence Management System (OCMS) is a web-based database application that consists of two components, a contact management portion and a services tracking component.

  - The Stakeholder Relations Database (SRD) collects and manages information about various stakeholder interactions. The application is being upgraded to the new ETC standard platform and will be one of a suite of common Enterprise Administrative systems (EASY) for use across the OPS. It will be an Intranet application using Websphere / Oracle.

- The Enterprise e-Forms utility provides a generic facility for OPS-wide use to allow program areas to develop electronic forms web applications to meet specific business requirements.

- Other key systems include:

  - Business Immigration
  - Regulatory Registry
  - Wisdom Exchange Integrated Community Profiles
  - Employment Standards Services Integration System
  - Occupational Health and Safety Inspection System
  - Summer Company.

Ministry of Economic Development and Trade

- Ontario Growth Firms – a client management system supporting the Wisdom Exchange and Field Services groups, primarily in support of innovative growth firms.

- Wisdom Exchange/Business Exchange - supports the annual Wisdom Exchange conference.

- Enterprise Centre Reporting (ECR) - accepts secure online input of information from Small Business Enterprise Centres and Business Self-Help Offices.

- Summer Company - manages registration and eligibility/evaluation processing for Summer Company applications.

- Ontario Exports Inc. applications – a client management system, providing call tracking, calendar of events, Global Traders Awards nomination and registration applications, and activity reporting.

- Science and Technology Integrated Investment Database – maintains information about research and other transfer payment programs and their corresponding projects.

- Internet sites are:

  - www.ontariocanada.com - main MEDT public Internet site, provides a broad range of news, information, resources and links related to MEDT and its programs;

- www.ontarioexportsinc.com - Ontario Exports Inc. public Internet site and associated applications are targeted to organizations to help Ontario companies export their goods and services worldwide;

- www.2ontario.com - Ontario Investment Service public Internet site provides marketing information about Ontario to attract and assist investors.

- www.sbe.gov.on.ca a web portal to strengthen the small and medium business sector and to encourage entrepreneurship.

Ministry of Labour

- The Industrial Relations Information System tracks employment agreements and their settlement process, as well as wage information and occupational data for agreements. It is an Oracle application that operates under Alpha/VMS.

- The Ministry of Labour has an Internet website for external clients and an intranet website for internal communication.

- The Occupational Health and Safety Merged Information System provides occupational health and safety information for Ontario workplaces, lost time injury claims for firms and data collection reporting for occupational exposure limits. It is an Oracle 7.1.5 application running under Alpha/VMS.

- The Occupational Health and Safety program uses an inspector notebook computer to generate reports and update directly into the application from the field. It is a Sybase SQL application that operates under Windows 2000.

- The File Information Case Tracking system is used by Legal Services to track case files.

- The Pay Equity Case Tracking System (PECTS) tracks case information for the Pay Equity Commission Review Services has been replaced with a new application based on the Filemaker Toolset.

- Case management systems for Grievance Settlement Board and Office of the Employer Advisor have been established using the Filemaker toolset.

- The Freedom of Information system maintains data for the receipt, tracking and reporting function of the Freedom of Information branch. The application is based on an Oracle database and operates in the Alpha/VMS environment.

- The Communications Branch has introduced an intranet-based tool to electronically distribute news clippings from a third party source to key individuals within the organization. The following Internet sites are maintained:

  - www.owa.gov.on.ca - The Office of the Worker Adviser (OWA) is an independent agency of the Ontario Ministry of Labour. The OWA provides

free services to non-unionised injured workers and their survivors in workplace insurance matters (formerly called Workers' Compensation);

- www.psab.gov.on.ca/english/gsb/index.htm - The Grievance Settlement Board provides expeditious and appropriate dispute resolution services for grievances arising under the collective agreements between Crown employers and Unions representing Crown employees in order to resolve disputes and promote harmonious labour relations in the Ontario Public Service;

- www.olrb.gov.on.ca - The Ontario Labour Relations Board is an independent, quasi-judicial tribunal mandated to mediate and adjudicate a variety of employment and labour relations-related matters under a number of Ontario statutes.

Ministry of Research and Innovation

- Internet site

  - www.mri.gov.on.ca – a website that highlights the focus on the government's commitment to innovation as the driver of growth across all sectors of the economy.

Ministry of Transportation

- The Cluster partners with the MTO's Road User Safety Division to deliver effective technology-enabled solutions through the Road User Safety systems for the driver, vehicle and carriers.

- A portfolio of over 135 information systems support a large complex and diverse range of Provincial Highways Management business and operational functions. These systems include the analysis of the highway network though online inventories of highway and bridge conditions facilitating the planning and scheduling of multi-year construction projects, engineering design work and the management of highway maintenance.

- The Integrated Ticketing office supports the Presto project of the Ministry of Transportation.

- The IT Service Management Office provides I&IT services and business management to the Cluster and all the ministries.

- The Asset Management Business framework will support PHM in developing an improved framework for asset management, primarily roads and bridges, and will initiate changes in the current business processes and activities. There are over $50 billion of assets under management and the direction is to develop and implement a more strategic management approach by linking applications through a common architecture and through the use of standards. This system is

undergoing system renewal. There are currently multiple applications on multiple platforms. These systems have moved to a common platform based on the Microsoft .NET architecture.

- Work is continuing with Land Information Ontario for road network information to align with the LIO databases.

3. INFORMATION SYSTEMS DRIVING FORCES

Exhibit ETC.3 outlines some key influences which will affect the information systems activities within the cluster.

- The cluster's strategy is to transform the organization so that as much as half of the resources are focused on growing and transforming the business. The essence of this transformation is that the cluster needs to re-allocate resources, that today are focused on just running the business, to growing the business and driving the modernization agenda. To reduce the 'Run' component from 70% to 50% requires a reduction in the number of technologies supported, use of commercial-off-the-shelf (COTS) solutions, a shift to component-based delivery and the need to leverage enterprise and horizontal solutions. This is a significant change for the organization. The dual thrust of this strategy is best captured by the phrase "Transforming While Performing". In 2008-09, the ETC strategy was to stabilize the cluster and build the foundation for transformation and last year the focus was to build the roadmap and start the journey of transformation. In 2010-11 the focus is on refining the roadmap and continuing the journey of transformation. There are four roadmaps that need to be created and integrated: business architecture; application architecture; information architecture and the technology architecture.

- A key change in priorities in the last few years has been the shift from focussing on the road transportation network to a renewed focus on public transportation, increasing transit ridership and promoting a multi-modal transportation network to support the efficient movement of people and goods. These changes drive the need for new systems.

- The RUS legacy systems (registration and licensing databases) are critical for the ministry, other ministries, clients and external stakeholders. These ageing systems require major re-investment to meet the need of providing stable, reliable information to support business plans and programs.

  - The RUS Electronic Service Delivery Strategy and associated initiatives have been developed with the primary goal of migrating these legacy systems to a flexible, scaleable platform.

- There is a requirement to develop a phased, comprehensive risk management strategy to renew cluster legacy applications in partnership with Road User Safety and Employment Standards programs.

- It is important to enhance the Portfolio Management services provided to client ministries by engaging in policy discussions so that enablement solutions can be identified early in the process.

- Citizens are encouraging governments to put more services online. Governments are also moving forward with electronic citizen engagement in the decision making process. The cluster will introduce and demonstrate new tools to foster collaboration both externally and internally.

- The Presto Project is an important enabler of public transit integration in the GTA and will facilitate "seamless" travel across the GTA for public transit passengers.

- From a technology perspective, the cluster is leading in the use of .NET development and acts a Centre of Excellence as the new application factory paradigm of business solutions development. The Cluster is building on the Zachman framework to provide additional functionality to Service Oriented Architecture solutions. The cluster is leading in deployment of Service Oriented Architecture.

- The cluster must build capacity and strategy to meet Information Management needs. Today in excess of 70% of the OPS data resides in an unstructured form. This is a significant inhibitor to the government's ability to achieve public policy objectives. The I&IT organization will develop an information management program focusing on information as a core asset of the OPS and reduction of the growing costs of duplication and storage of unnecessary documents.

- As the ministry changes its role from being a service provider to a service manager more focus will be placed on policy, planning and regulating, and less on direct service delivery.

  - A stronger information resource management approach will be required to support this role.

  - The role of the Strategic Planning and resource Branch will expand from strictly an oversight role to include the facilitation of business services for the cluster.

- Greater focus will be placed on managing the road network as an asset and novel approaches are being considered.

- Greater focus on improved processes, methods and tools to enable projects to meet project gating, risk management and architectural governance, and review process requirements without adding extra time and resources to project timeframes and budgets.

- Open for Business (OFB) is Ontario's three-year program to create faster, smarter and streamlined government to business services and to establish a more modern system of government by 2011. It is a key part of the Ontario Government's commitment to make Ontario more attractive to business while protecting the public interest. A key objective is to make it easier for organizations to do business with the government through modernizing services delivery, modernizing the regulations whilst determining whether the regulations are necessary to achieve the desired outcomes. Furthermore steps are being taken to engage business in consultations before legislation is introduced to help draft the necessary rules and regulations.

  A Deputies Steering Committee has been formed to provide support and advice to OFB in order to facilitate the implementation of modern services, modern government and the creation of a new relationship with business across government.

One of the primary functions of the Steering Committee is to "review and provide input into strategies and deliverables related to the roll out of the Modern Services, Modern Government and New Relationship with Business framework". ETC has co-ordinated the corporate I&IT support for OFB to date and will continue to do so going forward to ensure that the technology response has the biggest technology impact. All 23 ministries have Open for Business initiatives.

- There is a major need to shorten the timeframe to implement system changes.
  - Legislative changes add to the pressure.
  - The "connected economy" is creating a fast pace for new ideas or requirements.
- Increasing population growth and accompanying growth of drivers especially amongst youth, seniors and commercial drivers is having a significant impact.

EXHIBIT ETC.3

INFORMATION SYSTEMS DRIVING FORCES

- The cluster needs to re-allocate resources that today are focused on just running the business to growing the business and driving the modernization agenda.
- The legacy systems are critical and major reinvestment has been approved and is being made.
- Requirement to develop a phased, comprehensive risk management strategy.
- The Presto Project will be an important enabler of public transit integration in the GTA.
- The cluster is leading in the use of .NET development and is building on the Zachman framework to provide additional functionality to Service Oriented Architecture solutions.
- The cluster must build capacity and strategy to meet Information Management needs.
- More focus will be on policy, planning and regulation, and less on direct service delivery.
- Greater focus will be placed on managing the road network as an asset.
- Open for Business is a key enabler of more modern government.
- Faster system implementation is needed.
- There is increasing growth in driver population.

4. PLANNED CHANGES AND UPCOMING PROJECTS

The various system initiatives are described within each line of business.

a. Key Cluster Unified Projects

- Accessibility Planning

  - In 2005 the Accessibility for Ontarians with Disabilities Act (AODA) was passed in the Ontario legislature. The purpose of the AODA is to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises by developing, implementing and enforcing accessibility standards.

  - One intent is for websites to conform to the W3C Web Content Accessibility Guidelines 2.0 (WCAG 2.0), level A which covers a wide range of recommendations for making Web content more accessible. Following these guidelines will make content accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these.

  - Some current ETC web-based projects are planned that will use the new guidelines while developing the applications. These are; MTO Public Internet Migration Project; Corridor Management Permit System Renewal Project; Drivers License Check and Carrier Information Products.

- Architecture and Security Standards Development – ETC support of corporate initiatives such as OPS architecture development, OPS technology standards, security policies, encryption and security compliance.

- Centre of Excellence for .NET – this ETC lead initiative develops and promotes a uniform, standards based, methodology driven, application development environment in the OPS.

  The .NET Centre of Excellence (.NET COE) was established by the IT Executive Leadership Committee (ITELC) to develop and promote a uniform, standards based, methodology driven, application development environment in the OPS. To provide a response to the challenges of increased demand for business solutions, shorter product cycles and staff turnover facing the I&IT Clusters, a significant shift in the way applications are being developed needed to take place. Since its inception, the .NET COE has delivered on its initial mandate, and is being recognized as the authoritative source of expertise in .NET related issues. The .NET COE has produced multiple deliverables, which are currently being used in the application development of .NET solutions. Deliverables such as:

  - Application architecture for .NET applications

  - Training roadmap for .NET developers

- A standardized toolset
- Multiple white papers and educational session on .NET issues and technology aspects
- A SharePoint service to the OPS.

Looking ahead the .NET COE will be spending considerable time and effort in establishing a common Service Delivery Environment (SDE) that all .NET areas in the OPS can utilize to develop and deploy their applications. SDE became available in February 2010 for a targeted set of applications, and then became available to the broader OPS in April 2010.

The .NET COE will also expand the existing Enterprise SharePoint Service to accommodate customized applications and custom built sites.

The .NET COE has successfully evolved to the point where ITELC supports creating one OPS .NET solution factory where are .NET solutions would be developed. This will assist in reducing the technology footprint and the complexity of the technology environment. The underlying goal is to build pattern-based solutions with reusable assets using repeatable processes.

In addition to those two high profile and significant projects the .NET COE will continue to perform its ongoing tasks, such as training .NET developers and architects, assisting in the architecture and design of .NET solutions, and reviewing existing .NET applications.

The .NET COE is experiencing a significant demand on its services and resources. As part of the evolution to a solutions factory, the COE will be working with ITELC to come up with a business model to recover the costs of services delivered by the solutions factory.

- Centres of Excellence in other clusters – ETC provides funding and initiative support to the OPS Centres of Excellence, e.g. IT Project Centre (ITPC), Accessibility for Ontarians with Disability Act (AODA), SharePoint (JTS), and Privacy Impact Assessment COE.
- Chip Card and PCI Compliance – ETC support towards the Chip Card and Payment Card Industry (PCI) compliance initiative to increase security using debit and credit cards by utilizing PIN Numbers, and to implement new release of Desjardins Integrated Payment Solutions and new PIN pads.
- Common Components Applications and Services (CCAS) – ETC provides funding and initiative support to the OPS CCAS.
- Consolidated Mainframe – ETC support towards the ITS initiated OPS-wide initiative to consolidate the mainframe computing infrastructure.

- Desktop Management Services Project (DMSP) – ETC support towards the ITS DMSP consisting of the implementation of application and desktop virtualization technologies to address the lengthy testing process for desktop refresh, operating systems and applications deployment. It is also to develop options enabling ITS to recommend the next generation of desktop operating system, office suite and web browser.

- Disaster Recovery and Pandemic Planning – ETC support towards OPS-wide business continuity planning, disaster recovery planning and pandemic planning.

- Green IT – ETC support towards the ITS conservation and energy savings initiatives such as power management, refresh green print strategy, sustain the current green initiatives and support of paperless meetings.

- Government Mobile Communications Project (GMCP) – ETC support towards the ITS initiative towards the next generation of province-wide common network infrastructure for all OPS public safety users on the trunked network and other mobile system.

- Guelph Data Centre Transition – ETC support towards the transition of applications and infrastructure to the new OPS data centre in Guelph. The Guelph Data Centre (GDC) Program has been launched as a corporate I&IT initiative to ensure an integrated approach to all activities related to the GDC. Through this initiative two separate, but concurrent and coordinated projects, will complete the GDC Project; the Guelph Data Centre Facilities Project will deliver the physical infrastructure comprising of the Data Centre (computing environment) including building the site, while the Guelph Data Centre Transition Project will deliver the end-to-end planning and migration of all Cluster/Ministry applications, resources and supporting infrastructure from Toronto to Guelph. ETC, in partnership with ITS, is planning the migration of 119 ETC Cluster applications and supporting infrastructure from the Toronto Delivery Centre to Ontario's new enterprise data centre in Guelph.

- The vision for information management (IM) is one in which decision-makers have access to the right information at the right time. Policy analysis will be supported and enhanced by improved IM because the data/information upon which research and analysis rests will be authoritative, authentic and accurate. With improved information and the ability to integrate information within and across formats and business lines, service delivery will be modernized and enhanced, and coherent enterprise approaches will be enabled. Not only will service planning improve, but also direct delivery can be positively impacted by better information. Finally, citizens will have greater and quicker access to information that they desire. This is the vision for IM within the OPS.

  The Cluster will work towards enhancing its organizational capacity to fulfil its IM steward/manager role. The go-forward plan will include identification of key IM services to be provided by the Cluster, versus those services that are necessary to continue in client ministries. The focus at the Cluster level will be on bringing the

client ministries together to form an IM community of work jointly to achieve enterprise IM goals including readiness to implement the enterprise Information Management suite of policies, standards, tools and applications.

Given the lack of central funding for Information Management, the Cluster will be taking an opportunistic approach by project, looking at Open Text application suite of products for example:

- Dispute Resolution Services Renewal Project
- Road User Safety Modernization Project.

The Office of the Chief Information and Privacy Officer (OCIPO) wants to develop a set of use patterns (templates) of common process. OCIPO is offering the possibility to develop an issues management use pattern within the Open Text test environment at the MaRS Centre that would support MOL's Issues Management and Stakeholder Relations process.

- Information Management System (IMS) Data Base (DB) Transaction Manager Upgrade – ETC support towards ITS initiative to keep the mainframe IMS DB current based on vendor support model.

- IT Service Management (ITSM) Refresh – ETC support towards the OCCTO initiative to refresh five enterprise Information Technology Infrastructure Library (ITIL) processes for the OPS; Change Management, Incident Management, Problem Management, Service Level Management and Configuration Management.

- Maturity Transformation Initiative (3-3-4) – ETC support towards the corporate goal of achieving higher levels of maturity in portfolio, program and project management by 2011.

- Major Applications Portfolio Strategy (MAPS) – ETC support providing input towards the corporate Major Applications Portfolio Strategy initiative.

  MAPS has identified those high risk applications that must be remediated or replaced. Treasury Board has approved funding for the modernization of key high risk applications across the OPS. Of the 53 highest risk applications identified under MAPS, 21 reside within ETC. The modernization of these key applications will draw upon the resource expertise within our Cluster to ensure the successful completion of this initiative.

  The GDC Transition Project and the MAPS modernization initiative will run in parallel for the next three years and will be key priorities for both ITS and the Cluster. The existing GDC Transition strategy will continue as planned against current approved project plans while all MAPS modernization projects will be governed by the Applications Modernization Office (MGS) and delivered by ITS and I&IT Clusters through the standard engagement model (CRM / ITS PMO).

The ETC MAPS initiatives underway or planned for 2010-11 are set out in Exhibit ETC.4.

EXHIBIT ETC.4

ECONOMICS AND TRANSPORTATION CLUSTER
MAPS PROJECTS 2010-11

MAPS Project	Client	Funding Source		
		ETC	AMO	Client
MTO Road User Safety				
RUS Modernization Project	RUS		Yes	
Interim MAPS Strategy	RUS		Yes	
MTO Provincial Highways Management				
Capital Improvement Delivery System Renewal	PHM		Yes	
Land Management Database System	PHM			Yes
Construction Administration System	PHM			Yes
Corridor Management Permit System	PHM			Yes
Claims Information Management System	PHM			Yes
Ministry of Labour				
OHS Inspector Notebook Renewal Project	MOL			Yes
Dispute Resolution Services Renewal Project	MOL		Yes	
Ontario Labour Relations Board Renewal	MOL		Yes	
Ministry of Economic Development & Trade				
Electronic Customer Relationship Management	MEDT			Yes
Ministry of Consumer Services				
Electronic Customer Relationship Management	MCS			Yes
Ministry of Research and Innovation				
Electronic Customer Relationship Management	MRI			Yes

- Open for Business – ETC support towards an enterprise-wide initiative to implement modern services, modern government and a new relationship with business.

- PC Asset Management – ETC support towards the ITS initiative to manage the personal computer assets inventory across the OPS.

- Power Management – ETC support towards the ITS initiative to reduce power consumption i.e. to force laptops, desktops and monitors to turn the power off based on inactivity parameters.

- ServiceOntario Support – ETC support towards ServiceOntario initiatives such as Integrated Health Card Driver License, Valtag Program Modernization, Accessible Parking Permit, Internet Address Changes, Enterprise Payment Systems, Kiosk Renewal and Printer Consolidation, etc.

- Showcase Ontario – ETC provides funding and initiative support for the yearly OPS Showcase Ontario. This conference provides participants the opportunity to see new projects and initiatives taking place across the government, and providing a multitude of learning opportunities.

b. Ministry of Transportation

A series of system enhancements is necessary to support the following new Road User Safety requirements.

- The Road User Safety portfolio is large and touches many other parts of the government as well as many other partners delivering component services within the Road User Safety envelope. The Road User Safety Applications schematic is shown in Exhibit ETC 5.

The Road User Safety critical applications include:

- Driver Program – the licensing and control of all drivers.

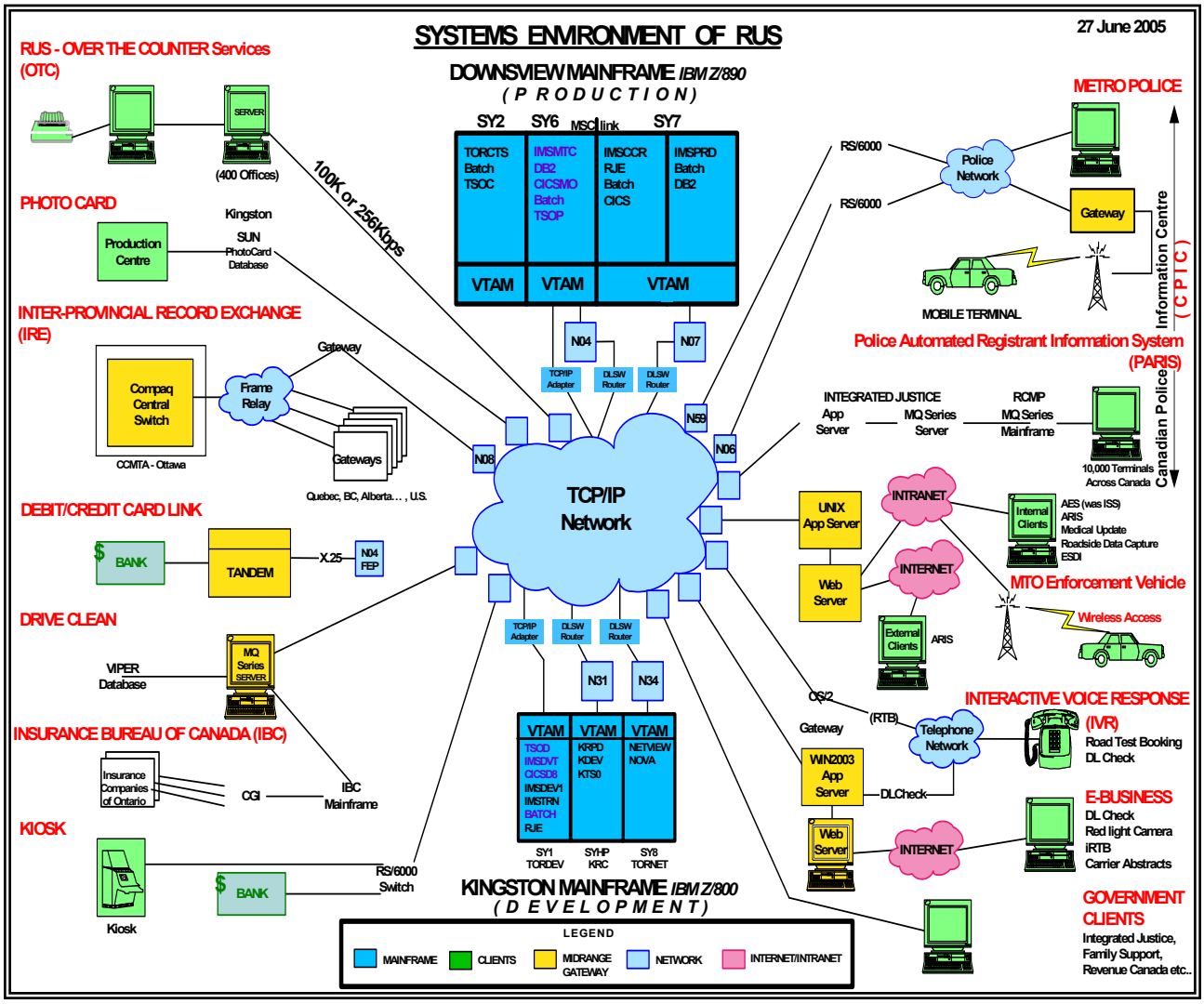
- Vehicle Program – the registration of all active and inactive vehicles, plates and their registration and maintaining databases of registrants.

- Carrier program - the registration, enforcement of all carriers and maintenance of a database of 80,000 carrier operators.

- Information and Support Services – provide secure and efficient access to MTO Driver Vehicle and carrier information.

EXHIBIT ETC.5

ROAD USER SAFETY SOLUTIONS



- A design framework project was completed in March, 2003 to ensure consistent architecture across all Road User Safety projects while conforming to the MGS Zachmann framework and security models. This will include technology, information, business, security and application architectures and will conform to the principles and standards set by the Enterprise Information Architecture project. The RUS future architecture is based on an n-tier model utilizing browser-based thin-client PCs. It will feature the use of reusable objects and a common interface for service delivery channels and business partners. It will be web-enabled and will provide a single virtual channel delivery interface, which will simplify support requirements.

- From a business perspective, this new architecture will align MTO business lines and product delivery to the overall e-government direction and customer centric strategies including:
  - Increased self-service and integration with ServiceOntario;
  - Integration of data across applications, ministries and jurisdictions;
  - Proactive prevention of fraud;
  - Provision of business intelligence and information at users' fingertips;
  - Facilitate agile and flexible systems that can easily reflect the latest policies, business processes and the ongoing changes to the regulatory framework.

There are two key projects for planning the RUS replacement:-

- RUS Modernization Planning – to develop and publish the plans for modernization of Road User Safety (RUS) legacy systems. Implementation is dependent on completion and approval of the RUS Modernization Business Case.
- RUS Modernization – to provide a modern and flexible infrastructure for business modernization and future delivery of MTO programs.
- RFP's are planned for this year for:
  - Project and Program Management
  - Systems Integrator and Solution Provider.

Other key MTO projects are:

- Address Integrity - to implement system changes to prevent multiple address changes.
- Authorized Requestor Program – ARIS (Authorized Requestor Information System) Enhancements to create new revenue streams from 407ETR online fees and Ontario Motor and Coach Association (OMCA) / Ontario School Boards Association (OSBA) (Authorized Requestor Policy Review – Information Privacy Commissioner (IPC).
- Commercial Vehicle Impound Program (CVIP) Enhancements (Bill 126) – Automate impound process to eliminate need for MTO enforcement officers to contact registrar before impounding a commercial vehicle for critical defects.
- Escalating Graduated Licensing System (GLS) Sanctions (Bill 126) – GLS intervention – escalating sanctions for Highway Traffic Act convictions and court ordered suspensions and implementation of escalating sanctions for repeat G1/GS offences.

- Graduated Licensing System (GLS) Timeframe Updates (Bill 126) – Extend G1 to 18 months with a 6-month time discount and extend G2 to 18 months.

- SIMS (Suspension Impoundment Management System) Phase 4 (Bill 126) – Various enhancements to the SIMS applications to allow for new Vehicle Impound Program rules and moving Administrative Driving Licence Suspension to Police Authority.

- Zero Blood Alcohol Concentration (BAC) 21 and under (Bill 126) – extend existing zero BAC requirements to all drivers in all license classes up to and including age 21.

- Reduced Suspensions with Ignition Interlock Conduct Review program for 1st Time Offenders only. (Bill 203) Licensing Control System (LCS) mainframe upgrades to receive new data from Ministry of Attorney General/Integrated Court Offences Network, determine driver eligibility for participation in the Conduct Review program and processing of performance data that will result in either removal from the program, ignition interlock period extension or normal exit from the program (reinstatement). Includes several driver status queries via ARIS and update to suspension notices, reinstatement notices, information letters, extension letters and a new acceptance/rejection letter.

- Bridge Management System (BMS) - HIBS Integration – the integration of the Bridge Management System with the Highway Infrastructure Business Solution (HIBS).

- Bridge Management System – Provincial Auditor Recommendations – the implementation of changes required to the Bridge Management System as a result of Provincial Audit investigations and recommendations regarding management of provincial highways structures.

- Capital Improvement Delivery (CID) - .Net Conversion – the conversion of the system used to manage the delivery of the highway capital program to a .NET platform.

- Capital Improvement Delivery – Investment Planning Integration – the modifications to CID to maintain the linkages with the new Investment Planning tool.

- Claims Information Management System (CIMS) – an upgrade to allow CIMS to support the payment function which is key to management of over $5M claims transactions per year.

- Contractor Screening Database Development – will create an electronic form to enable MTO staff across the province to update the contractor screening information as required by the Contractor Threat Risk Assessments.

- Continuous Transactions Control Monitoring - to investigate acquired solution software that are able to analyze card transaction data along with financial and

employee data to identify suspicious activity, thus providing a platform for continuous monitoring and automation of a process to identify errors and control violations across all financial systems.

- Correspondence Tracking Information System (CTIS) Migration – to migrate the existing CTIS application from its legacy Lotus Notes platform to a .NET platform to better facilitate growth and long-term support and maintenance.

- Corridor Management Permit System Renewal – the redevelopment of the current Corridor Management Permit system to the .NET platform for web-enabled third-party permitting and addition of a mapping interface. Current technology is prohibitive in terms of web-enablement.

- Commercial Vehicle Operator Record (CVOR) Investment Commercial Vehicle Information System – to enable trend analysis and evaluation of program effectiveness.

- Electric Vehicle – Implement system to recognize/reward vehicle owners of current environmentally-friendly vehicle or those considering purchase or lease of.

- Enhanced Drivers Licence Card - to enhance the Ontario Drivers Licence with citizenship information, to allow the card to be used for cross-border identification.

- Environmental Management System (EMS) Development – replaces current EMS and develops improved application with greater functionality and enhanced user interface.

- Fleet Management Information System - to facilitate the implementation of an OPS-wide fleet management service offering in partnership with MTO and IFIS.

- Geographical Positioning System (GPS) Data Reporting System – to develop a reporting system for externally provided GPS data from Turnpike Global Technologies.

- HESB Intranet Technology Solutions (HITS) Stabilization – consists of assessment, recommendation and implementation of changes for this business critical aging infrastructure to stabilize and increase capacity where possible. The goal is to continue hosting applications until the new .NET Service Delivery Environment is available and application transition has occurred.

- Highway Costing (HiCo) Mass Haul Integration – a replacement of an obsolete application used by the Provincial Highways estimating staff to calculate the unit cost of trucking earth and rock materials on capital contracts construction sites.

- Highway Infrastructure Business Solutions (HIBS) – this is the restructured former Provincial Highways Information System (PHIMS) project with the same components in scope; Traffic Volume System, Location Referencing / Mapping,

Asset Management (Inventory/Deficiencies/Corridor Investment Plans), Data Integration, and Maintenance Program (Inventory Component).

- IBC Uninsured Vehicles - System changes required in support of Insurance Bureau of Canada (IBC) for uninsured vehicles.

- Information Product Pricing Strategy Implementation (IPPS) – Various ARIS (Authorized Requestor Information System) enhancements to support the new IPPS.

- Interim MAPS Strategy - represent ETC-RUSSB working towards the remediation plan for high risk applications. This includes the development of an application portfolio assessment framework.

- Location Referencing – PHM Integration – provides modifications to a number of PHM systems to upgrade the location referencing and mapping tools.

- Lotus Notes Upgrade – will upgrade the current legacy Lotus Notes platform to ensure the ongoing stability and integrity of the environment for the CTIS, IMS, RAQS and CBMS until they are able to be converted or replaced.

- MTO Intranet Migration – migrate the existing MTO intranet website to a Microsoft Office SharePoint Server (MOSS) 2007 to better facilitate content editing and ongoing support and maintenance.

- New Guelph Data Centre – this initiative will meet government current and future information technology requirements including replacement/relocation of existing computer data centre to the new Guelph Data Centre.

- OPS .NET Service Delivery Environment – plans on partnering with CYSSC, the .NET CoE and ITS to develop and implement a common service for delivering and hosting .NET applications OPS-wide.

- Pavement Management System (PMS) - HIBS Integration – the integration of the Pavement Management System with Highway Infrastructure Business Solution (HIBS).

- Payment Card Industry Compliance - outstanding and deferred issues resolution (Payment Card Industry, Certification conditional approval items etc.), including Privacy Impact Assessment (PIA) and Threat and Risk Assessment (TRA) recommendations.

- Photo Comparison Technology Implementation – to reduce fraud and duplicate driver licenses under different names, eliminate potential for ID theft.

- PHM Data Management – the development of a Data Management set of policies and procedures to ensure that data is contributing positively and effectively to meeting Provincial Highways Management business objectives.

- PRESTO System Project (Fare Card) – a project to implement a common transit fare collection system in the Greater Toronto Area (GTA). The system will be an important enabler of public transit integration in the GTA and will facilitate seamless travel across the GTA for public transit passengers.

- Property Information Management System Renewal - the Property function is currently supported by a computer application which is outdated in terms of technology and functionality and requires full redevelopment and replacement. The Land Management Database System application was built over 10 years ago and the business of Property Management has changed; systems functions must also now be changed accordingly.

- Relaunch Graphic Licence Plate Program – a request for an approach to change from a bundle of Work Requisitions to a phased project management approach.

- Revenue Refund Payment System (RRPS) Migration – to re-engineer and improve the business workflow and associated Integrated Financial Information System (IFIS) interface, and migrate the existing legacy mainframe-based system to a .NET platform to better facilitate growth and long-term support and maintenance.

- RUS Modernization – to provide a modern and flexible infrastructure for business modernization and future delivery of MTO programs.

- Senior Commercial Drivers Licence Downgrade Policy Change - to implement system changes to support Commercial License Renewals for Senior Drivers.

- Senior Management Team (SMT) Dashboard Enhancements 2009-10 - this phase of development for the SMT Dashboard includes a migration to SharePoint 2007 and various functional enhancements.

- Taking the Lead – ServiceOntario Integrated Workstation (IW) – Printer Consolidation – provide support to Service Ontario in the workstation integration of License and Control System (LCS) and Client Registration System (CRS) by replacing dot matrix and laser printers.

- Taking the Lead – ServiceOntario Valtag Program Modernization – implement system changes along with marketing schemes to shift 80% of Valtag renewals from traditional channels to the web over a 5-year span.

- Tax Harmonization – the harmonization of GST and PST into one tax for all related Cluster applications.

- Transportation Map Interface – Title Records - will complete the design, development and implementation of a digital system for storage, maintenance and dissemination of Title Record Information.

- Servers Replacement – the replacement of approximately 280 regional file and print servers that are past their useful life of five years old or older.

- Vehicle Registration System (VRS) to Bank Reconciliation (VBR) Migration – to migrate the existing VBR application from its legacy platform to a .NET platform to improve functionality, efficiency of operation and long-term support and maintenance.

. **Ministry of Transportation – Presto Project**

- The GTA fare system will enable seamless travel across the GTA. It will provide one card (farecard) that customers can use to ride on any GTA transit vehicle without tickets, passes or exact cash fare. It will work on all participating transit services. It will let riders pay any fare or charge including transfers, special fares (e.g. children, students, seniors) and honour frequent rider discounts.

- The farecard is a plastic card embedded with a computer chip. Its common currency will be an e-purse (the electronic equivalent of cash). A Central System will link all municipal systems, handling all financial information. It will track farecard transactions, store e-purse values in separate bank accounts, do fiscal reconciliations every day with each transit service and provide other customer and transit provider services. Separate municipal systems will interface with both equipment and software. The TTC System will handle bus, subway, light rail trains, and streetcar services. A GO Transit System will manage fares-by-distance and will provide the same functions as the Municipal Systems and may be used for verifying proof of payment.

- The project office is currently working on finalizing the specifications for each of the main components of the system. More information is available at http://www.prestocard.ca.

- Under the leadership of The Ontario Ministry of Transportation (MTO), the design of the main system components is now complete. The system will be implemented through a single, joint procurement and contract for all transit services except the TTC. MTO will issue and execute the contract.

  - April 2005 – Short list of pre-qualified vendors was selected through a Request for Qualifications process. The four vendors were invited to make RFP submissions for the design, build, delivery and operation of the system(s).

  - October 2006 – Accenture was awarded a 10 year contract, worth $250 million including sales taxes, to design, develop and implement a seamless fare card system for public transit in the GTA. Thales Transportation Systems will provide all of the front-end equipment. TELUS provides infrastructure support including network and hosting services. IBI Group provided implementation and transition services and Giesecke and Devrient were responsible for fare card production and distribution. Accenture managed the project, and provide system integration services.

- The PRESTO card is being rolled out in four stages across the GTA and Ottawa:
  - One: Field Trials, GO Transit's Oakville and Bronte rail stations as well as Union Station, Fall 2009.
  - Two: Complete Lakeshore West GO Rail and Oakville and Burlington Transit by Winter 2010.
  - Three: Milton and Georgetown GO Rail lines and associated GO Bus routes, Brampton Transit, Mississauga Transit and TTC Islington Subway Station by Summer 2010. Barrie, Stouffville and Richmond Hill GO Rail and Associated GO Bus routes, Hamilton Street Railway, York Region Transit and TTC Subway stations Finch, Don Mills and Downsview by Fall 2010. Lakeshore East GO Rail line and associated GO Bus routes and Durham Region Transit by Winter 2011.
  - Four: Ottawa's OC Transpo System by Winter 2011.

- The Ministry of Transportation is currently leading this initiative, in partnership with each of the GTA Transit Agencies and OC Transpo in Ottawa.

d. Ministry of Labour

- Dispute Resolution Services (DRS) Renewal Project - this initiative will deliver the solution necessary to replace the existing applications with current and aligned technology and generate opportunities for integration with other MOL technology initiatives.

- Ontario Labour Relations Board (OLRB) Renewal Project - this initiative will deliver the solution necessary to replace the existing applications with current and aligned technology and generate opportunities for integration with other MOL technology initiatives.

- Employment Standards Information System (ESIS) Final Phases - the project will extend the functionality of the existing application to better support the business and will align / integrate with similar information and application initiatives across the MOL.

- OHS Inspector Notebook (INB) Renewal Project – the Occupational Health and Safety (OHS) Program provides compliance monitoring and enforcement of OHS legislation and related regulations. This project will deliver the solution necessary to replace the existing INB application with current and aligned technology, and generate opportunities for integration with other MOL technology initiatives.

- Single Business Number – this initiative will match the Ministry of Labour registered organizations to an existing Canada Revenue Agency business number.

e. Ministry of Economic Development and Trade

- Electronic Customer Relationship Management (eCRM) – this initiative will assist the ministries in developing an integrated business model to support a Customer Centric approach.

- Enterprise Grant and Loan Management System (EGLM) - this application will provide an end-to-end solution to manage grants, that includes electronic applications, adjudication, awards and financial management.

- Geographic Information System Phases 1and2 - the scope of the project is to create a new Investment Attraction Tool that would allow ministry consultants and potential investors to review multiple data sets for Ontario and its regions through one, easy to navigate, on-line function on the International Trade and Investment Division's website.

f. Ministry of Research and Innovation

- Electronic Customer Relationship Management (eCRM) – this initiative will assist the ministries in developing an integrated business model to support a Customer Centric approach.

- Enterprise Grants Management System (eGMS) - this application will provide an end-to-end solution to manage grants, that includes electronic applications, adjudication, awards and financial management.

g. Ministry of Consumer Services

- On-line Registration – this project will enable the ministry to provide an efficient and effective method for outside business' to register on-line with the ministry.

5. BUSINESS OPPORTUNITIES

Exhibit ETC.6 summarizes the business opportunities in the cluster.

- The RUS Modernization project is expected to issue RFP's for each of:
  - Project and Program Management
  - Systems Integrator and Solution Provider.
- The HIBS project is expected to issue RFP's for each of:
  - Location Management system
  - Mapping services
  - Investment panning and optimization.
- The implementation of the new Accessibility Guidelines will provide many opportunities.
- The Guelph Data Centre Transition will require many resources during the transition of 119 ETC applications to the new data centre facility.
- Dispute Resolution Services (DRS) Renewal Project - this initiative will deliver the solution necessary to replace the existing applications with current and aligned technology and generate opportunities for integration with other MOL technology initiatives.
- The Major Applications Portfolio Strategy will provide many opportunities. 21 of the highest at risk applications exist within the cluster.
- Capital Improvement Delivery (CID) – .Net Conversion – the conversion of the system used to manage the delivery of the highway capital program to a .NET platform.
- Employment Standards Information System (ESIS) Final Phases - enables the public to submit labour claims via multiple channels: web, mail, fax, and over the counter. The project will extend the functionality of the existing application to better support the business and will align / integrate with similar information and application initiatives across the MOL.
- Property Management System Renewal – Development of a system to support the management of Ministry properties.
- Approximately 280 regional file and print servers will be replaced.
- An Executive Dashboard system changes include migration to SharePoint 2007.

- Consulting services are required in specific niches including:
  - Expertise in new tools and techniques will be needed to assist in product evaluations for subsequent effective use.
  - Web services will create ongoing opportunities.
  - Information Management expertise will be needed to assist in relating user requirements to system specification.
  - Architecture standards and methodology assistance is required for solution development projects.
  - A broad range of web products and expertise will be needed.
  - Service management best practices.

EXHIBIT ETC.6

BUSINESS OPPORTUNITIES

- The RUS Modernization project is expected to issue RFP's for each of:
  - Project and Program Management
  - Systems Integrator and Solution Provider.
- The HIBS project is expected to issue RFP's for each of:
  - Location Management system
  - Mapping services
  - Investment planning and optimization.
- The implementation of the new Accessibility Guidelines will provide many opportunities.
- The Guelph Data Centre Transition will require many resources during the transition of 119 ETC applications to the new data centre facility.
- DRS Renewal Project - this initiative will deliver the solution necessary to replace the existing applications with current and aligned technology and generate opportunities for integration with other MOL technology initiatives.

BUSINESS OPPORTUNITIES (Continued)

- MAPS will provide many opportunities. 21 of the highest at risk applications exist within the cluster.
- CID – .Net Conversion – the conversion of the system used to manage the delivery of the highway capital program to a .NET platform.
- ESIS Final Phases - enables the public to submit labour claims via multiple channels: web, mail, fax, and over the counter. The project will extend the functionality of the existing application to better support the business and will align / integrate with similar information and application initiatives across the MOL.
- Property Management System Renewal – Development of a system to support the management of Ministry properties.
- Approximately 280 regional file and print servers will be replaced.
- Executive Dashboard system changes include migration to SharePoint 2007.
- Consulting services are required in specific niches.