EXECUTIVE SUMMARY

Transit station bicycle parking is good public policy. This is clear in the scholarly literature and is reflected in the practices of leading transit agencies. Implemented appropriately, it supports active transportation and public transit, an attractive outcome in view of the links between transportation mode choices and urban congestion, pollution, sustainability, and public health.

This report develops recommendations for bicycle parking at Baseline Station in Ottawa. The station was selected in light of its clear potential to benefit from improved bicycling integration: it is highly accessible by bicycle paths to a large population base and its current parking facilities are well-used. Moreover, the station is set to become a vital hub for both buses and trains once a light rail extension planned for 2023 is completed. This transition represents a unique opportunity to reassess the potential for improved intermodal linkages.

Recommendations are based on a literature review of international precedents and best practices, as well as case studies focused on Bay Area Rapid Transit (BART) and Metrolinx's Eglinton Crosstown project, adjusted for the local context using data sourced from Statistics Canada and the City of Ottawa. Key recommendations of this report include:

• Bicycle Parking Quantity

Provide enough bicycle parking spaces to meet future demand. A conservative estimate of parking requirements in 2031 is 170 to 219 spaces, a projection which should be fine-tuned as planning for the light rail extension progresses. Provision for future expansion should be made at early stages of station design, and bicycle parking facilities should be routinely monitored to ensure spare capacity is available at all times.

Bicycle Parking Types

Offer an appropriate mix of parking types, recognizing the varying needs of users. An optimal composition for increasing ridership is roughly 22% for short-term facilities and 78% for long-term. Long-term parking should offer higher security by preventing public access to parked bicycles, for instance with bicycle cages or lockers.

• Bicycle Parking Security

Allay fears of bicycle theft and vandalism by following best practices in facility security. Good security reduces a significant psychological barrier for prospective bicycle access transit users, and avoids ridership attrition among users who become victims of theft. Best practices include the use of active or passive surveillance, good lighting, and proactive maintenance.

• Planning Context

The City of Ottawa should commit to a citywide target for increasing bicycle access ridership. Inaction has costs of its own. Bicycle access rates at major transit stations should be monitored and the success of investments in bicycle parking facilities evaluated. The City should also assess bicyclists' willingness to pay for long-term parking, and investigate the possibility of integrating payment with the existing Presto smart card system.

• Considerations and Supporting Measures

Evaluate the potential effect on bicycle access rates and parking needs of permitting bicycles to be brought on board light rail trains all day or only during off-peak hours. Ensure bicycle access routes are prioritized for clearance following a snowfall, and locate bicycle parking close to station entrances to minimize the distance bicyclists must walk after dismounting. Promote investments in improved bicycle parking facilities, potentially using empty advertising spaces on transit vehicles. Improve customer awareness of bicycle security through the placement of information posters or hang tags on parked bicycles, and post station area maps near station entrances indicating recommended bicycle routes and parking facilities.

Baseline Station has the potential to be a leading example of cycle-transit integration. Implementation of the report recommendations would be consistent with the existing policy direction of the City of Ottawa, and would increase transit ridership through bicycle access.

The introduction of LRT represents a rare opportunity to redesign Baseline Station with the bicycle infrastructure that supports the needs of today and tomorrow. Ottawa would be well-advised to seize it.