Grand Forks International Airport (GFK)
Airport Master Plan Study Update
Project Newsletter #2: June 2016

AVIATION ACTIVITY FORECASTS

What are “Forecasts”? 
Forecasts identify future levels of aviation activity. They become the basis for effective decision-making in airport planning. Forecasts are realistic and based on the latest available data and industry trends at the time. These projections provide the basis for improved facilities to accommodate aviation demands.

Airport activity measures include passenger boarding commercial airlines (enplanements), takeoffs and landings (operations) and aircraft claiming the airport as their home base (based aircraft).

GFK Aviation Activity Forecasts
GFK aviation activity forecasts were developed by KLJ using the latest data and industry trends, draft forecasts have been reviewed by GFK Airport Authority staff and are currently being reviewed by FAA for their approval. Forecasts represent a realistic, constrained scenario for growth.

Notable trends include continued growth in passenger enplanements from market-driven demand from the local area and Canada, UND Aerospace activity growth slowing as a result of capacity constraints, and significant reductions in air cargo activity from FedEx moving their regional hub away from GFK.

<table>
<thead>
<tr>
<th></th>
<th>2014 (Existing)</th>
<th>2019 (Short-Term)</th>
<th>2024 (Mid-Term)</th>
<th>2034 (Long-Term)</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Enplanements</td>
<td>146,531</td>
<td>167,341</td>
<td>183,519</td>
<td>234,921</td>
<td>2.4%</td>
</tr>
<tr>
<td>Annual Operations</td>
<td>324,196</td>
<td>313,002</td>
<td>334,585</td>
<td>351,183</td>
<td>0.4%</td>
</tr>
<tr>
<td>Based Aircraft</td>
<td>147</td>
<td>160</td>
<td>169</td>
<td>179</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Critical Design Aircraft
The critical design aircraft is a single aircraft or a family of similar aircraft with the most demanding operational characteristics. These aircraft are the basis for airport design standards.

EXISTING
- **Airbus A-300, MD-83 (Family)**
  - Wingspan: 147’
  - Overall Length: 177’
  - Maximum Weight (lbs.): 370,000
  - FAA Airplane Reference Code: D-IV
  - FAA Taxiway Design Group: 5
  - 2015 Operations @ GFK: 632
  - Forecast 2024 Operations @ GFK: 0

FUTURE
- **CRJ-900, Airbus A320 (Family)**
  - Wingspan: 111’
  - Overall Length: 123’
  - Maximum Weight (lbs.): 172,000
  - FAA Airplane Reference Code: C-III
  - FAA Taxiway Design Group: 3
  - 2015 Operations @ GFK: 1,102
  - Forecast 2024 Operations @ GFK: 5,096

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**AIRPORT FACILITY REQUIREMENTS (DRAFT)**

**Airfield**
- Primary Runway (17R/35L): Accommodate ultimate ARC C-III aircraft, consider approach enhancements
- Primary Runway: Calculated pavement strength is less than current design aircraft needs
- Primary Runway: Existing runway length sufficient. Plan for ultimate extension from 7,351’ to 8,000’
- Crosswind Runway (9L/27R): Extend to accommodate large aircraft traffic to improve operational safety
- GA Runways: Consider establishing instrument approaches for flight training, holding bays/run-up areas
- Taxiway design standards change from TDG-5 to TDG-3: 50’ wide taxiways needed for largest aircraft
- Airfield exceeds 80% capacity now; capacity improvements and/or demand management strategies needed

**Air Cargo**
- Air cargo cut by 95% with FedEx’s departure from GFK
- Current facility designed for large air cargo operator
- Re-utilization of facility for air cargo

**Passenger Terminal Complex**
- Peak activity drives terminal space needs
- Additional 1-2 gates with boarding bridges recommended in long-term
- Security checkpoint may need 3rd lane for peak long-term activity
- Departure holdrooms and circulation space currently at capacity
- Public parking areas within 15% of effective capacity during peak periods
- Consider terminal building expansion, additional parking in long-term
- Additional rental car ready/return and storage parking in mid-term

**General Aviation**
- FAA forecast is for 32 new based aircraft in next 20 years
- Preserve 38% additional hangar space for new based aircraft
- Existing GA aircraft parking aprons sized to meet future needs
- Consider separating corporate vs. non-corporate development

**Support Facilities**
- Replacement U.S. Customs General Aviation Facility
- Consider additional Jet-A Fuel Facility capacity
- Consider local ATCT facility needs
- On-airport perimeter roadway for safe, efficient access

**Definitions**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ARC</td>
<td>Airport Reference Code</td>
</tr>
<tr>
<td>GA</td>
<td>General Aviation</td>
</tr>
<tr>
<td>TDG</td>
<td>Taxiway Design Code</td>
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Visit [GFKAirport.com](http://www.gfkairport.com) for more information.

Study comments can be submitted here: [https://www.surveymonkey.com/r/GFKAirportStudy](https://www.surveymonkey.com/r/GFKAirportStudy)

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**Project Schedule***

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Concepts</td>
<td>Sep 2016</td>
</tr>
<tr>
<td>Preferred Concept Determined</td>
<td>Dec 2016</td>
</tr>
<tr>
<td>Implementation Plan</td>
<td>Jul 2017</td>
</tr>
<tr>
<td>Final Master Plan Documents</td>
<td>Aug 2017</td>
</tr>
<tr>
<td>Airport Layout Plan</td>
<td>Feb 2018</td>
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*Schedule includes anticipated agency review timeframes

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**Key Project Contacts**

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