

# Runway End Safety Areas at Billy Bishop

Toronto City Council  
October 9, 2024



# Preamble

- This report/decision is **not about closing** the Billy Bishop Toronto City Airport
- This report is about how best to achieve **compliance** with a new federal airport **safety requirement** (Runway End Safety Areas):
  - In a tight timeframe – design and construction must be advanced rapidly for PortsToronto to meet Transport Canada’s July 12, 2027 timeline
- And, longer-term, the need for a broader discussion about the future of the airport – best achieved through an **airport master plan update**

# New Airport Safety Regulations

- There is a new federal airport safety requirement that must be met at Canada's airports. The requirement is for **Runway End Safety Areas (RESAs)**
- The intention of these Runway End Safety Areas is to **reduce the severity of damage** to an aircraft if it overshoots or overruns a runway
- Transport Canada has identified **three ways** that airports can meet Runway End Safety Area requirements:
  1. Prepare natural, compacted open areas at the ends of a runway
  2. Install an engineered material (an "Engineered Material Arresting System") designed to decelerate an aircraft
  3. Shorten a runway's "declared distance" (shorten a runway)
- RESA compliance is the responsibility of airports, however, approvals may be required

# How is the City of Toronto involved?

- The Billy Bishop airport is governed by a **Tripartite Agreement between PortsToronto, the City of Toronto, and Transport Canada**
- The Tripartite Agreement was signed in 1983; it serves as both a **lease and an operating agreement**
- Any Tripartite Agreement changes would require three agreement signatories to agree
- At Toronto's island airport, Runway End Safety Areas options would require added landmass through lakefill, **requiring a change to the Tripartite Agreement and a City Council decision**

# Runway End Safety Area Options

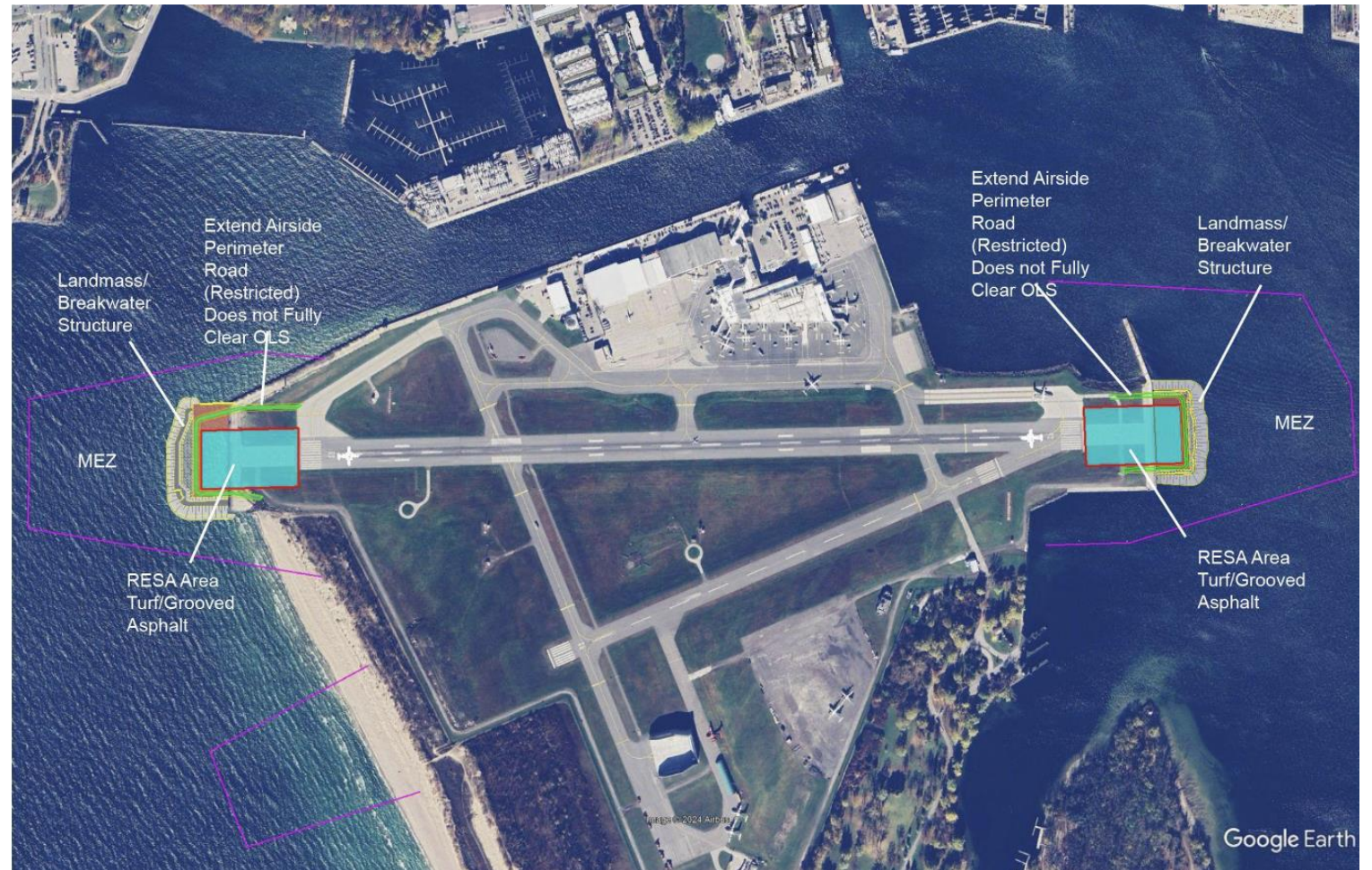
- PortsToronto is conducting an Environmental Assessment to evaluate three options for Runway End Safety Areas implementation that would prepare natural, compacted open areas
- Options which would have shortened the runway's "declared distance" were not considered viable by PortsToronto as they would impact Q400 aircraft operations
- PortsToronto has also looked at an engineered material arresting system; this was not considered viable by PortsToronto



# Current Options Under Consideration

**Option 1:**  
Minimum  
landmass to  
meet regulatory  
requirement.

Cost estimate:  
\$61-64 M  
(source: PortsToronto)

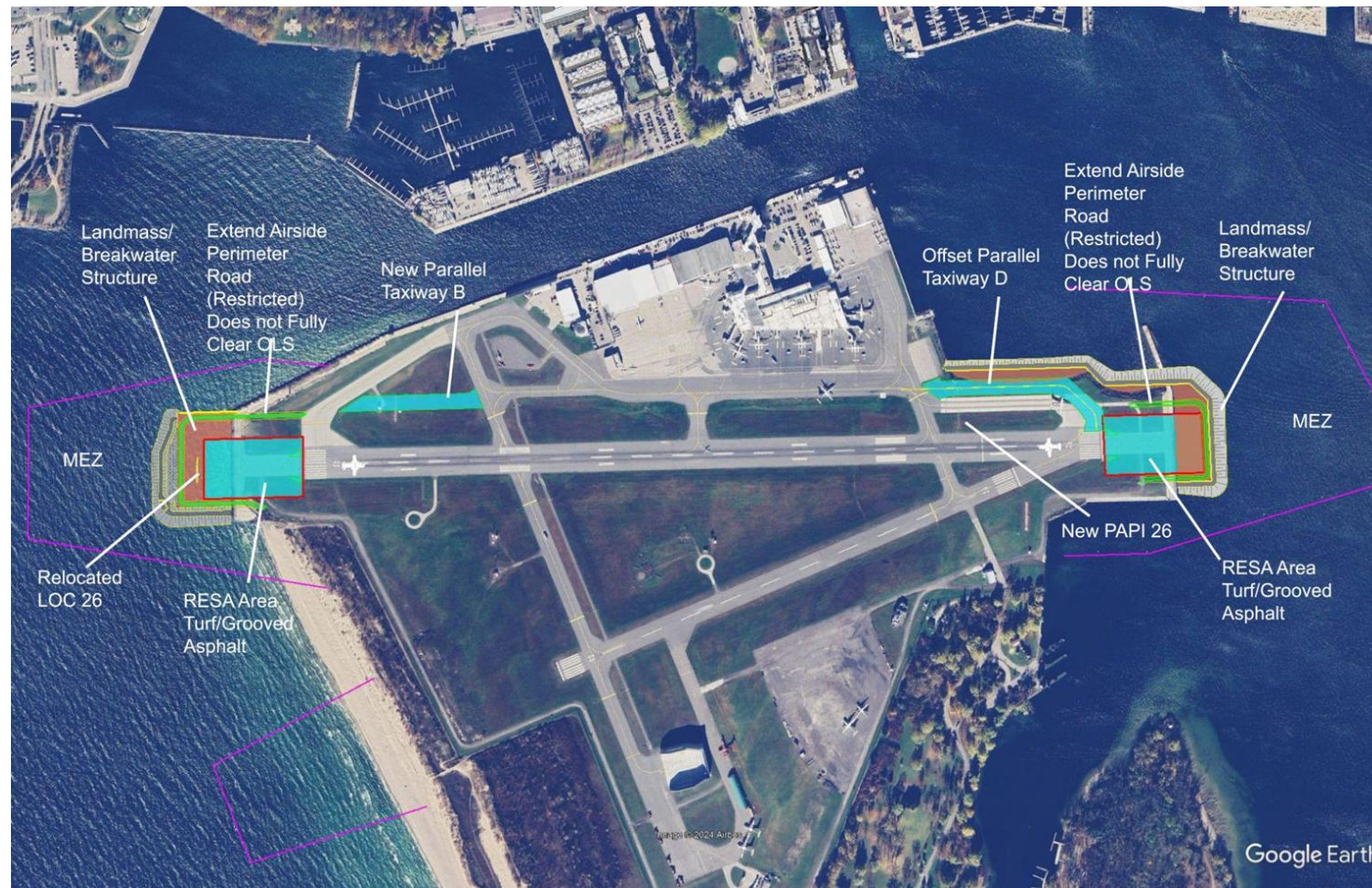




# Current Options Under Consideration

**Option 2:**  
Minimum  
landmass +  
additional  
taxiway

Cost estimate:  
\$93-97 M  
(source: PortsToronto)

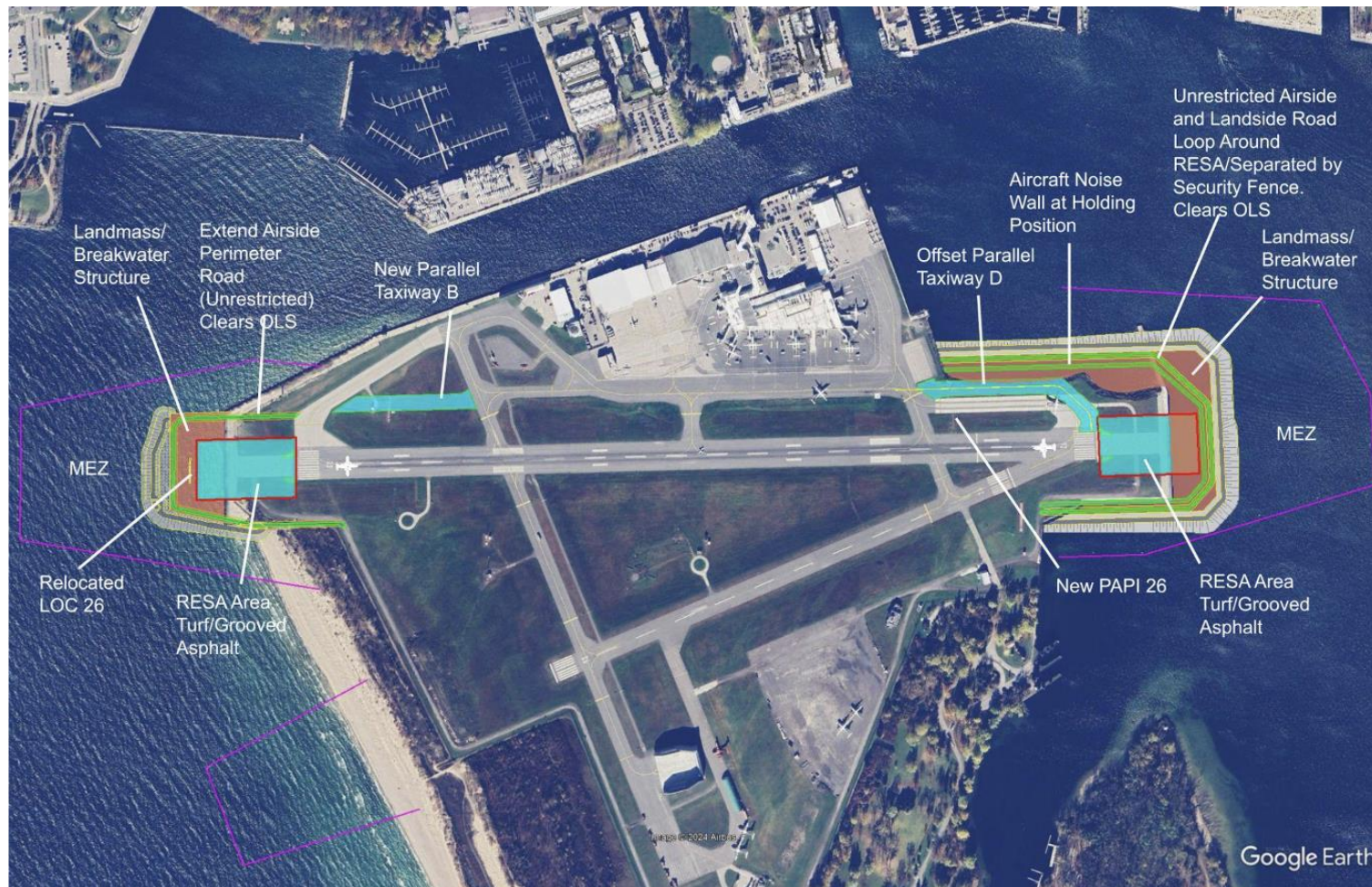




# Current Options Under Consideration

**Option 3:**  
Minimum  
landmass +  
taxiway +  
additional airside  
roads + sound  
barrier +  
underground utility  
corridor

Cost estimate:  
\$169-175 M  
(source: PortsToronto)





# Runway End Safety Area Key Points

		RESA 1	RESA 2	RESA 3
		Minimum Landmass	Additional Taxiway	Additional Airside Roads, Sound Barrier, Underground Utility Corridor
West End	Lakefill volume	7,850m <sup>2</sup>	11,800m <sup>2</sup>	12,800m <sup>2</sup>
	Landmass length	54m	82m	82m
	Landmass width	145m	145m	150m
East End	Lakefill volume	16,100m <sup>2</sup>	11,300m <sup>2</sup>	32,700m <sup>2</sup>
	Landmass length	54m	52m	66m
	Landmass width	135m	160m	270m
Impact on Marine Exclusion Zone		None	None	None
		\$61-64M	\$93-97M	\$169-175M

## What to see in this summary chart:

- Volume of lakefill goes up with each option
- Width of landmass increases with each option
- Landmass on east end increases substantially for RESA 3
- None of these options have an impact on the Marine Exclusion Zone
- None of these options extend the runway
- Cost estimates are very preliminary, subject to change

# Summary of City Public Engagement

- Over 3,000 participants in total
- Approx. 250 people attended the City's public meeting on September 24, 2024
- Over 2,900 responses to the City's online survey (with over 7,700 visits to the website)
- Top considerations in reviewing Runway End Area options include:
  - Impact on environment
  - Health impacts
  - Impact on Hanlan's Point as a safe, culturally significant, queer space
  - Waterfront revitalization
  - Safety and regulatory compliance
  - Costs
  - Accessibility of airport
  - Economic impact
  - Transparency and public engagement in process

# Staff Findings – Runway End Safety Areas

- Staff recommend PortsToronto's natural, compacted open area "Option 1" as the most efficient option for compliance:
  - The lowest risk scenario to achieving the mandated federal safety requirements by the July 12, 2027 federal deadline
  - Has a considerably lower project cost
  - Does not require additional Council consideration of Official Plan compliance (Options 2 and 3 would require an Official Plan amendment)
  - Provides the shortest construction timeline and smallest scope of lakefill
- A lease extension is not recommended at this time (requires a broader public conversation, through a airport master plan update)



# Staff Findings – Runway End Safety Areas

- PortsToronto's Environmental Assessment is not a regulatory Environmental Assessment:
  - It is not a requirement of the federal or provincial governments
  - It is a requirement of the City's Official Plan
- Option 1 is incremental to Options 2 and 3
- Options 2 and 3 can be implemented in future phases

# Staff Findings – Broader Conversation

- Separate from the runway ends safety issue, many have noted the need for a broader discussion about the airport
- An airport master plan update can provide a forum to consider the issues holistically (last updated in 2018)
- An effective framework is required to facilitate a robust public and stakeholder engagement process, to allow for thoughtful consideration of the issues involved, and to provide transparency and accountability in decision-making

# Recommendations Summarized

1. Staff to execute Tripartite Agreement change to provide for RESA Option 1 lakefilling / land mass extension
2. Conditions related to the above
3. Staff to participate in discussions with PortsToronto and Transport Canada on a process to update the 2018 airport master plan in advance of the 2033 expiry of the Tripartite Agreement, and report to Executive Committee in Q2 2025 with a framework to guide this process, including funding requirements



# Next Steps

- PortsToronto has noted that City Council decisions that would enable Runway End Safety Areas compliance are needed in late November 2024, to provide enough time so that construction of new runway ends can be completed by Transport Canada's July 12, 2027 compliance deadline
- PortsToronto will identify its preferred approach to compliance (recognizing City Council's decision)
- The City, PortsToronto and Transport Canada will finalize and execute an updated Tripartite Agreement