1. At the Centre of Canada, Winnipeg
2. Manitoba’s Agriculture Industry
3. Manitoba Climate Challenges
4. Operation Processes
5. Plans for Future: Building a World Class Animal Hotel
At the Centre of Canada, Winnipeg
About Winnipeg

• Winnipeg is a critical transportation hub for Canada
• Northern Hub of the Mid-Continent Trade Corridor – with access to a market of 100M
• Home to three Class 1 railways, some of Canada’s largest trucking companies and Winnipeg Richardson International Airport
Manitoba’s Agriculture Industry
Manitoba, Leader in Agriculture & More

• Agriculture rich Province with top quality products
  – Providing 30% of Canada’s total pork production
  – Home to some of the largest livestock companies in Canada
  – Top export markets include:
    China, Philippines, Chile, Russia, Japan and South Korea
• Frequent transportation of zoo animals and polar bears
  – Winnipeg is home to a specialized Polar Bear exhibit
Manitoba’s Climate Challenges
Climate

• Moderate dry climate with sharp seasonal temperature changes

<table>
<thead>
<tr>
<th>WINTER</th>
<th>SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>−40°F (−40°C)</td>
<td>100°F (38°C)</td>
</tr>
</tbody>
</table>

• Snow coverage on the ground between November to April
## Climate

<table>
<thead>
<tr>
<th>WINTER</th>
<th>SUMMER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average Temperature</strong></td>
<td><strong>Average Temperature</strong></td>
</tr>
<tr>
<td>8.8°F (-12.9°C)</td>
<td>77.7°F (25.4°C)</td>
</tr>
<tr>
<td><strong>Average Snowfall</strong></td>
<td><strong>Average Rainfall</strong></td>
</tr>
<tr>
<td>43.5” (110.6 cm)</td>
<td>16.4” (41.6 cm)</td>
</tr>
<tr>
<td><strong>Average Humidity</strong></td>
<td><strong>Average Humidity</strong></td>
</tr>
<tr>
<td>72.7%</td>
<td>55.6%</td>
</tr>
</tbody>
</table>
Winter Climate Challenges

• Weather unpredictability (can vary by 30°C within 24 Hours)
• Extreme low temperatures, high winds, humidity & low visibility have a domino effect on:
  – Animal unloading/loading efforts and wait times;
  – Runway Surface Issues for heavy operations:
    • Friction values, contamination of runways
  – De-icing/anti-icing hold over times; and,
  – Humidity/heat control within aircraft during wait times.
Summer Climate Challenges

• Long day time hours and heat can be intense
  – Especially challenging for swine operations
  – Providing water/feed for animals ahead of long-haul flights is a priority
Operation Processes
Parties Involved & Roles

• Specialized Forwarders: provide oversight for entire operation
• Ground Handlers: efficiently load animals
• Central De-Icing Facilities: prioritize livestock flights
• Air Carriers:
  • Ensure flight crews are trained for livestock operations
• Canada Food Inspection Agency (CFIA):
  • Ensure operations are up to code
• Airport Authority: Provides Real Estate and coordination to ensure flow of operations
Pre-Planning (Day Prior)

- Coordination of livestock trucks:
  - Arrival scheduled to be 4 to 6 hours prior to flight departure
- Operational review of:
  - Flight times and other constraints;
  - Parking stand assignment;
  - Final notice of flight times received by all agencies;
  - Weather forecast during operation;
  - Gradual staging of equipment to loading area; and,
  - Anticipated staffing levels.
Day of Operation

- Pre-flight arrival verification and meeting with Forwarder, Carrier and Airport Authority to review:
  - Anticipated weather conditions
    - Required runway surface conditions and friction values
    - De-icing facility resources and timing
  - Actual and updated flight arrival and departure
    - “Follow me” vehicle as required by Carrier
- Decision for loading time based on review
Plans for Future: Building a World Class Animal Hotel
Building a New Air Cargo Campus
New State-of-the-Art Multi-Tenant Air Cargo Logistics Facility

- New facility will address a number of gaps and become a World-Class leader in Airport animal transportation by including:
  - A dedicated livestock facility with all required equipment;
  - Specified parking positions with a hydrant fuel system;
  - Power in/power out positions for fast and easy access; and,
  - Building facility to qualify for CEIV Live Animal certification.
Thank you for your attention!
Questions?