



## Air Improvements

Most commercial airports in Iowa have the capacity, acreage, and necessary services to accommodate freight movement. However, the presence of freight service depends on whether or not a company decides to choose one of those locations to operate out of. In Iowa, the Des Moines International Airport (DSM) and the Eastern Iowa Airport (CID) in Cedar Rapids handle over 99 percent of reported air freight. For the *Air Improvements* section of the State Freight Plan, future air cargo project lists provided by DSM and CID were included.

### DSM currently

- Roughly 50 acres reserved for air cargo operations (South cargo area and East cargo area)
- These facilities are not fully utilized and can be downsized
- South cargo area
  - 43 acres
  - Two major carriers – FedEx and UPS
- East cargo area
  - 8 acres
  - United Airlines (belly cargo operations)
  - Federal Inspection Facility

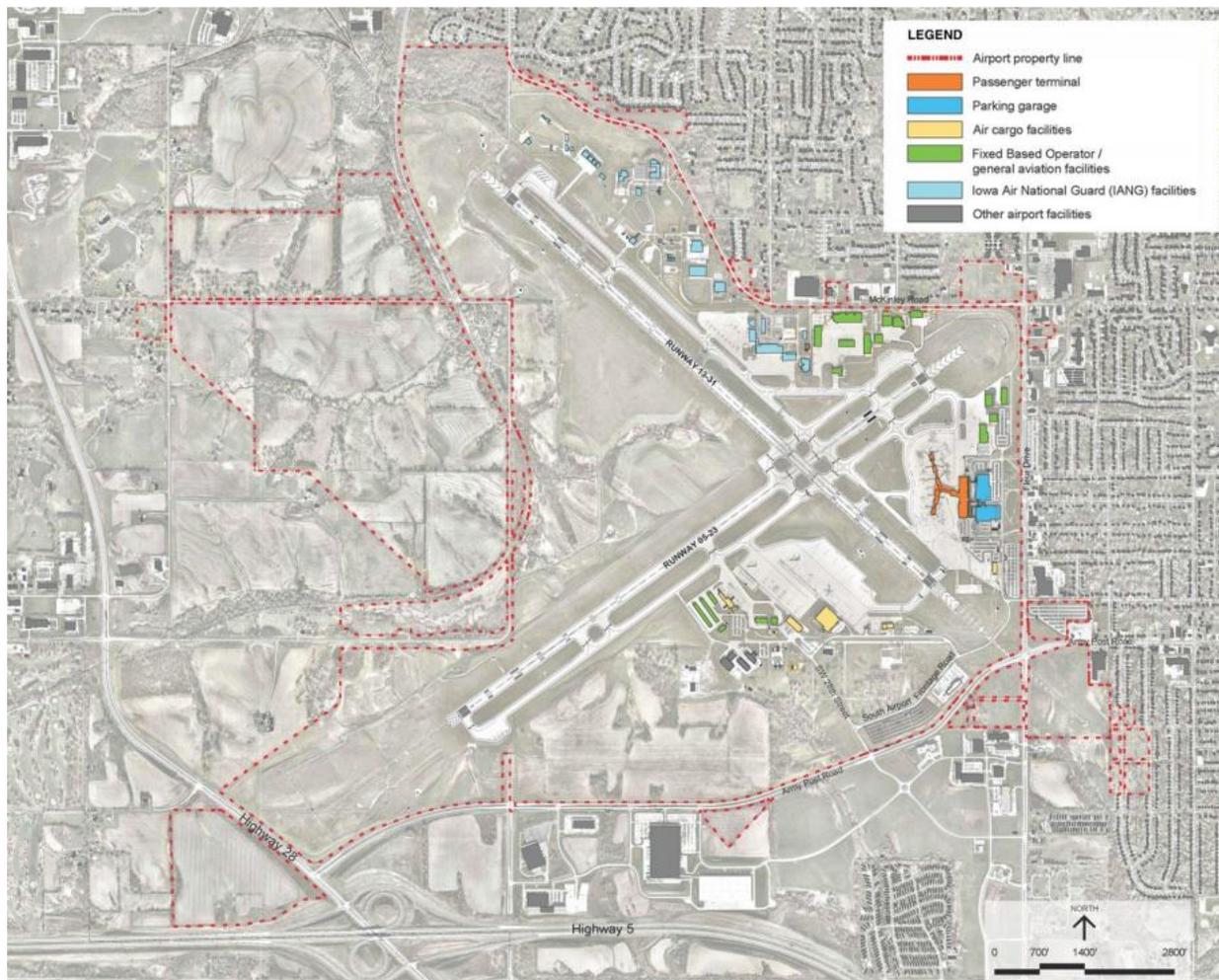
### DSM in the future

- New passenger terminal has been proposed at the location of the existing South cargo area
- Cargo operations would be moved to the location of the existing passenger terminal
- Total air cargo handling area would decrease to roughly 12 acres
- Determined by analyzing current use and forecasts with general cargo facility use ratios (MAP = million annual passengers)

#### DSM Airport current and future air cargo handling facilities

1. Existing Facilities	2. Activity Forecasts	3. Assumptions	4. 4.0 MAP Requirements
<p><b>All-cargo apron (s.y.)</b></p> <ul style="list-style-type: none"> <li>• South 177,000</li> <li>• East <u>27,000</u></li> <li>• Total 204,000</li> </ul> <p><b>Warehouses (s.f.)</b></p> <ul style="list-style-type: none"> <li>• Bldg 31 12,300</li> <li>• Bldg 32 28,000</li> <li>• Bldg 35 <u>27,350</u></li> <li>• Total 67,650</li> <li>• Approx. 68% of total square footage is leased</li> </ul> <p><b>Total land area (approx.): 50 acres</b></p> <p><b>Existing warehouse utilization (based on leased space only): 1.5 ton/s.f.</b></p>	<p><b>All-cargo airline air cargo (millions of pounds)</b></p> <ul style="list-style-type: none"> <li>• 2012: 147.8</li> <li>• 4.0 MAP: 172.7</li> <li>• Compound annual growth rate (CAGR): 0.8%</li> </ul> <p><b>Annual cargo aircraft operations</b></p> <ul style="list-style-type: none"> <li>• 2012: 5,456</li> <li>• 4.0 MAP: 5,427</li> <li>• CAGR: 0.0%</li> </ul>	<p><b>Target warehouse utilization: 1.5 ton/s.f.</b></p> <p>0.5 ton/s.f. ■ Low automation facility 0.9 ton/s.f. ■ Automated facility 1.6 ton/s.f. ■ Highly automated facility</p> <p><b>Number of warehouse levels: 1.0</b></p> <p><b>Target land requirement ratio: 3.3</b></p> <p>Overall land area (warehouse building and landside facilities) derived using a ratio relative to cargo warehouse space</p>	<p><b>All-cargo aircraft stands (sized for ADPM)</b></p> <ul style="list-style-type: none"> <li>• ADG II 1</li> <li>• ADG IV 7</li> <li>• Total 8</li> </ul> <p><b>Warehouse and land requirements (s.f.)</b></p> <ul style="list-style-type: none"> <li>• Warehouse 53,700</li> <li>• Ramp 334,600</li> <li>• Landside 123,500</li> </ul> <p><b>Total land area (approx.): 12 acres</b></p> <p><b>South cargo area is adequate throughout planning period</b></p>

DSM Airport property



**CID currently**

- *Integrated express carriers – FedEx, DHL, and UPS*
- *Facilities to accommodate cargo jet operations (e.g., Boeing 757, Airbus 300-600)*
- *3 cargo handling facilities totaling 136,000 square feet (100 percent utilized)*
- *Cargo apron is approximately 89,000 square yards between 2 cargo ramps*
- *No carriers have exclusive use of the cargo aprons*

**CID in the future**

- *Additional 106 acres identified in the airport’s Master Plan for future cargo development*
- *Work to promote the airport’s role in economic development*
- *Work to target industry clusters reliant on air cargo operations*
- *Continue to build relationships with FedEx, DHL, and UPS*



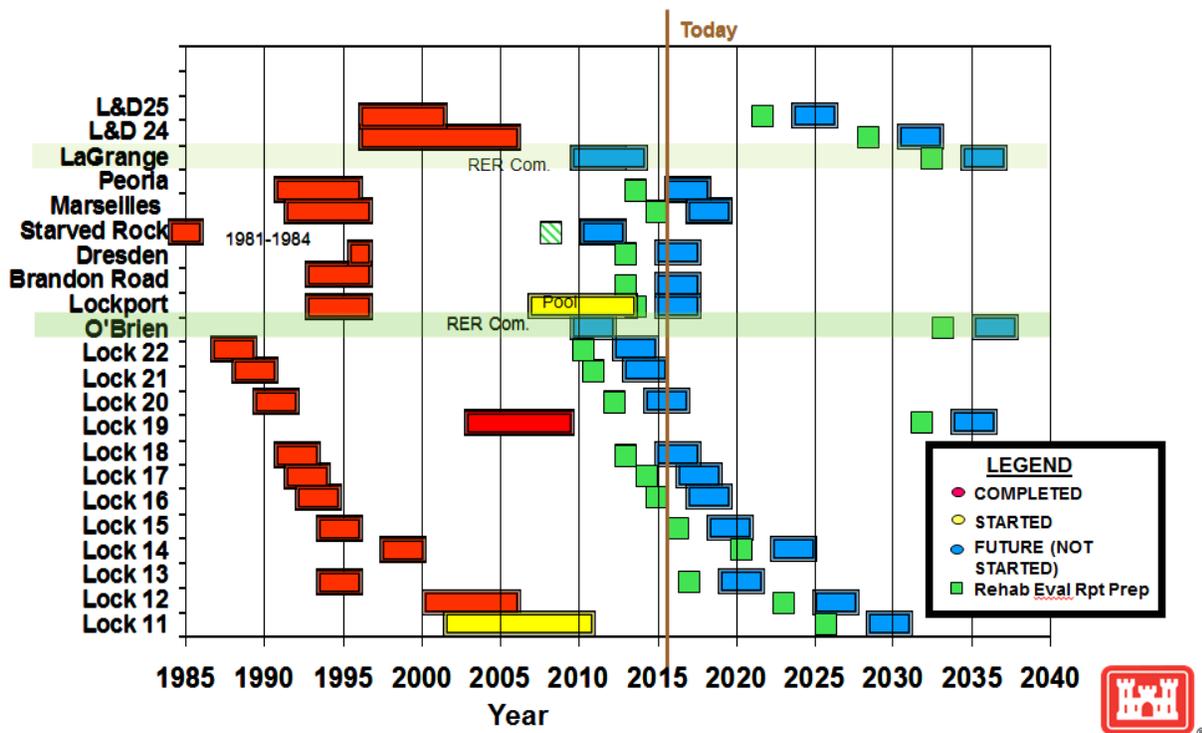
## Waterways

The U.S. Army Corps of Engineers (USACE) refers to the river navigation infrastructure priorities they are responsible for as a “three-legged stool.” The three parts include operations and maintenance, major rehabilitation, and improvements (small- and large-scale). Completing tasks in these three areas depends on whether or not funding is allocated by Congress.

- **Operations and maintenance:** Currently funded at 35 to 40 percent of what is needed each year, which has led to nearly \$1 billion unfunded maintenance requirements.
- **Major rehabilitation:** Currently 14 major rehabilitation projects are behind schedule across the 20 lock and dams that fall within the jurisdiction. These require construction funding that hasn’t been allocated for the last 15 years.
- **Improvements (small- and large-scale):** The authorization for improvements is the Navigation and Ecosystem Sustainment Program (NESP), which was authorized in 2007. No construction funds have been appropriated to date. Several small-scale measures are ready to construct.

Most of the locks bordering Iowa (locks 11 through 19) are currently in the Rehabilitation Evaluation Report (RER) preparation stage and are set to begin in the near future. A RER must be completed and approved prior to a project being funded for construction. These spell out the cost, scope, urgency, and objectives of the rehabilitation project. As of now, none of the RERs have been funded for any of the Iowa locks. Rehabilitation was recently started on Lock and dam 11 but wasn’t funded to completion.

Schedule of major rehabilitations on the Upper Mississippi River, Rock Island District





**New 1,200-foot locks**

- Authorized at 7 locations (lock and dams 20, 21, 22, 24, and 25 and La Grange and Peoria)
- Iowa products traveling down the river to the gulf must pass the five Mississippi River locations
- More efficient transportation, operation 12 months out of the year, and eliminate the single-point-of-failure system as far north as Lock and dam 18 at Burlington, Iowa
- All of this depends on funding levels and whether sufficient amounts are allocated

**Proposed 1200-foot locks in the Upper Midwest**



In addition to lock and dam rehabilitation and expansion, Iowa DOT supports the USACE in the development and completion of all other navigation projects on the Mississippi and Missouri Rivers, such as dredging, facility and equipment upgrades, and other channel maintenance projects.