Council of Calumet

April 12, 2011
Four Current Projects April, 2011

1. Expand Conservation Programs to After School

2. Freight Ferry:
   1. Milwaukee
   2. Port of Chicago
   3. Port of Indiana
   4. Muskegon

3. Illiana Corridor Planning

4. Indiana Coal Corridor

Frank Patton – Lee Morris
Co-incubators

Questions: frankp414@gmail.com
Located in the heart of the Indiana Dunes National Lakeshore, Dunes Learning Center provides exceptional, hands-on learning experiences that inspire community, environmental stewardship, and a lifetime of memories. Our innovative educational programs are for everyone—children, schools, teachers, families, community groups, college students, and adults.
Welcome!

The Mighty Acorns® program introduces thousands of 4th through 6th graders to nature and conservation stewardship in the Chicagoland area each year through activities based on education, restoration, and exploration.

Mighty Acorns...

- Builds knowledge and skills over a three-year period.
- Provides outdoor experiences in fall, winter, and spring.
- Joins natural resource management and education.
- Connects schools with nature centers, parks, and forest preserve districts.
- Encourages students to care for and restore local natural areas.

funded in part by:

- Conservation 2000
- Illinois Department of Natural Resources
- Chicago Wilderness™
School Programs
prepared for

Indiana Department of Transportation

prepared by

Cambridge Systematics, Inc.

with

The al Chalabi Group
ASC Group
Burgess and Niple
Earthtech/AECOM
The McCormick Group
Mercator Advisors, LLC
Figure 5.5  Illiana Expressway Feasibility Study – Alternative Alignment Corridors (AC1, AC2 and AC3)
The southernmost corridor, designated as AC1, begins at I-57 just south of the Will-Kankakee County Line, midway between Peotone and Manteno. The corridor then heads in a southeasterly direction, crossing (Kankakee) County Highway 17 between CR E9000N and CR E10000N. At that point it turns easterly until crossing IL 1 approximately one mile north of CR E9000N. The corridor continues east into Indiana, crossing US 41 just south of 197th Street and continuing easterly to Cline Avenue. At Cline Avenue, it proceeds in a northeasterly direction, tying into I-65 at the existing interchange with Indiana SR 2.

The central corridor, designated as AC2, begins just south of the Wilmington Road interchange with I-57 (the interchanges would need to be connected) just southeast of Peotone. The corridor runs easterly south of W. Coming Road until it crosses IL 1 between W. Coming Road and W. Kentucky Road. This corridor follows along and just north of an overhead power utility line in both Illinois and Indiana. The corridor continues straight easterly into Indiana and crosses US 41 between 157th and 173rd Avenue. It then continues east until turning northeast just west of Holtz Road, continuing in this direction to 153rd Avenue. At this point it turns easterly to its connection with I-65, approximately two miles north of the SR 2 interchange.

The northern corridor, designated as AC3, begins southwest of Monee at the proposed access interchange for the South Suburban Airport (SSA) at I-57. The corridor then runs south of Monee along the northern edge of the ultimate acquisition boundary of the proposed SSA. At approximately Steger-Monee Road, it veers to the southeast until crossing IL 1 just south of Goodenow Road. The corridor continues along Goodenow Road into Indiana, crossing US 41 just north of 125th Avenue. The corridor continues eastward just north of Cedar Lake and Lemon Lake Park. Just past Lemon Lake Park the corridor turns to the southeast, until 145th Street where it heads easterly until tying into I-65, approximately 2 1/2 miles south of the interchange at US 231.
International Energy Outlook 2010

Coal

In the IEO2010 Reference case, world coal consumption increases by 56 percent from 2007 to 2035, and coal's share of world energy consumption grows from 27 percent in 2007 to 28 percent in 2035.
Figure 60. World consumption by country grouping, 1980-2035
(quadrillion Btu)
Figure 61. Coal share of world energy consumption by sector, 2007, 2020, and 2035 (percent)
Figure 62. OECD coal consumption by region, 1980, 2007, 2020, and 2035, 2007, 2020, and 2035 (quadrillion Btu)
Figure 62. OECD coal consumption by region, 1980, 2007, 2020, and 2035, 2007, 2020, and 2035 (quadrillion Btu)
Figure 66. Coal imports to Asia by major importing region, 2007 and 2035 (quadrillion Btu)

- China and Hong Kong
- North Korea, South Korea, and Taiwan
- Indian Sub-continent and South Asia
- Japan
For example, a ship leaving the Laem Chabang Port in Thailand with cargo destined for eastern North America will save a couple thousand nautical miles simply by traveling through the Suez Canal.

If a ship travels via the Suez Canal, India is 1840 nautical miles closer to Halifax than it is to west coast ports.
**NORTH AMERICA TO EUROPE**

<table>
<thead>
<tr>
<th>From / To</th>
<th>Bilbao</th>
<th>Le Havre</th>
<th>Gibraltar</th>
<th>Antwerp</th>
<th>Rotterdam</th>
<th>Bremerhaven</th>
<th>Valencia</th>
<th>Gioia Tauro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halifax</td>
<td>6 days</td>
<td>6 days</td>
<td>6 days</td>
<td>6 days</td>
<td>6 days</td>
<td>7 days</td>
<td>7 days</td>
<td>8 days</td>
</tr>
<tr>
<td>Montreal</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>8 days</td>
<td>9 days</td>
<td>10 days</td>
</tr>
<tr>
<td>New York/New Jersey</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
<td>8 days</td>
<td>9 days</td>
<td>10 days</td>
</tr>
<tr>
<td>Norfolk</td>
<td>7.5 days</td>
<td>7.5 days</td>
<td>7.5 days</td>
<td>7.5 days</td>
<td>7.5 days</td>
<td>8.5 days</td>
<td>8.5 days</td>
<td>9.5 days</td>
</tr>
<tr>
<td>Savannah</td>
<td>8 days</td>
<td>8 days</td>
<td>8 days</td>
<td>8 days</td>
<td>8 days</td>
<td>9 days</td>
<td>9 days</td>
<td>10 days</td>
</tr>
</tbody>
</table>

**NORTH AMERICA TO INDIA/ASIA**

<table>
<thead>
<tr>
<th>From / To</th>
<th>Mumbai</th>
<th>Colombo</th>
<th>Chennai</th>
<th>Singapore</th>
<th>Ho Chi Min City</th>
<th>Laem Chabang</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halifax</td>
<td>16 days</td>
<td>17 days</td>
<td>18 days</td>
<td>20 days</td>
<td>21 days</td>
<td>22 days</td>
</tr>
<tr>
<td>Montreal</td>
<td>18 days</td>
<td>19 days</td>
<td>20 days</td>
<td>22 days</td>
<td>23 days</td>
<td>24 days</td>
</tr>
<tr>
<td>New York/New Jersey</td>
<td>17 days</td>
<td>18 days</td>
<td>19 days</td>
<td>21 days</td>
<td>22 days</td>
<td>23 days</td>
</tr>
<tr>
<td>Norfolk</td>
<td>17.5 days</td>
<td>18.5 days</td>
<td>19.5 days</td>
<td>21.5 days</td>
<td>22.5 days</td>
<td>23.5 days</td>
</tr>
<tr>
<td>Savannah</td>
<td>18 days</td>
<td>19 days</td>
<td>20 days</td>
<td>22 days</td>
<td>23 days</td>
<td>24 days</td>
</tr>
</tbody>
</table>

*Based on a cruising speed of 20 knots*
STRAIT OF CANSO SUPERPORT CORPORATION
Port Hawkesbury / Mulgrave - Nova Scotia, Canada
Indiana’s Rail Network
40 Freight railroads operating on 4,165 miles. Hauled 298 million tons in 6.8 million railcars. (Source: AAR 2005 data)
Make no little plans. They have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die.
Fuel Comparison by mode – ONE gallon of fuel moves ONE ton of freight..............

- Truck: 132 MILES
- Rail: 436 MILES
- Inland Water: 514 MILES
Modal Comparisons for Coal Transportation

1 BARGE LOAD = 15 RAILCAR LOADS = 80 TRUCK LOADS
Bottom Line

- Indiana’s marine freight industries are vibrant with capacity to expand

- Indiana’s roadway network is healthy and getting better due to Major Moves
  - Indiana lacks rail service to/from the West
  - Indiana lacks efficient north-south rail routes for bulk commodities
  - Lack of east-west roadways in the northern portion of the state results in delays in the movement of freight around the Chicago metropolitan area
**Midwest Regional Rail Initiative Phase 7**

As Program Manager for the Midwest Regional Rail Initiative, Quandel Consultants is assisting the Wisconsin Department of Transportation and the DOT's of the eight other Midwest states in progressing toward the implementation of a 3,000 mile system of improved intercity passenger rail.

---

**Northern Lights Express Passenger Rail Project**

The Northern Lights Express (NLX) is a proposed passenger rail project that will serve the Twin Cities and Duluth, MN corridor. As part of a project team, Quandel Consultants is managing and producing the environmental documentation for the NLX Alliance. The documentation will address the potential environmental impacts and mitigation impacts within the NLX corridor.
MISSION STATEMENT

FOR THE CLEARWATER CLEAN COAL CONFERENCE

The 36th International Technical Conference on
Clean Coal & Fuel Systems
June 5 to 9, 2011
Clearwater, Florida, USA

The 35th conference was successfully concluded on June 10th; to see the complete program and all events; Click here for pages/Official Program 2010.pdf
The University of Texas at Arlington has found a way to turn coal into crude oil, and, perhaps more importantly, the money to do so on a large scale.

Researchers with UTA's Center for Renewable Energy and Science Technology expect to license the technology to a company, which will build a refinery by the end of the year to turn lignite coal into oil. According to a press release, the process can produce oil for around $30 a barrel -- far less than the current market price for crude of around $75 a barrel.
Why Are We Here

1. Economic Development
   1. Coal Operations
   2. Transportation

2. Tax Revenue
   1. Infrastructure
   2. Education
   3. Public Safety

Make no little plans. They have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die.