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Safety News

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Did you know...

- Railroads are three or more times more fuel-efficient than trucks.
- If just 10 percent of the freight that currently moves by truck were diverted to rail, fuel-savings would approach one billion gallons per year.
- Freight railroad fuel efficiency has steadily improved, rising 74 percent since 1980.
- In 2004 railroads moved a ton of freight nearly 410 miles, on average, per gallon of diesel fuel, which is up from 235 miles in 1980.

Passenger Rail Corner



More Amtrak Uncertainty – Amtrak funding level remains up in the air.

Amtrak ticket information at
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www.iowarail.com

Feature Articles

Rail History is Alive and Well

One of my passions in life is history, and Iowa is rich in railroad history. Because railroads helped to populate this state, many communities have an active rail line or former railroad depot. As a result, Iowans have a variety of historical museums focusing on railroads.



Union Pacific Railroad Museum

At least 60 former railroad depots, many beautifully restored, are in use around the state as local history museums or for other purposes. Iowa also has a number of railroad attractions devoted to model railroading, and a number of sites where antique railroad locomotives are displayed, or where excursion rides are provided. Listed below are a few of Iowa's railroading attractions.

- Boone & Scenic Valley Railroad
- Burlington Northern Depot and World War II Memorial Museum in Red Oak
- C.B. & Q. Restored Depot in Creston
- Chicago, Rock Island and Pacific Depot in Wilton
- Delmar Depot Museum
- Depot/Caboose Riverfront Park in Parkersburg
- Dows Depot Welcome Center
- Eldora Welcome Center and Railroad Museum
- Fort Madison, Farmington and Western Railroad near Donnelson
- Gowrie Depot Historical Museum
- Grafton Heritage Depot/Museum
- Historic General Dodge House in Council Bluffs (national historic landmark)
- Historic Valley Junction in West Des Moines
- Hobo Museum and Hobo Gift Shop in Britt
- Hub City Heritage Railway Museum in Oelwein
- Illinois Central Railroad Depot in Independence
- Kate Shelley Railroad Museum and Park in Moingona
- L. M. & O. Railroad Museum in Marathon
- Midwest Central Railroad in Mount Pleasant
- Milwaukee Railroad Shops in Sioux City
- Moravia Wabash Depot Museum
- North Lee County Historic Center and Railroad Depot
- Oelwein Railway Museum
- RailsWest Railroad Museum and HO Model Railroad in Council Bluffs
- Red Barn Model Railroad Museum in Dundee
- Restored Railroad Depot in Clarion

- Santa Fe Depot Museum Complex in Fort Madison
- Trainland U.S.A. in Colfax
- Union Pacific Railroad Museum in Council Bluffs
- Vinton Railroad Depot and Museum

Another exciting development in the state to preserve transportation history is the Iowa Transportation Museum in Grinnell. A group of advocates have been working for about five years to create a museum dedicated to transportation in Iowa – its history, heroes, current role in the state's economy, and possible future directions. The former Spaulding Automobile Factory in Grinnell, adjacent to the Iowa Interstate Railroad, has been purchased for the museum and the buildings are presently being stabilized. For more information, visit this Web site:

<http://www.iowatransportationmuseum.com/pages/artifact.html>

And, finally, there is a project underway to preserve and share historic photos, maps and other historic paper documents within the DOT. With the support of a Transportation Enhancement Grant, the DOT will be hiring a consultant to develop a Historic Resources Plan. The plan will identify the various collections around the DOT, recommend storage and preservation techniques, and create a timeline for cataloging and digitally scanning selected documents. Eventually, we intend to make the scanned collection available on the internet.

Peggy Baer
Director, Office of Rail Transportation

The Trails and Rails Connection

As spring approaches, many of you will be getting your bicycle in working order or donning your walking shoes to take advantage of the over 1,150 miles of recreational trails in the state. The trail system in Iowa, particularly its more rural segments, is largely built on the "bones" of former railroad lines.

During the early stages of development of Iowa's trails system, the majority of trails were built on public lands. In the 1960s and 1970s, interest grew for an expanded trail system using railroad right of way as a backbone of that system.



In 1968 the National Trails System (NTS) Act was established by Congress to facilitate use of railroad right of way for trails. However, because rail right of way often is a patchwork of outright ownership, easements and other possible ownership/use scenarios, it was very difficult to buy property for a trail. The buyer had to negotiate with multiple property owners and a single unwilling property owner could prevent the development of the trail corridor.

In 1985 the NTS Act was amended to make possible the purchase of railroad right of way as an entire parcel by a trails group or public body. The amendment allowed a public entity to acquire the property of a rail line on an interim basis for trails use when a track segment is to be abandoned. The interim use comes with the condition that the right of way is available for rail use if needed in the future. This feature is called rail banking. The NTS Act thus serves a dual purpose --- facilitating the development of trails, while at the same time, preserving rail corridors which offer the potential for restoration of rail service.

Developing a trail on a former rail bed is faster, simpler and cheaper than building a trail "from scratch," since basic grading, drainage, culverts, and bridges are already in place. Today, 616 miles of trails (54 percent Iowa's trails system) are built on the right of way of former rail lines. To date, no trails in Iowa

have reverted to an active rail corridor, but key pathways that form connections to the existing rail system have been preserved, if that need ever arises.

For information on Iowa's trails system
www.iowabikes.com

Building Iowa's Rail System

The last newsletter announced a new program that provides loans or grants for rail projects that spur economic development, such as building rail spurs or sidings. Demand for assistance through the new Rail Revolving Loan and Grant Program was high, with 26 applications received, requesting a total of \$17 million in grants or loans.

The Iowa Rail Finance Board is expected to make awards later this summer. However, due to the fact that only \$3.6 million is available to award, not all projects can be funded.

A Different Point of View

I recently had the opportunity to ride Amtrak from Osceola to West Burlington. But rather than a plush seat, I was in the cab, sitting beside the engineer. I would like to share some personal observations about my ride.

We all know that trains are big, but climbing up the ladder on the side of the locomotive to enter a door approximately 8 to 10 feet above ground level suddenly made me realize this locomotive is way more than big – it's GIGANTIC.



At full speed the train traveled up to 79 mph. I expected that to seem very fast, but the speed was deceptive. I discovered:

- in the wide-open countryside, 70+ mph seemed almost leisurely – more like 50 mph on the Interstate;
- when approaching a highway-rail crossing, 70 mph seemed very fast – when you spy a crossing ahead, you are upon it in practically the blink of an eye; and
- when a vehicle is approaching a highway-rail crossing ahead of the train, it is impossible NOT to think with a slight sense of panic --- “Will they stop?” ---because 70 mph then feels like you are flying!

Radio communication between the dispatcher and engineer was frequent and repetitive with lots of redundancy to avoid any miscommunication. Though I could vaguely discern that the radio communication had SOMETHING to do with location and activities, the rest may well have been a foreign language. Like many fields, there is a whole vocabulary common within the industry that an outsider finds perplexing.

There is a lot of variability along a route. Some segments of track have train signals, much like traffic lights on the highway, that inform the engineer if he or she has the right to proceed. In other areas, signals are not present and the engineer must obtain the right to operate on that segment of track through the dispatcher.

While 70+ mph was the norm, there were track segments where the maximum speed was much lower for one reason or another. Some switches to divert a train from one track to another were automated, others were not. Much like driving down a highway, the tracks have different trackside features, speed restrictions and traffic control.



There really is a “dead man’s switch,” a button that must be pushed periodically. If there is no response from the engineer, the train will automatically stop, preventing a runaway train if the engineer is non-responsive. And finally, when telling a youngster about the trip, he asked if I was able to steer the train. No, I did not, and steering is not *quite* the right word, since of course, there is no steering wheel.

Diane McCauley, Newsletter Editor

Commodity Focus

Focus on Coal

Coal is a dark sedimentary rock composed mostly of carbon and hydrocarbons and is the most abundant fossil fuel in the United States. Certainly not a very exciting or elegant commodity, but coal plays a very large role in the national and state economy, and makes up the largest single commodity shipped by rail.

Coal is mined in 27 states, with the largest quantity of coal mined in Wyoming’s Powder River Basin, where low-sulphur coal is in demand to meet air quality standards. Coal is used in industry and steel making, but the largest use by far is to generate electrical power. Over 50 percent of the nation’s power is generated by coal.



Because coal is consumed in large quantities all over the United States, but is produced in large quantities in just a handful of states, the efficient transportation of coal is critical. Over 65 percent of coal shipments in 2003 – more than 680 million tons – were delivered by rail, according to Energy Information Administration data.

That’s a lot of coal, and it makes up a substantial portion of the railroad industry’s cargo. Of the major commodities carried by rail, the shipment of coal accounts for 40 percent (in 2002) of the total ton miles (one ton of product hauled a single mile).

With the opening of the Powder River Basin (PRB) in Wyoming to mining in the 1970s, U.S. coal shipments have grown dramatically, from 4.8 million carloads to 7.1 million carloads in 2002. By 2025 coal consumption is expected to rise by 38 percent.

The largest coal movements from the PRB are to electric generating plants in the Midwest and southern part of the United States. Iowa utility companies depend on coal to generate about 85 percent of their electrical power, using nearly 22 million tons of coal in the process. Regulated utilities and municipalities are not the only Iowa entities using coal. Coal is the primary fuel source for many large Iowa employers. ADM, Cargill and John Deere all use coal in their manufacturing processes. Iowa is also home to the world’s first 50-million gallon, coal-fired ethanol plant--- Central Iowa Renewable Energy in Goldfield. The second such plant, owned by Lincolnway Energy in Nevada, will come online in June.

As coal production and usage increase, railroads become more efficient hauling it by using larger rail cars, higher powered locomotives, improving infrastructure, and finding better ways to utilize the equipment. Unit trains, an entire train made up of coal cars, shuttle cars directly between the mine and larger customers for speedy and cost-effective transportation.

The increased demand does present some challenges. “Given the cost of other fuels, such as natural gas, demand for coal has jumped exponentially. While railroads and mines alike are making massive investments in infrastructure and personnel to keep up with demand, businesses that rely on coal are struggling to get the tonnage they want. Further, companies wanting to use coal for the first time have an even more difficult time finding reliable sources. This crunch is causing producers, transporters and end-users to look at all options that maximize production and/or secure supply,” says Jeff Woods, marketing manager at Alliant Energy Transportation in Cedar Rapids.

Industry News

Fuel Master

Iowa was one of the proving grounds for Union Pacific Railroad's new fuel-conservation program, which has shown some dramatic results. While you struggle to save that few gallons of gas in your weekly commute, just imagine the potential of even small improvements in fuel efficiency in a locomotive that can burn three or more gallons of diesel fuel *per minute*.

Union Pacific's "Fuel Master" program uses training, incentives and some good old-fashioned competition to yield some astonishing results. By the end of 2005, UP has credited the program with saving 16 million gallons of diesel fuel, representing \$30 million.

Locomotive engineers in approximately 30 crews that travel across a dozen different states (including Iowa) have participated in the program. Engineers receive fuel-conservation information and peer-training. Many of the tips are familiar – coast to a stop, no jack-rabbit starts and careful planning – while others are unique to the rail environment. Some engineers train on specially-equipped simulators that provide feedback on fuel consumption.

Engineers' fuel-consumption performance is compared within the same territory (to eliminate variances such as flat and hilly terrain). Those engineers in the top 15 to 20 percent are awarded a \$100 fuel card for their personal use.

UP plans to expand the program in 2006, is expecting to double the total savings and will implement the program system-wide by 2007.

Many other railroads, including BNSF, have similar fuel-savings programs in place; however, UP's program is unique in offering a personal-incentive to their employees.

Iowa Interstate adds an Illinois Line

Iowa Interstate Railroad, Ltd. (IAIS) will lease a 32-mile line between Utica and Henry, Illinois, from CSX Transportation. "This transaction helps IAIS have better control over its mainline operations to Chicago and Peoria," said IAIS President and Chief Executive Officer Dennis Miller.

IAIS operates over 500 miles between Omaha and Chicago on lines formerly owned by the Chicago, Rock Island and Pacific Railroad, which was liquidated in 1980.

Iowa Interstate Gaining Power

Iowa Interstate Railroad will move forward with plans to purchase 22 GP-38-2 locomotives from GATX Rail. The Federal Railroad Administration (FRA) announced approval of a \$9.35million Railroad Rehabilitation and Improvement Financing (RRIF) loan application for the purchase.

The RRIF program authorizes the FRA to provide direct loans or loan guarantees to eligible railroads, governments or government-sponsored authorities to acquire, develop, improve or rehabilitate intermodal or rail facilities.

IAIS leased locomotive power from GATX in 2005. In 2005, IAIS obtained a \$32.7 million RRIF loan to upgrade 300 track miles to accommodate heavier rail cars and increase speed.

South Dakota Sells "Core" Line

A rail line that the State of South Dakota rescued from abandonment 25 years ago has been sold to BNSF Railway for \$40.3 million. The deal also includes improved short-line access to BNSF tracks. The state will invest approximately \$6.5 million in sidings and track improvements, and BNSF agreed to grant regional- and short-lines access rights to the line.

“This is access to worldwide markets that our smaller carriers have never before had,” said South Dakota Gov. Mike Rounds in a prepared statement.

The 368-mile Core line runs from Aberdeen to Mitchell, Mitchell to Canton, Canton to Sioux Falls, and Mitchell to Sioux City. The State of South Dakota took ownership of the line in 1980 after it was deserted by the bankrupt Milwaukee Road. Then Governor Janklow persuaded the legislature to temporarily raise sales tax by one cent to finance the purchase in a bold move to preserve the rail service that was critical to South Dakota’s economy.

BNSF contracted to operate the line for five years and in 1986 negotiated a new operating agreement that contained a purchase option. Years of negotiations on the sale and several lawsuits have resulted in a sales agreement that appears to be a win-win situation.

Safety News

Safety Counts at CRANDIC

The Cedar Rapids and Iowa City (CRANDIC) Railway Co. reported a second year of safety success. With two consecutive years without a recordable injury, CRANDIC employees worked more than 280,500 hours injury-free. President and General Manager Paul Treangen offered words of praise for his 78 employees when he said, “Reaching this milestone is proof of their ongoing dedication to safety and is something we can all be very proud of.”

Passenger Rail Corner

More Amtrak Uncertainty

Amtrak received a \$1.318 billion appropriation to continue operations in 2006. The appropriation was coupled with a number of reform measures.

The Bush Administration’s budget proposal for 2007 recommends \$900 million for Amtrak, \$418 million less than the 2006 appropriation, and \$900 million more than the Administration’s 2006 proposal, which recommended zero funding.

The budget proposal for capital improvements would remain at \$500 million. However, the budget recommendation would not provide Amtrak any direct operating subsidy. Instead, the proposal would give the Secretary of Transportation \$400 million for Efficiency Incentive Grants. The grants would be contingent on a number of reforms and restrictions in the FY2006 legislation and awarded by the secretary if they’re “in the best interests of the transportation system” and included in Amtrak’s business plan.

Congress has yet to take any action on Amtrak funding or the Administration’s budget proposal, but it likely will prove to be another contentious year as both opponents and proponents of Amtrak struggle with the future of Amtrak.

Many organizations are interested in the outcome of this issue. Their opinions can be viewed at the following Web sites:

www.s4prc.org

States for Passenger Rail Coalition



www.fra.dot.gov
www.narprail.org

Federal Railroad Administration
National Association of Railroad Passengers

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