TRANSPORTATION ASSETS MANAGEMENT PLAN

The Town of Mahone Bay operates and maintains many assets for the delivery of public services and the benefit of residents. The Town's Asset Management Policy classifies these assets into nine categories and the Council's Strategic Plan prescribes the development of an Asset Management Plan for each.

This is the Town's Asset Management Plan for Transportation Assets and as such will provide a high-level introduction to the Town's transportation systems.

ASSET MANAGEMENT GOALS

- Coordinate transportation infrastructure rehabilitation with replacement of water, wastewater and stormwater lines
- Adapt transportation infrastructure to climate impacts (take advantage of transportation infrastructure renewal to improve associated stormwater management systems)
- Extend services to support new development
- Enhance infrastructure for cyclists and pedestrians
- Increase safety and accessibility

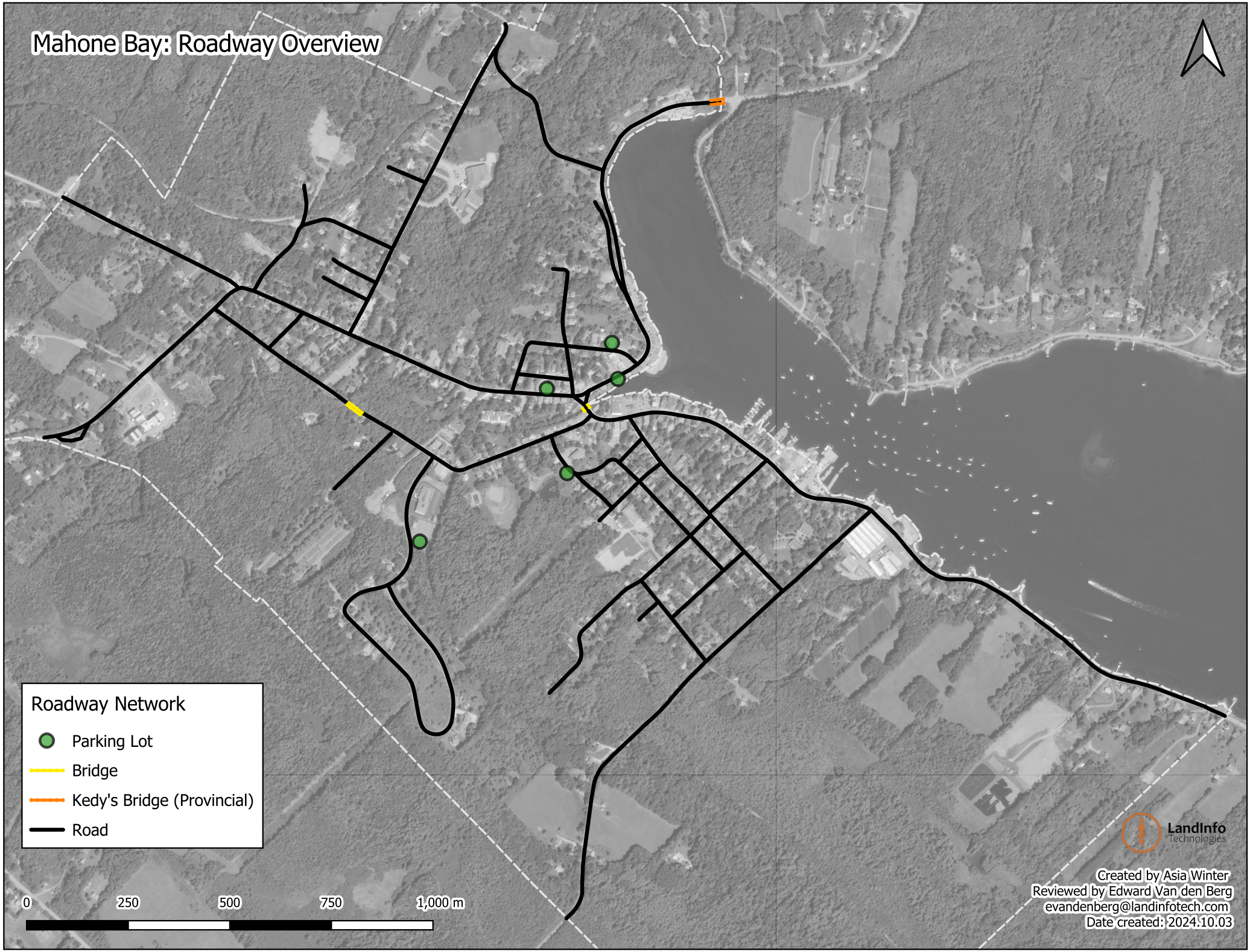
RISKS:

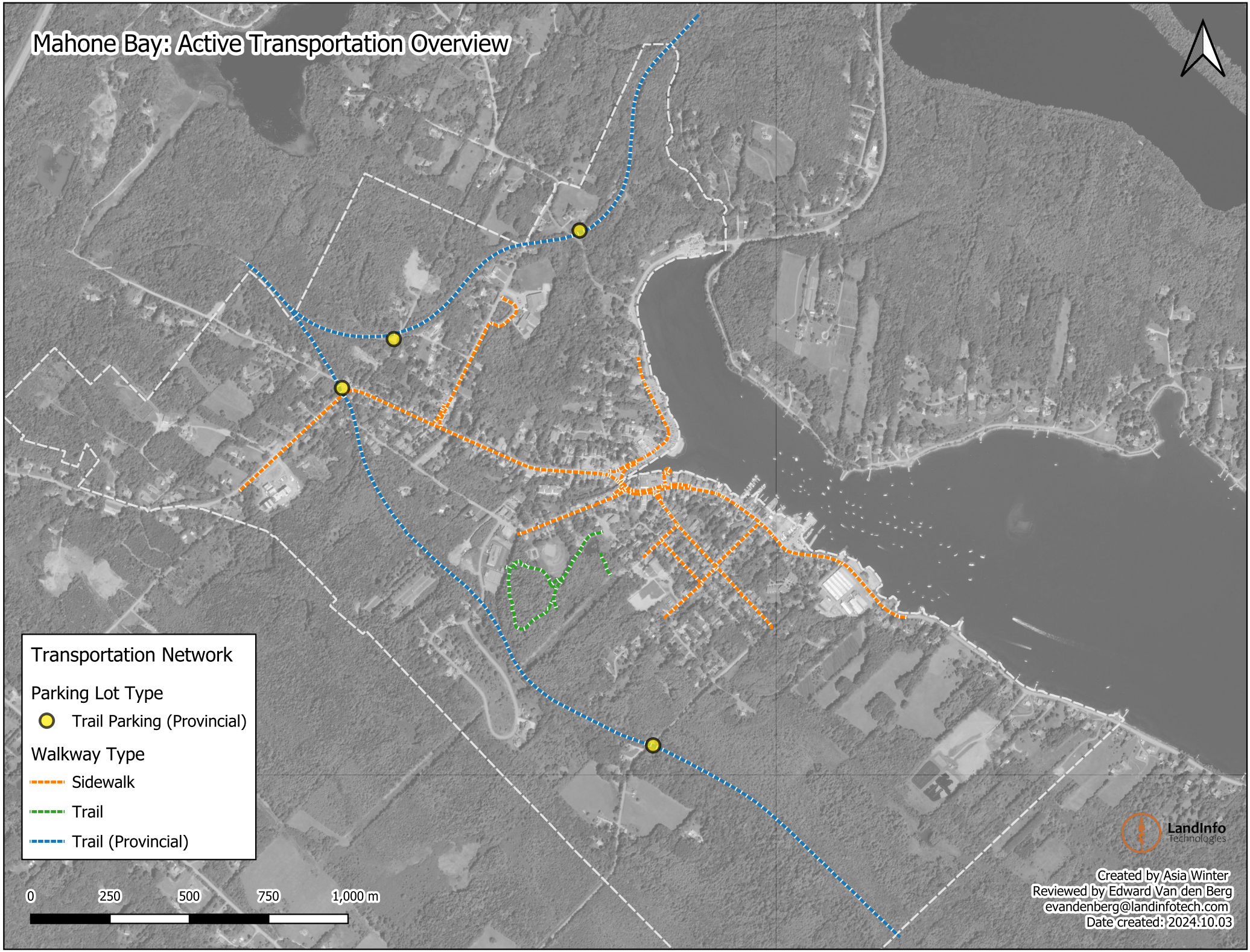
- Heavy rains and coastal erosion threatening infrastructure

The Public Works Department is responsible for the Town's transportation infrastructure. The Department operates in accordance with all federal and provincial regulations to ensure the safety of staff, the public and our natural environment. Department staff include:

Jonathan Uhlman – Manager of Public Works & Transportation
Tony Smith – Lead Public Works Technician
Duane Zwicker – Public Works Technician
Chris Sawler – Public Works Technician

The following map depicts the Town's Transportation Assets (the Town does not own the rail trail or associated parking lots but coordinates with local trail groups on their operation and maintenance):


Mahone Bay: Roadway Overview
Roadway Network
Parking Lot
Bridge
Kedy's Bridge (Provincial)
Road
0
250
500
750
1,000 m
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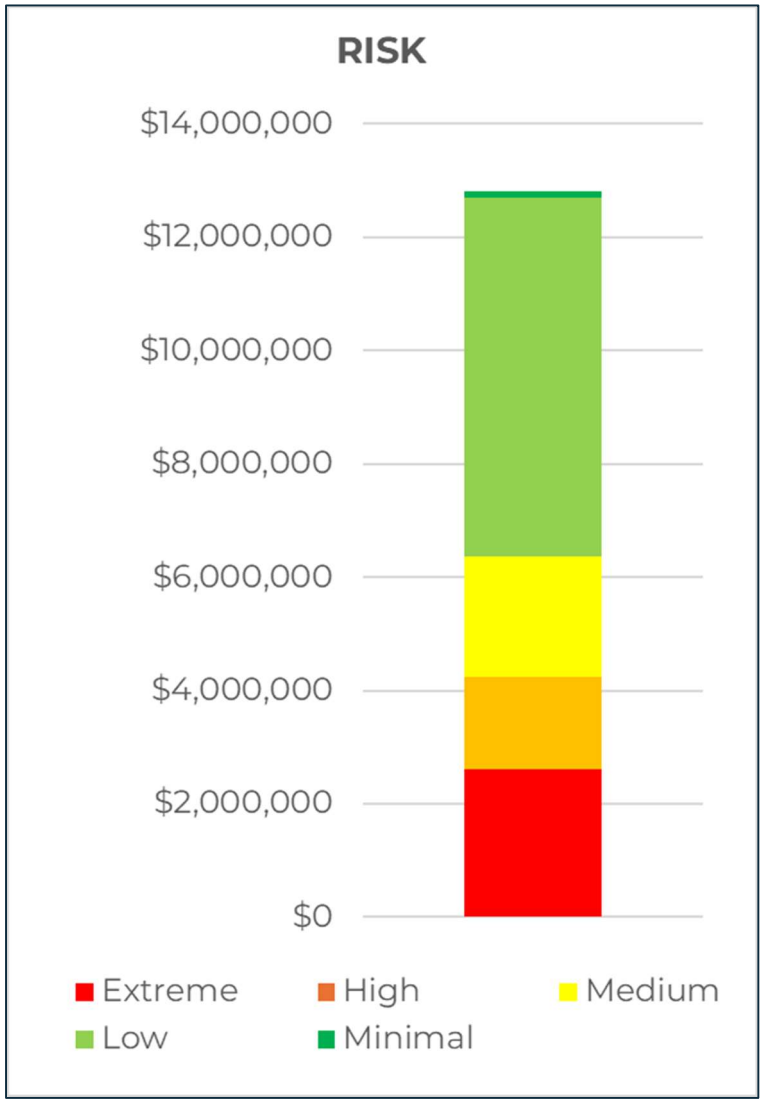

Mahone Bay: Active Transportation Overview
Transportation Network
Parking Lot Type
Trail Parking (Provincial)
Walkway Type
Sidewalk
Trail
Trail (Provincial)
0
250
500
750
1,000 m
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	Number of Features	Length (m)	Area (m sq)
Guard Rail	1	10	0
Pedestrian Walkway	116	11,934	23,418
Other	10	207	311
Sidewalk	91	5,381	10,416
Trail	15	6,345	12,691
Road Overlay	88	15,156	105,693
Collector	20	4,387	36,134
Local	68	10,770	69,559
Traffic Sign	334	0	0
Grand Total	**539**	**27,100**	**129,111**

	Renewal Cost	Annual Sustainable Investment
Guard Rail	$1,550	$39
Pedestrian Walkway	$2,126,461	$99,634
Other	$1,162,500	$58,125
Sidewalk	$668,918	$26,757
Trail	$295,043	$14,752
Road Overlay	$7,896,689	$341,950
Collector	$2,577,566	$128,878
Local	$5,319,123	$213,071
Traffic Sign	$232,965	$15,531
Grand Total	**$10,257,665**	**$457,154**

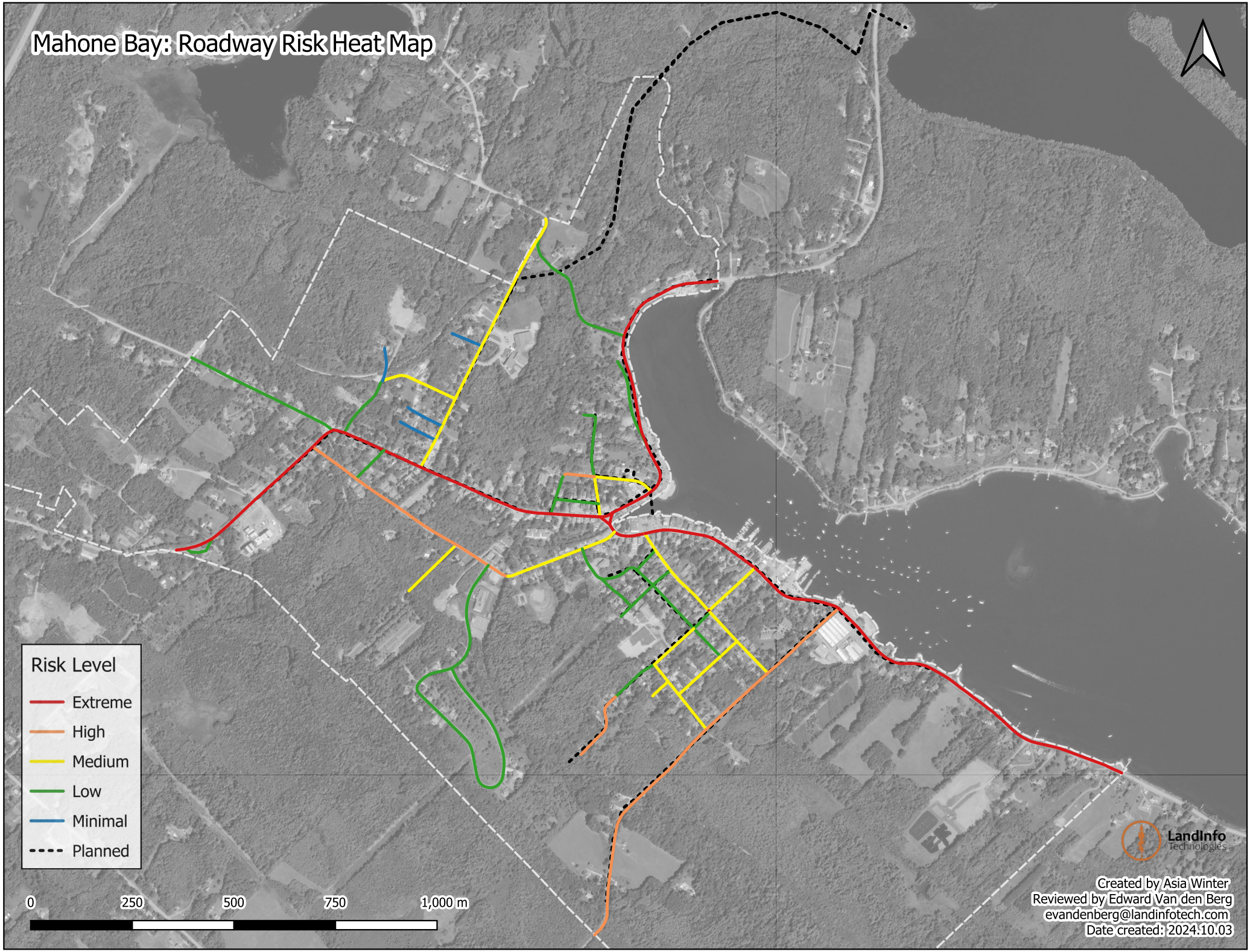
Making smart investments in our Transportation Assets to ensure they provide reliable service into the future requires understanding where investments are needed most. Our investment decisions are guided by the concept of Risk. In asset management planning Risk is a function of probability, the likelihood that an asset will fail to perform its expected role, and consequence, the impact such a failure would have on the delivery of services. Severity of impacts is generally determined by the number of customers impacted.

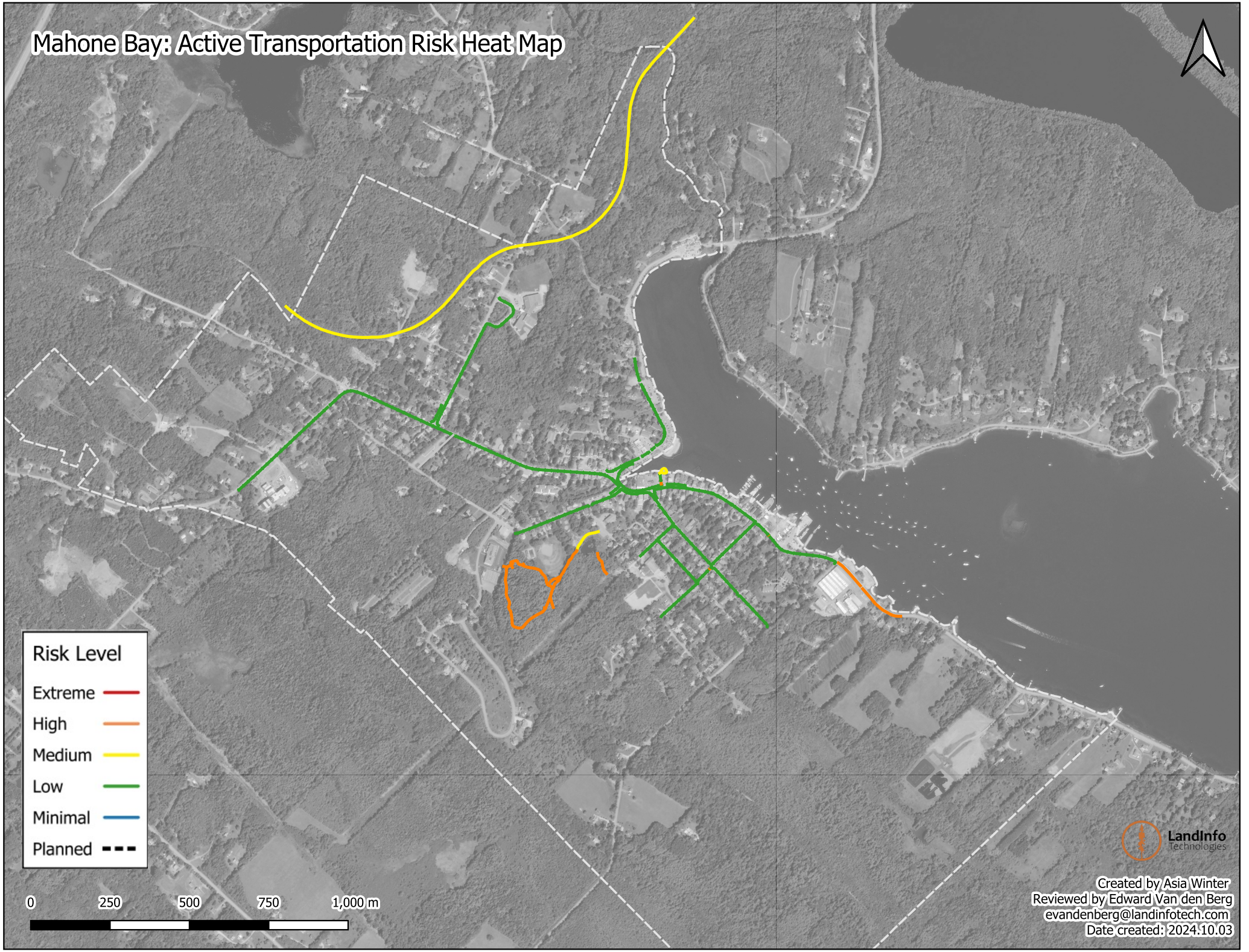
The following is an illustration of the Risk associated with the Town's current Transportation Assets:



In practice the Town Council must make smart investments to reduce Risk in our transportation systems while considering ratepayers' ability to pay. This Asset Management Plan links the identified need for investment with Council's planned capital spending.

The following map depicts the Town's transportation systems, showing associated Risk:


Mahone Bay: Roadway Risk Heat Map
Risk Level
Extreme
High
Medium
Low
Minimal
Planned
0
250
500
750
1,000 m
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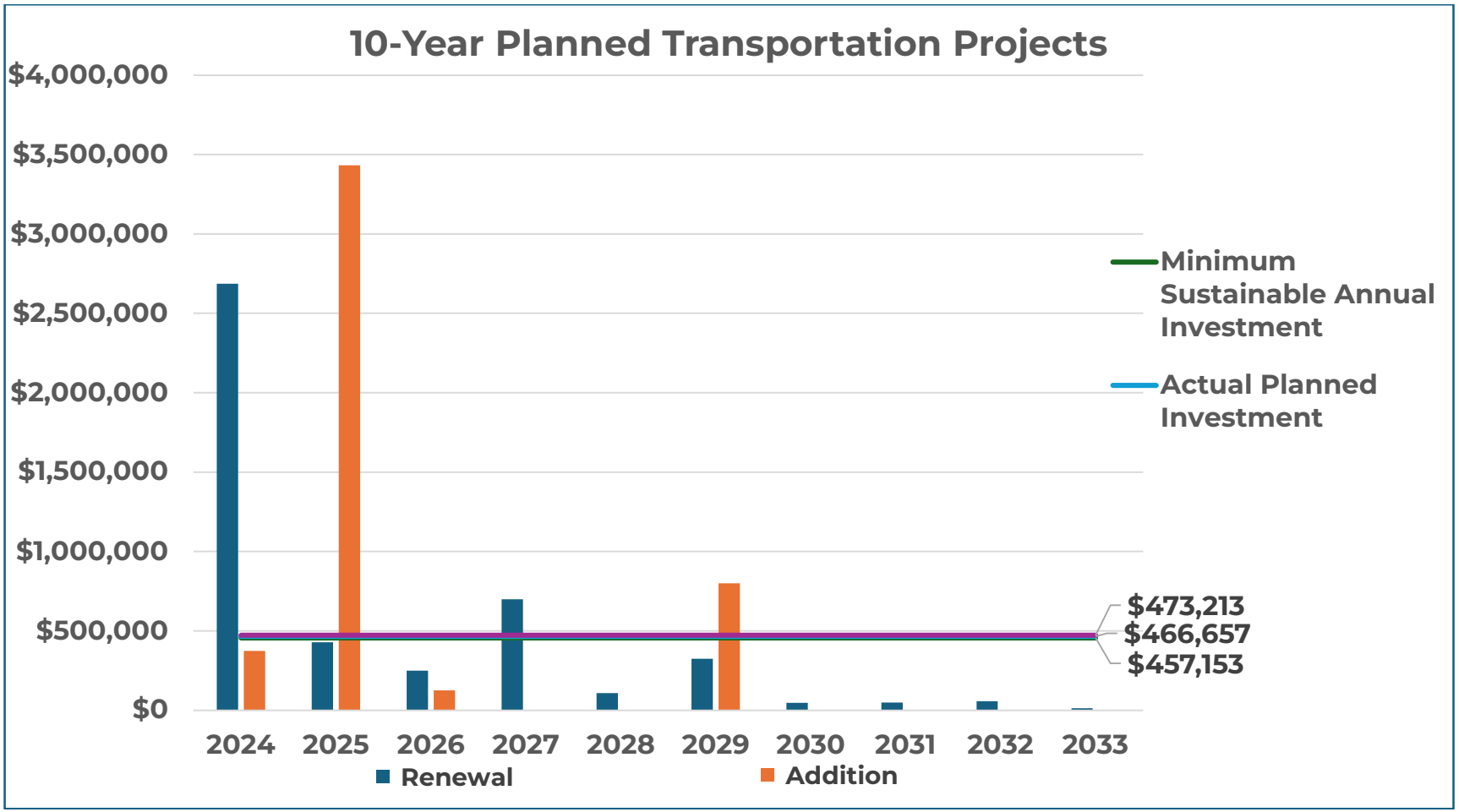

Mahone Bay: Active Transportation Risk Heat Map
Risk Level
Extreme
High
Medium
Low
Minimal
Planned
0
250
500
750
1,000 m
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When Risk is used to inform asset management decision making it is possible to develop a picture of the investment decisions which will be necessary to keep our Transportation Assets working as intended.

	Extreme	High	Low	Medium	Minimal	Grand Total
Barrier Or Fence			$1,550			$1,550
Pedestrian Walkway		$309,210	$1,581,868	$235,383		$2,126,461
Other		$232,500	$930,000			$1,162,500
Sidewalk		$17,050	$651,868			$668,918
Trail		$59,660		$235,383		$295,043
Road Overlay	$2,611,220	$1,317,695	$2,266,484	$1,575,445	$125,845	$7,896,689
Collector	$2,577,566					$2,577,566
Local	$33,654	$1,317,695	$2,266,484	$1,575,445	$125,845	$5,319,123
Traffic Sign		$6,975	$23,018	$202,973		$232,965
Grand Total	**$2,611,220**	**$1,633,880**	**$3,852,920**	**$2,013,801**	**$125,845**	**$12,822,914**

The Sustainable Annual Investment level is the minimum investment needed to mitigate risks and continue with the provision of services. The cost estimates used to determine the Sustainable Annual Investment level are updated periodically but may understate the effects of inflation.

By incorporating Risk, along with the Sustainable Annual Investment level the Town is able to develop a sustainable 10-year Capital Investment Plan (CIP) for transportation assets:



KEY 10-YEAR CAPITAL PROJECTS:

- Orchard / Parish Paving (2024-2025) - $123,000
- Main Street West Project (2025-2026) - $2,442,099
- Edgewater Street Project (2025-2026) - $3,988,976
- Main Street East Project (2026-2027) - $700,000

With Average Planned Spending exceeding Sustainable Annual Investment, the Town's planned 10-year capital expenditures are adequate to ensure our Transportation Assets continue to provide expected levels of service. Upgrades and improvements are not reflected in the minimum Sustainable Annual Investment and additions / extensions are shown as Annualized Addition.

The following map depicts Planned Transportation projects over the next 10 years, according to the CIP (not all projects may be shown, projects without a location will not be shown):


Mahone Bay: Roadway Planned Infrastructure
Roadway Features
Roadway Planned Type
Mahone Bay: Planned Addition
Mahone Bay: Planned Renewal
Roadway Planned Date
2026-12-31
2027-12-31
2029-12-31
2030-12-31
2031-12-31
2032-12-31
2033-12-31
2034-12-31
Clearway Street Transmission Main
Clearway Street Transmission Main
Orchard-Parish Paving Project
Edgewater Street Project
Main Street West W/WW Project
Main Street East W/WW Project - Part 1
Fairmont Line Replacement
Fauxburg Road Renewal
0
250
500
750
1,000 m
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Mahone Bay: Active Transportation Planned Infrastructure
Pedestrian Walkway Features
Walkway Planned Type
Mahone Bay - Planned Addition
Walkway Planned Date
2026-12-31
Edgewater Street Project
Kinburn - Main Multi-Use Trail
0
250
500
750
1,000 m
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Finally, to carry out this 10-year Capital Investment Plan funding strategies must be considered.

Funding Strategies

The Town is significantly reliant on external funding support from higher levels of government to carry out the planned capital program. Town funding for Transportation Assets comes through tax rates, including the Infrastructure Charge, levied on all properties in Mahone Bay, which contributes to a reserve used for capital investments.

Improvement Plan

The Town continues to improve this document and our practice of asset management. The following improvements are planned:

- Updating the Town's Municipal Specifications
- Operationalization of asset management practice with new work order system.
- Development of standards for the collection and maintenance of asset management data.

Engagement

Staff respond to and track service complaints. The Town has a responsibility to maintain existing infrastructure. Council will consider strategic extension of services to support development.