

Map Manager: Real-Time Enrichment of Community-Generated Open Data to Drive Location Intelligence

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SUMMARY

The current process for updating the road network, crucial for locational referencing services, is hindered by inefficiencies and long timelines. Existing transport network mapping lacks the accuracy and coverage expected by the Department of Transport and Planning (DTP) and the public, resulting in significant risks to downstream applications. To meet the growing demands of asset and event management systems, a more dynamic and granular base network is needed. □ In response, the Map Manager project, launched in 2023, leverages OpenStreetMap (OSM) data, identified as the most detailed and updatable resource for Active Transport, walking, cycling, and Freight applications. The project addresses key bottlenecks in asset management and network operations by maintaining a unified OSM base network, facilitating the development of integrated applications that optimize data accuracy and coverage. □ By integrating smart mapping technology and a real-time map-matching engine, the project maximizes the potential of OSM data, enabling location-based operational intelligence. This supports performance metrics and smart devices, aligning with the strategic goal of ensuring simple, safe, and connected journeys. □ Map Manager enhances community-generated open data by validating and enriching it, then disseminating it back to the community through planned and unplanned disruptions and asset management. This continuous data improvement cycle enhances operational efficiency, responsiveness, and provides greater benefits to the community, freight sector, and emergency management. □

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