

Transit Master (iBus) Application Audit

Transportation & Works Department
MiWay – Transit Division

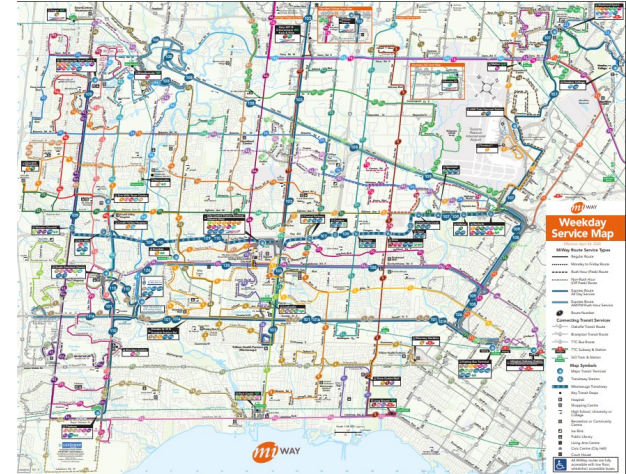
Vandana Waghela CIA, CISA, PMP

Josie Wang CPA, CIA, CFE

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- MiWay is Ontario's 3rd largest municipal transit service provider
- Fleet comprised of 500 hybrid electric and clean diesel buses
- Each bus is equipped with an Integrated Vehicle Logical Unit (IVLU) device
- Annual maintenance cost of the Transit Master (iBus) application is ~\$900,000
- Approximately 1,200 users of the system
- Managed by the Transit Business Systems Team



In-Scope Objectives

- Change management control processes are established and adhered to
- Transit Master (iBus) application gathers and retains data
- Transit Master (iBus) application effectively communicates information to buses
- Communication of technology issues align with divisional procedures
- Business capacity and resources are sufficient to support the Transit Master (iBus) application

Out of Scope

- Scheduling and planning of bus routes
- Integration with GTFS/GTFS-RT server and other intelligent transportation system components
- Maintenance of buses
- Compliance with legislation (e.g. Ministry of Transportation [MTO] bus maintenance requirements, Accessibility for Ontarians with Disabilities Act [AODA], etc.)

Working well

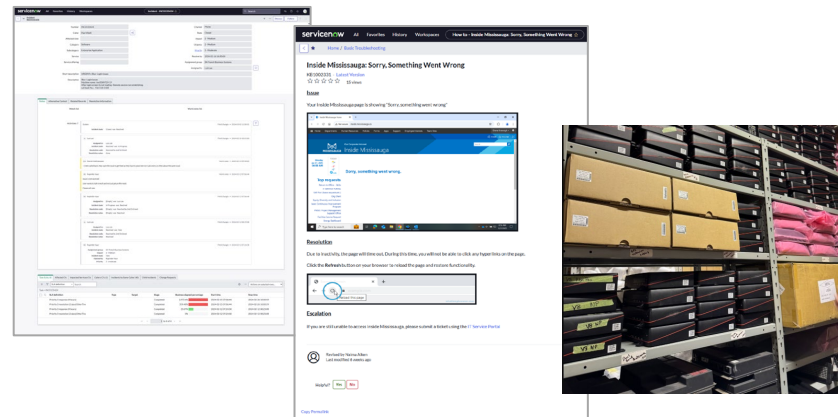
- ✓ Change management processes are generally well established
- ✓ Most processes appropriately documented
- ✓ Staff roles and responsibilities are defined
- ✓ Real-time data transmitted between the bus and application
- ✓ Data backups and contingency plans in place



Bus-in-a-box

Opportunities for improvement

- Improve record-keeping of incidents
- Develop knowledge-base material for first-tier support staff
- Maintain up-to-date information for IVLU devices

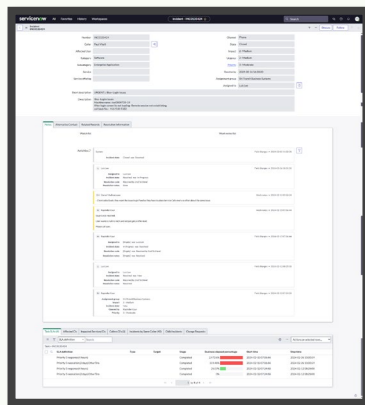


Observations

- Best practices established to log incidents
- Best practices not followed consistently
- Inconsistencies were not widespread
- Missing, inadequate or incorrect information can misrepresent nature of incidents

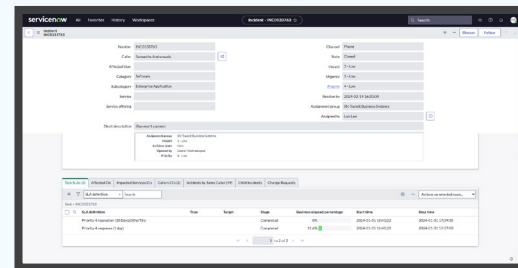
Recommendation

- Refresher training be provided to the team to follow established best practices



Management Comments

- Team will arrange further training sessions focused on following established best practices

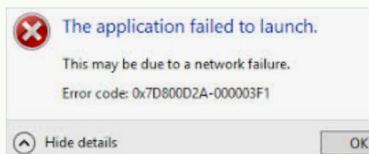


Observations

- First-tier support staff log incidents and assign ticket to appropriate team
- Approximately 30% of incidents were due to issues with launching application
- Providing knowledge-base material for recurring issues can help reduce resolution times and improve client satisfaction

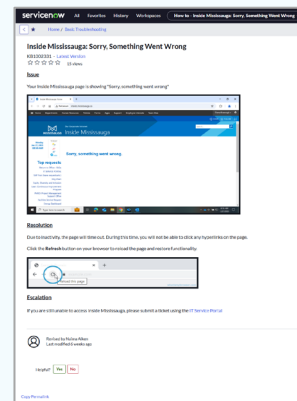
Recommendations

- Develop knowledge-base material, detailing troubleshooting techniques for common issues (e.g. launching the Transit Master [iBus] application)
- Share knowledge-base material with first-tier support staff



Management Comments

- Team will develop and share knowledge-base material on common/recurring issues

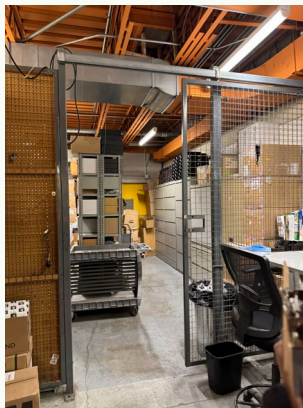


Observations

- Processes in place for inventory management and maintenance of IVLUs
- Bus inspections included physical security of IVLU devices
- Data discrepancies noted
- Data integrity issues can lead to operational inefficiencies

Recommendation

- Update asset information and accurately manage it in the Enterprise Asset Management application

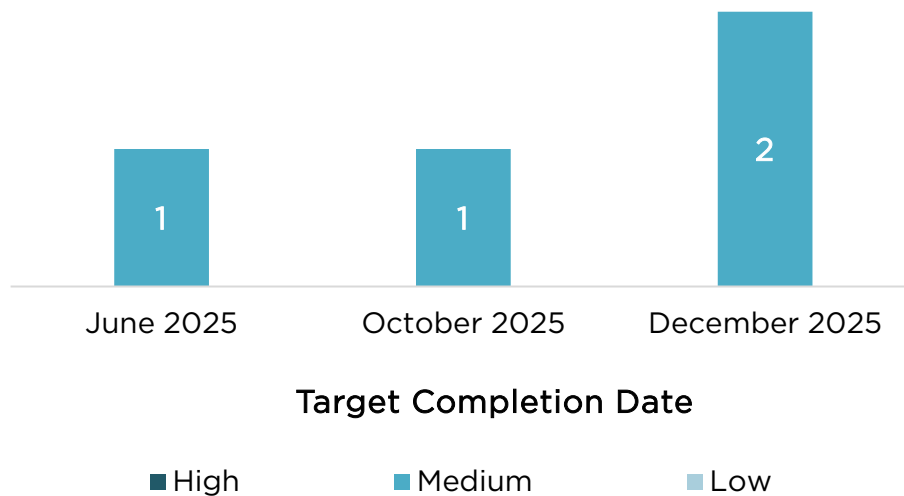


Management Comments

- IVLU asset information will be updated to ensure it accurately reflects the number of current active buses



Recommendations By Priority and Target Completion Date



Thank you