



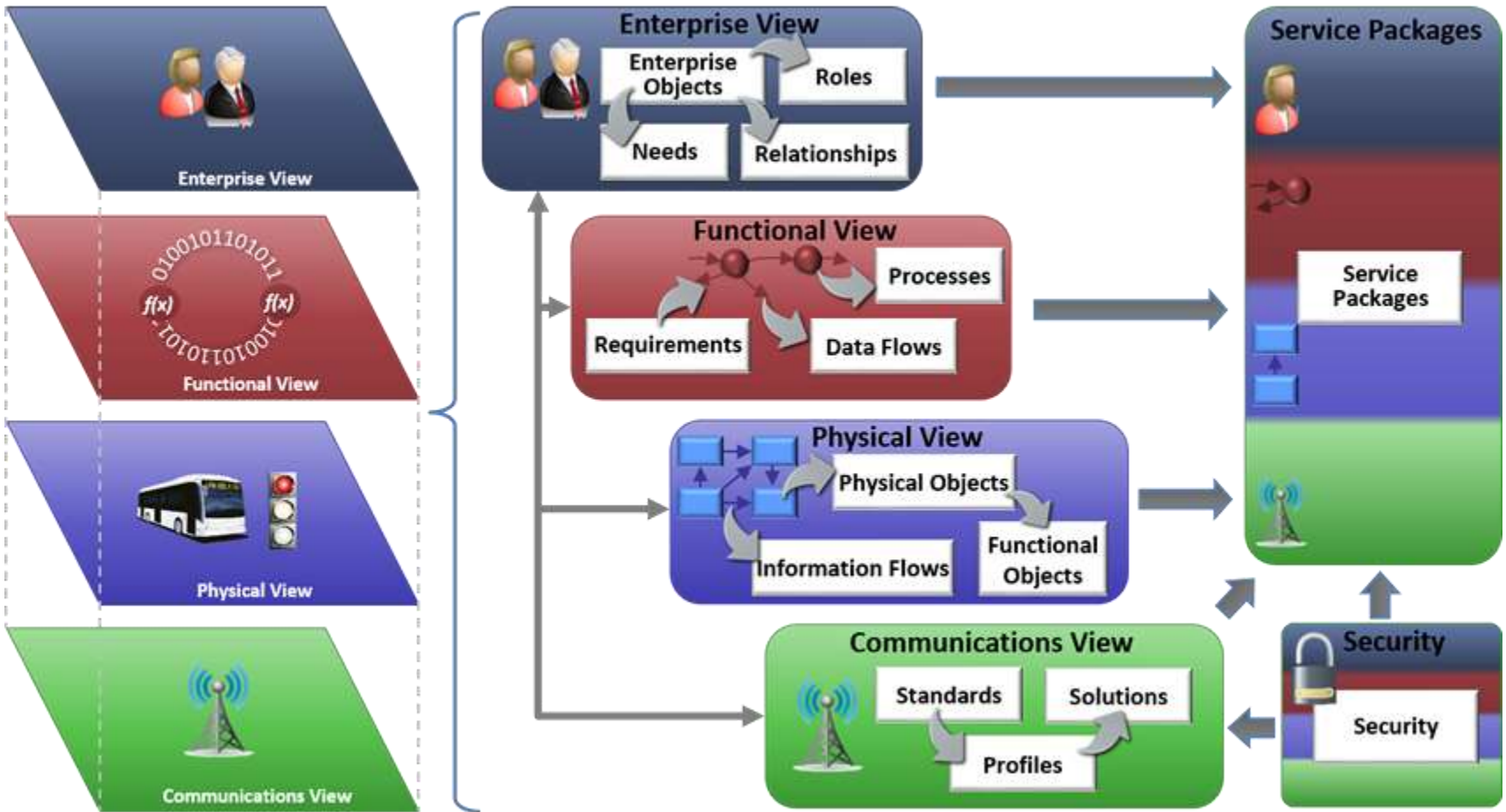
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# **ITS for Life**

**ITS Canada ACGM**

**Stephen Erwin, P.Eng.  
Head, Intelligent Transportation Systems  
June 19, 2018**



### ITS SERVICE BOOK

## TRAVEL TIME SYSTEMS

**Purpose:** Travel Time Systems (TTS) provide an additional level of travel time information to drivers, allowing them to make more informed travel decisions and avoid congestion. The information of travel time systems can be considered as follows:

- **Driver awareness:** Give drivers more choice planning alternatives.
- **Operational information:** Provide information on current traffic conditions.
- **Travel time:** Allow drivers to make more informed travel decisions based on current traffic conditions.

**Considerations for Use:**

- Travel time systems can be used to provide information on travel time to destinations based on current traffic conditions.
- There is no standard methodology for determining travel time.
- The accuracy of travel time information is dependent on the quality of the data used.

### ITS SERVICE BOOK

## INCIDENT MANAGEMENT

**Purpose:** Traffic Incident Management (TIM) refers to strategies to identify and respond to congested areas affecting safety and mobility along a roadway.

The objectives of Incident Management are:

- Improve incident response and clearing through technology based automation.
- Improve safety.
- Reduce secondary congestion.
- Reduce congestion build-up.

The Federal Highway Administration (FHWA) and the Federal Highway Administration (FHWA) Traffic Incident Management (TIM) Strategy and Implementation:

1. Detection and Verification
2. Traffic Management and Traffic Control
3. Clearance
4. Scene Management and Traffic Control
5. Road Clearance and Recovery

The ITS Architecture of TIM will be provided in the next section of this book.



### ITS SERVICE BOOK

## QUEUE WARNING SYSTEMS FOR WORK ZONES

**Purpose:** Queue Warning Systems (QWS) are used to monitor and provide drivers of the presence of a vehicle queue in advance. QWS can be used to provide information to drivers about the location and length of a queue. QWS can also be used to provide information to drivers about the location and length of a queue. QWS can also be used to provide information to drivers about the location and length of a queue.

The objectives of a QWS are to monitor and provide drivers of the presence of a vehicle queue in advance. QWS can be used to provide information to drivers about the location and length of a queue. QWS can also be used to provide information to drivers about the location and length of a queue.

**Improved safety:** Queue warning systems can be used to provide information to drivers about the location and length of a queue. QWS can also be used to provide information to drivers about the location and length of a queue.

**Improved mobility:** Queue warning systems can be used to provide information to drivers about the location and length of a queue. QWS can also be used to provide information to drivers about the location and length of a queue.



### ITS SERVICE BOOK


## SMART WORK ZONES

**Purpose:** Smart Work Zones (SWZ) are used to provide information to drivers about the location and length of a queue. SWZ can be used to provide information to drivers about the location and length of a queue. SWZ can also be used to provide information to drivers about the location and length of a queue.

The objectives of SWZ are to monitor and provide drivers of the presence of a vehicle queue in advance. SWZ can be used to provide information to drivers about the location and length of a queue. SWZ can also be used to provide information to drivers about the location and length of a queue.

**Improved safety:** Smart work zones can be used to provide information to drivers about the location and length of a queue. SWZ can also be used to provide information to drivers about the location and length of a queue.

**Improved mobility:** Smart work zones can be used to provide information to drivers about the location and length of a queue. SWZ can also be used to provide information to drivers about the location and length of a queue.





Ontario 511 Secure https://511on.ca

Apps RealPlayer Urban Legends Ref Microsoft Web Slice Gallery Imported From IE

**511 Ontario** Traveller Information All Regions English Register Login

Home Newsroom Text Report My 511 Truck & Bus Info Links About

**ALERTS** June 16th at 10 p.m. to 8 a.m. – Full closure of Highway 401 for Wales Road Bridge Demolition, Ingleside

**MY ROUTES** **EMERGENCY INFO** **NEWS**

A Address

B Address

Reset

[Learn how to use the new Ontario 511](#)

**MY CAMERAS**

Please login to customize My Cameras.

Highway 404 near Bloomington Rd  
Looking West

2018-06-14 20:30:32 EST

Map Legend

- Traffic Speeds
- Incidents
- Cameras
- Road Conditions
- Weather Radar
- Weather
- Forecasted Driving Conditions
- Construction & Roadwork
  - Construction
  - Current Roadwork
  - Future Roadwork
- Hubs
- Services
- Truck & Bus Info

9:00 PM 2018-06-14



## Persona



Domenic Blackburn

### User Profile:

- Single father of two school age children
- Commutes daily from Hamilton to Toronto for work
- Children are involved in sports and rely on him for transportation



# Cognitive Approach

- Personalized
  - Users create profile to identify common routes and travel times
  - Machine learning - incorporate learning from previous user experiences
  - Uses natural language
- Pulls information from users mobile device
  - Connects to user's calendar appointments
  - Location and directionality
  - Speed
- Integrates multiple data sets
  - Weather conditions
  - Crowdsourced information
  - Public transit – schedules, delays, fares
  - Parking lot vacancies
  - Construction
  - Travel delays
  - Traffic incidents
  - Road Conditions



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**Thank you**

**Stephen Erwin, P.Eng.  
Head, Intelligent Transportation Systems  
(416) 235-4676  
Stephen.Erwin@ontario.ca**