Obiee Etleb P.Eng

OBIEE@ETLEB.COM



B.A.Sc. Civil Engineering - University of Waterloo

PROFESSIONAL EXPERIENCE

Metrolinx Autonomous Track Testing Inspection (ATTI) Manager - Track AM&M

Toronto, Canada 04/2025 - Present

- **Program Leadership:** Lead the delivery of \$23 million <u>autonomous regulatory testing</u> and inspection services across the GO Transit rail network, ensuring schedule compliance, safety, data quality and regulatory adherence.
- Technical Oversight: Provide engineering expertise in track geometry, rail wear, tie and ballast condition, and longitudinal restraint assessments to inform strategic asset investment decisions.
- Vendor & Contract Management: Oversee vendor performance and enforce contract compliance, leading procurement activities from technical specification development through to award recommendations.
- **Risk & Compliance:** Serve as the accountable party for infrastructure compliance under ATTI services; identify risks and manage corrective action plans to meet regulatory standards and safety requirements.
- **Data-Driven Maintenance:** Monitor and validate inspection data quality, using asset condition trends to recommend localized or system-wide State of Good Repair (SOGR) programs and preventative maintenance strategies.
- Stakeholder Collaboration: Coordinate with Network Operations Centre, Track and Fleet Maintenance Delivery, Rail Service Design, and external rail partners to deliver testing programs with minimal operational disruption.
- Standards & Innovation: Contribute to the development of <u>Metrolinx Track Standards</u>, apply lessons learned, and integrate new technologies and processes to improve inspection accuracy and program efficiency.
- Incident Response & Investigation: Lead or support incident investigations and track slow order triage, implementing strategies that enhance network safety, reduce operational risk, and improve on-time performance.
- Budget & Strategic Planning: Manage OPEX budgets and contribute to long-term capital planning, aligning autonomous inspection services with corporate goals and future infrastructure needs.
- **Leadership & Team Development:** Direct cross-functional teams, define individual development goals, and provide coaching to drive performance, ensure high-quality service delivery, and foster a strong safety-focused culture.

Metrolinx Engineering Lead – Track Asset Management & Maintenance (AM&M)

Toronto, Canada 10/2024 - 04/2025

- Asset Management: Oversee track assets valued at \$3.8 billion using Hexagon EAM, ensuring data accuracy and implementing SoGR practices and advanced technology to ensure assets are safe, reliable, and fit for purpose.
- Risk & Failure Analysis: Led risk register initiatives and resolved track compliance issues using RCM, RAM modelling, and FMEA to proactively identify risks, mitigate failures, and enhance system reliability.
- Strategic Analysis: Partnered with <u>Global Rail Group</u> to deliver a grinding and milling cost-benefit analysis with detailed intervention locations by phase, resulting in approval of a \$16M project to mitigate accelerated rail wear.
- Data Quality Review: Responsible for reviewing data from <u>Ballast GPR</u>, <u>LORAM Aurora tie condition</u>, and rail surface surveys, identifying data gaps and calibration issues.
- Cost Efficiencies: Spearheaded the implementation of Asset Handover automation, streamlining documentation and communication workflows, reducing manual processing time, and sustainably improving project closeout accuracy. This solution is projected to save over \$300,000 annually within the Track business unit. Additionally, through indepth risk based root-cause analysis, identified a more cost-effective alternative for an approved \$6 million project by acquiring a \$150,000 seized clip extractor from Australia, ultimately saving Ontario taxpayers over \$5.5 million.

Metrolinx Reliability and Assurance Specialist – Track AM&M

Toronto, Canada 09/2022 - 10/2024

- On-Site Validation: Oversaw and validated scheduled calibration and maintenance activities for <u>track geometry</u> <u>measurement system (TGMS)</u>, ensuring measured gauge, crosslevel, alignment, profile, curvature, warp is accurate.
- Data Analysis and Reporting: Applied advanced data modeling techniques to analyze and report on key metrics, including the Track Quality, Rail Flaw, Rail Wear, Rail Cant, Ties and Ballast Fouling Indexes.
- Mentoring and Leadership: Onboarded an analyst and fostered a culture of continuous improvement by mentoring on best practices in Track Maintenance, RAMS, data analytics, ensuring technical excellence in project execution.

- Data Digitization and Predictive Maintenance: Utilized Python and Power Automate to digitize hundreds of strip chart PDFs on track geometry, rail wear, rail cant, defective ties, and ballast conditions reducing review time by over 9%. Developed predictive maintenance models using Python and Excel VBA, supporting a 10-year SoGR plan for track.
- Process Automation: Led the automation of the Site Observation Tracker and Asset Handover through Power Apps and Power BI, significantly enhancing efficiency and generating actionable insights.
- Strategic Planning and Funding: Spearheaded the development of the annual Asset Management Plan for the Track business unit, successfully securing over \$125 million in funding from the Investment Panel (IP).

PNR Railworks Toronto, Canada Project Engineer - Track and Signals 08/2019 - 09/2022

- Provided technical expertise to contract development and the implementation of capital rehabilitation programs across both passenger and freight corridors, ensuring alignment with engineering standards and asset needs.
- Inspect track and signal work completed by contractors and approve track conditions for safe revenue service.
- Complete daily tasks while consistently meeting or exceeding corporate targets for safety, quality, and profitability.
- Ensured all field personnel fully adhered to engineering instructions for inspections, maintenance, and construction, in accordance with CN Engineering Standards, GO Transit Track Standards, and Transport Canada regulations.
- Serving as the main liaison between PNR Engineering and Alstom/WSP Engineering, participating in industry and company workshops, chairing engineering/quality weekly meetings, and presenting new process flows to client.
- Developed detailed work plans and track and signal engineering drawings to enhance operational efficiency and support GO Transit's service reliability and customer satisfaction goals.
- Authored several client-accepted technical manuals including Fiber Optic Maintenance and Concrete Mix Design

Toronto, Canada **Parsons Corporation** Rail and Transit Design Engineer 06/2018 - 08/2019

Projects: Several GO Station Design Upgrades RER, Metrolinx Regional Express Rail Signaling Upgrades

- Designed multiple LRT alignment options to connect future Pearson Airport transportation hub to Toronto subway.
- Produced drawings displaying alignments and profile options, station sites to present to the public.

Curiato Inc Waterloo, Canada 11/2015 - 10/2019 Lead Production Manager/Project Engineer

Project: Flexible Printed Circuit Board Production

Designed and 3d-printed prototype electrical coupling module to connect 18 sensor boards used to collect patient data, after several design iterations I oversaw the overseas production and delivery of approximately 5000 modules.

Parsons Corporation Markham, Canada 09/2017 - 12/2017 & 04/2016 - 08/2016 Safety Engineer

- Presented weekly safety meetings to brief staff and clients of possible safety issues and present recent near misses.
- Drafted monthly reports summarizing safety issues and potential risks in current construction processes.

Professional experience prior to 2016 is available on my personal website or LinkedIn profile.

EDUCATION

09/2013 - 04/2018 Bachelor of Applied Science, Civil Engineering Waterloo, Canada University of Waterloo Railroad Track Engineering (CEE 409) 04/2025 - 10/2025 University of Chicago, Online Chicago, USA

CERTIFICATIONS

01/2025 Reliability Centered Maintenance - Reengineered (RCM-R) Toronto, Canada Conscious Asset Canadian Method on Risk Evaluation and Assessment (CMREA) for Railway Systems 06/2024 Toronto, Canada Reliability Centered Maintenance - Optimize Asset Management 06/2022

Udemy Course, Online

Python for Data Science and Machine Learning

05/2022 - 10/2023 Udemy Course, Online

Obiee Etleb, ATTI Manager - Track AM&M