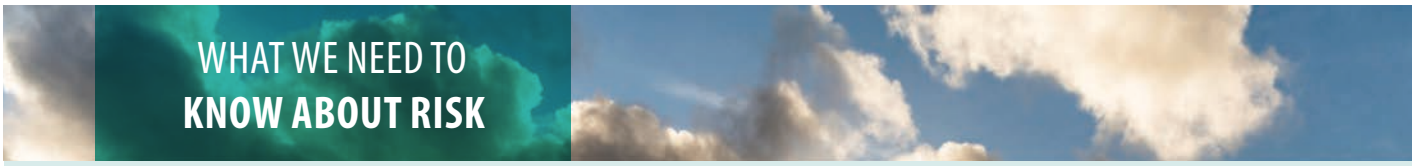
APPENDIX B

Template for Communicating with Airport Executives

Before you can identify, develop, and propose strategies for climate change integration at your airport, you may need to build support. This appendix contains a blank template for communicating about these risks with airport executives, as well as a completed version that you can reference for an example.

Use the template on the following page to enter key information for your airport. Replace "<Enter text here>" with information specific to your airport. For examples of what to enter, hover over the text field on the blank template or see the "EXAMPLE" template filled out on the subsequent page. You can find the template online by searching the TRB website (www.TRB.org) for *ACRP Research Report 188: Using Existing Airport Management Systems to Manage Climate Risk*.



WHAT WE NEED TO **KNOW ABOUT RISK**

Recent trends show that the frequency and the type of extreme weather events are changing, with impacts across industries and societies worldwide. New and different hazards pose a risk to <Enter Text Here>, in both the near- and the long-term, but there are changes we can make today to manage these risks over time.

Potential Near-term Risks

<Enter Text Here>

Benefits of Taking Action

<Enter Text Here>

Recent Trends and Observed Impacts

<Enter Text Here>

HOW OTHER AIRPORTS ARE ADDRESSING CLIMATE RISK

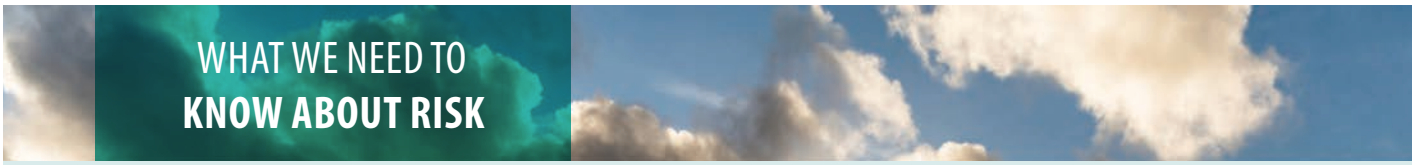
Airports of all sizes are starting to manage their climate risks, including airports in Boston, Istanbul, San Diego, Philadelphia, New York, and Toronto.

FOR EXAMPLE:

- Massport **(Boston Logan International Airport)** in Boston, Massachusetts, assessed flood risks. From this, Massport set a new design flood elevation for infrastructure and began a process to systematically floodproof critical assets.
- In Canada, **Toronto Pearson International Airport** accounted for increased frequency and intensity of microburst storms in a hydraulic analysis for a new culvert and is evaluating the potential impacts of a new precipitation mix on deicing fluid use and water quality.
- In Turkey, **Istanbul New Airport**, the world's largest, built-in water and power efficiency is expected to save around USD 8.5 million annually and create less dependence on local supplies.

Where to Go from Here?

<Enter Text Here>



WHAT WE NEED TO **KNOW ABOUT RISK**

Recent trends show that the frequency and the type of extreme weather events are changing, with impacts across industries and societies worldwide. New and different hazards pose a risk to < Enter Text Here >***, in both the near- and the long-term, but there are changes we can make today to manage these risks over time.***

Potential Near-term Risks

- More frequent heavy rain events (up to 3 times more events with more than 2 inches of rain in 24 hours within the next 20–30 years) could lead to
  - More frequent drainage system failures and
  - Higher risk of environmental contamination.
- Increase in heat waves (up to 25 days per year above 95 degrees Fahrenheit) – could lead to
  - Reduced efficiency of outdoor staff due to need for more, frequent breaks, and
  - Risks to elderly travelers.
- Increased risk of pavement rutting and shoving.

Benefits of Taking Action

- Save on maintenance costs for drainage system maintenance, pavement repair, and other weather-related costs
- Avoid costly mistakes in drainage design for planned runway extension project
- Maintain compliance with environmental regulations
- Improve safety and security for staff and passengers

Recent Trends and Observed Impacts

- Runways were flooding from heavy downpours four times in the past five years, and resulted in
  - 27 canceled flights,
  - $20,000 in clean-up costs per event ($80,000 total), and
  - $40,000 in lost revenues per event ($160,000 total).
- Number of emergency response calls for workers in heat distress has doubled from the current 5-year period from the previous period.
- Observed 10% increase in cooling costs over past 5 years.

HOW OTHER AIRPORTS ARE ADDRESSING CLIMATE RISK

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FOR EXAMPLE:

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Where to Go from Here?

- Create airport policy to require all new infrastructure designs to incorporate future precipitation projections.
- When emergency management plan is due for update this spring, ensure extreme heat is adequately captured.
- Follow the ACRP Handbook to integrate climate risks into the asset management system.
- Continue to track and analyze flood frequency and frequency of heat-related issues.
- Distribute climate change projection information to all departments.