Metrolinx
Locomotive Voice/Video Recording System Overview

BACKGROUND PREPARED FOR
SENATE STANDING COMMITTEE ON TRANSPORT & COMMUNICATIONS

FEBRUARY 2018
GO Transit
- 75 locomotives and 725 bilevel passenger coaches
- Each train set usually consists of 1 locomotive and 6, 10 or 12 coaches
- Run in what is termed “push-pull” operation:
  - Locomotive is always on eastern or southern end of train set
  - The passenger coach at the opposite end of train set from the locomotive is a specially modified “cab car” that includes an operator cabin
  - When heading one direction, locomotive pulls coaches; crew controls from locomotive cab
  - When heading in other direction, locomotive pushes coaches; crew controls locomotive remotely from the cab car

UP Express
- 18 diesel multiple unit (DMU) railcars
- Each train set consists of 2-3 cars
- Each car is self-powered and has an operator cab
- Trains assembled such that there is a cab facing outwards at both ends, and run bidirectionally
CAMERA LAYOUT

Four camera set-up with two microphones allowing capture of 95% of the cab area
CAMERA VIEWS OF LVVR CREW CAB
SAMPLE IMAGES

Front Facing Camera

Engineer/Helper Camera
DATA SECURITY

• Audio/video kept for 72 hrs, after which it is overwritten by new recordings. (FIFO)
• First level password allows access to front facing video only (no audio)
• Access to Internal cabin audio and video files are secured by a second level password available only for accident investigation
• If data falls in the wrong hands, it cannot be viewed without the proprietary software. (*.VL file extension). Viewing software is not commercially available.