Part III. Appendices

This section of the *2009 Iowa Railroad System Plan* provides additional information for select topics mentioned in the plan. The topics covered in the appendices include:

- Appendix A: Government interaction with railroads.
- Appendix B: Government financial assistance programs.
- Appendix C: Midwest Regional Rail Initiative.
- Appendix D: 2008 Iowa railroad profiles.
- Appendix E: Performance measures for Iowa's railroad system.

Appendix A. Government interaction with railroads

Government activities with respect to rail transportation in Iowa can be categorized by federal or state agency involvement. At the federal level, the primary organizations involved are the Federal Railroad Administration (FRA), Surface Transportation Board (STB) and U.S. Department of Transportation (DOT). At the state level, rail interests are mainly handled by the Office of Rail Transportation within the Iowa DOT, as well as by the Iowa Department of Inspections and Appeals.

Brief historical overview

Throughout American history, rail regulation has varied in intensity. Railroads were initially given extensive land tracts and the freedom to develop their track systems. The early 1900s saw the creation of the Interstate Commerce Commission (ICC), which, among other duties, regulated railroad routes and rates. Economic troubles struck the industry in the 1970s, and multiple pieces of legislation, most notably the Stagger's Rail Act of 1980, deregulated much of the industry. As a result, railroads shed many of their less-efficient tracks (either bought by other railroads or abandoned), and increased flexibility in setting rates, routes and negotiating contracts with shippers.

The ICC was replaced by the STB in 1995, with remaining functions primarily focusing on noncompetitive routes, as well as mergers. Deregulation has been widely regarded as a positive change that has improved the financial vitality of railroads and increased return on investment, as well as funds for capital, safety and maintenance improvements.

The industry has now become consolidated into fewer large carriers focusing on primary shipping routes. Additionally, 55 percent of rail traffic now moves by negotiated contracts between the railroads and shippers. Legislative debate remains, however, about fairness of rates for shippers in communities served by only one railroad, where some shippers argue they are captive to a railroad's rates. Rail carriers respond that they are competing against other modes as well (i.e., truck carriers); therefore, they need rate flexibility across their contracts.

Federal railroad regulatory agencies

Surface Transportation Board

This STB is affiliated with the U.S. DOT and primarily serves as an arbitrator for railroad disputes concerning rates and services, as well as a regulatory authority over other transportation modes (i.e., pipelines, trucks and buses). In addition, the STB regulates industry structure through approvals of mergers, sales and acquisitions, abandonment, and the conversion of rail lines into recreational trails. Further information on the STB can be found at http://www.stb.dot.gov/.

Federal Railroad Administration
The FRA is part of the U.S. DOT. The primary responsibility of the FRA concerns enforcement of railroad safety legislation. In addition, the FRA administers railroad funding programs, and conducts policy and safety research. Further information on the FRA can be found at http://www.fra.dot.gov/.

Iowa rail regulatory agency

Iowa Department of Transportation
The primary rail regulator within the state of Iowa is the Iowa DOT. However, the Iowa DOT has limited regulatory authority. It participates in the railroad abandonment process and is involved in developing federal legislation, but it has little authority over the mostly deregulated arena of rail rates and services. When applicable, the Iowa DOT can facilitate service disputes between shippers and carriers through the Iowa Department of Inspections and Appeals.

Other areas of Iowa DOT involvement include long-range planning for railroads and financing. Financing involves loans and grants for construction and maintenance of track, maintenance and safety improvements at grade highway-rail crossings, and developing new spur tracks for economic development.

Appendix B. Government financial assistance programs

Many crossing safety programs are partially federally funded through the FRA or U.S. DOT, and sometimes through the authority of the Federal Highway Administration (FHWA) (when these programs involve highways). Common safety improvements with these funds include pavement markings, active warning devices, elimination of hazards, and crossing closures. These are primarily federally funded improvements determined by the state, with some costs shared by the state, local communities or railroads.

The Iowa DOT's Office of Rail Transportation provides detailed information on its Web site (www.iowarail.com) about many of the state and federal governmental financial assistance programs described below.

Economic development

Railroad Revolving Loan and Grant Program

The Railroad Revolving Loan and Grant Program (RRLGP) provides assistance to improve rail facilities that will spur economic development and job growth, and otherwise aid railroads in the preservation and improvement of the rail transportation system. The program can provide assistance as loans, grants or combinations thereof, but grant funding is limited to 50 percent of the total funds available. Industries, railroads, local governments or economic development agencies may apply for financial assistance for projects such as:

- Building rail spurs to a new or expanding development.
- Building or rebuilding sidings to accommodate growth.
- Purchasing or rehabilitating existing rail infrastructure.
- Rehabilitating existing rail lines to increase capacity.
- Developing other rail-related projects.

Demand for assistance from the RRLGP has far exceeded available funds. Fifty seven projects requested more than $34.3 million in assistance competing for $9.6 million in awards to 25 projects. In 2008, the Iowa legislature appropriated $2 million to the fund. The Iowa DOT has a funding initiative to increase state funding for the program called Access Rail.

Railroad Revolving Loan and Grant Program

As of December 12, 2008

SUMMARY (since origination of RRLGP)

57 projects
$34.2 million requested
25 awards
$9.6 million in total awards
Assisted in creation of **1,175 jobs**
$1.4 billion in private capital investment is associated with the awards (excludes flood restoration candidates)

June 2006 Awards

Applicant	Location	Grant	Loan	Awarded Total
Absolute Energy LLC	Mitchell Co.	$246,000	$254,000	$500,000
Cascade Lumber Company	Pleasantville	$214,000	$320,000	$534,000
Eastern Iowa Ind. Center	Davenport	$450,000	$310,791	$760,791
Green Plains Renewable Energy	Shenandoah	$126,000	$154,000	$280,000
Iowa Cold Storage	Altoona	$120,000	$259,500	$379,500
Iowa Renewable Energy LLC	Washington	$168,000	$132,000	$300,000
Marco Group International	Davenport	$22,500	$0	$22,500
Metzler Automotive	Keokuk	$60,000	$0	$60,000
	Total	**$1,406,500**	**$1,430,291**	**$2,836,791**

December 2006 Awards

Applicant	Location	Grant	Loan	Awarded Total
Siemens Wind Power	Ft. Madison	$326,000	$0	$326,000
Southern Iowa BioEnergy	Osceola	$100,000	$150,000	$250,000
	Total	**$426,000**	**$150,000**	**$576,000**

October 2007 Awards

Applicant	Location	Grant	Loan	Awarded Total
CR Terminal - IANR	Palo	$36,000	$206,000	$242,000
Norfolk Iron & Metal	Durant	$810,000	$30,000	$840,000
Big River Resources	Grinnell	$75,000	$0	$75,000
Oregon Trail Energy	Alta	$75,000	$0	$75,000
Raccoon Valley Bio Diesel	Strom Lake	$50,000	$0	$50,000
Unity Ethanol - Cedar River	Louisa County	$0	$270,000	$270,000
Unity Ethanol -Ottumwa	Ottumwa	$159,000	$111,000	$270,000
	Total	**$1,205,000**	**$617,000**	**$1,822,000**

May 2008 Immediate Opportunity Award

Applicant	Location	Grant	Loan	Awarded Total
City of Newton/Trinity Towers	Newton	$165,795	$165,795	$331,590
	Total	**$165,795**	**$165,795**	**$331,590**

July 2008 Awards - Flood Recovery

Applicant	Location	Grant	Loan	Awarded Total
Burlington Junction Railway	Track restoration	$0	$71,000	$71,000
Cedar Rapids and Iowa City Railway Co.	Track restoration	$0	$320,000	$320,000
Keokuk Junction Railway Co.	Track restoration	$0	$554,000	$554,000
Iowa, Chicago and Eastern Railroad Corp.	Track restoration	$0	$1,417,000	$1,417,000
Iowa Interstate Railroad Ltd.	Track restoration	$0	$772,000	$772,000
Iowa Northern Railway Co.	Track restoration	$0	$681,000	$681,000
Iowa River Railroad	Track restoration	$0	$184,000	$184,000
	Total	**$0**	**$3,999,000**	**$3,999,000**

TOTAL (since origination of RRLGP)	$3,203,295	$6,362,086	$9,565,381

For further program information or questions, please contact the Iowa DOT's Office of Rail Transportation at 515-239-1140 or iowarail.com.

Safety and maintenance programs

Railway-Highway Grade Crossing Safety Fund

This federally funded program provides financial assistance to improve rail crossings over highways. Approved projects are 90 percent federally funded, with 10 percent provided by the railroad and/or highway authority. These funds are used to install new crossing signal devices, upgrade existing signals, improve crossing surfaces, and provide low-cost improvements such as increased sight distance, widened crossings, increased signal lens size or crossing closures.

Funding is competitive, determined by a cost-benefit analysis that considers costs, estimated benefits and the severity of crash risk at a location. The proposed project must be approved by the Iowa DOT and Iowa Transportation Commission before being placed in the Statewide Transportation Improvement Program. Annual funding is approximately $4 to $5 million.

Railway-Highway Grade Crossing Safety Program
(Federal-Aid)
2009 Construction Program

Federal ID #	Railroad	Highway jurisdiction	Road location	Type of improvement	Federal funds
865627B	ICE	Bettendorf	Shoreline Drive	Signals w/gate arms	$ 195,000
376147P	ICE	Guttenberg	Herder Street	Signals w/gate arms	$ 230,000
079145H	BNSF	Monroe County	Monroe County Road T-55	Signals w/gate arms	$ 185,000
376129S	ICE	Dubuque	Hawthorne Street	Signals w/gate arms	$ 145,000
864238S	NS	Des Moines	Maury Street	Signals w/gate arms	$ 200,000
385535M	ICE	Garner	Allen Street	Signals w/gate arms	$ 180,000
376145B	ICE	Guttenberg	Koerner Street	Signals	$ 145,000
607883H	IAIS	Polk County	Northeast 86th Street	Signals	$ 120,000
063225D	BNSF	Albia	North Eighth Street	Circuitry upgrade - CWT	$ 150,000
876065N	UP	Story County	West Maple Avenue	Signals w/gate arms	$ 190,000
307818Y	CC	Linn County	C Avenue Extension	Signals w/gate arms	$ 140,000
097449W	BNSF	DOT	Iowa 10	Signals w/gate arms	$ 140,000
307004E	CC	Delaware County	332nd Avenue	Signals w/gate arms	$ 160,000
382079E	BNSF	DOT	Riverside Boulevard	Circuitry upgrade - CWT	$ 45,000
307008G	CC	Delaware County	330th Avenue	Signals w/gate arms	$ 160,000
307286X	CC	Hardin County	JJ Avenue	Signals w/gate arms	$ 170,000
086564X	BNSF	Sioux City	Fourth Street	Signals w/gate arms	$140,000
063327W	BNSF	Middletown	Boundary Street	Circuitry upgrade - CWT	$ 180,000
380039A	ICE	Grafton	Third Street	Signals w/gate arms	$ 150,000
307508E	CC	Storm Lake	Geneseo Street	Signals w/gate arms	$ 150,000
307459K	CC	Fonda	Main Street	Signals w/gate arms	$ 150,000
078048V	BNSF	Lee County	263rd Avenue	Signals w/gate arms	$ 150,000
307705B	CC	Buchanan County	Golf Course Boulevard	Signals w/gate arms	$ 150,000
082356H	BNSF	Lyon County	Lyon County Road K-42	Signals w/gate arms	$ 120,000
190983D	UP	Crawford County	N Avenue	Signals w/gate arms	$ 190,000
307597Y	CC	Cherokee County	F Avenue	Signals w/gate arms	$ 150,000
				Crossing closure statewide	$ 25,000
				Yield sign pilot project	$ 110,446
Total					$4,220,446

2009 Railway-Highway Grade Crossing Safety Program
(Federal-Aid)
Surface Repair Projects

County	Federal ID #	Railroad	Highway jurisdiction	Road location	Federal safety funds (60%)
Clinton	376036X	ICE	Clinton	17th Avenue North	$ 63,485
Hamilton	307338M	CC	Webster City	Broadway Street	$ 55,260
Benton	607647D	IANR	Vinton	Eighth Avenue	$ 39,480
Black Hawk	911786J	CEDR	Cedar Falls	Lone Tree Road	$ 33,120
Clinton	190350N	ICE	Clinton	Fourth Avenue North	$ 32,100
Linn	376722W	CIC	Cedar Rapids	L Street Southwest – 900 Block	$ 45,000
Muscatine	606852F	IAIS	West Liberty	North Calhoun Street	$ 34,263
Black Hawk	607537T	IANR	La Porte City	Commercial and Eighth streets	$ 21,246
Polk	603713A	IAIS	Des Moines	Southeast Second Street	$ 37,200
Cedar	606860X	IAIS	Cedar County	Baker Avenue	$ 36,688
Muscatine	606851Y	IAIS	West Liberty	Prairie Street	$ 37,171
Linn	190494T	UP	Cedar Rapids	10th Street Southeast and Otis Road	$ 74,415
Dubuque	306988P	CC	Farley	Third Street Northeast	$ 39,720
Lee	078050W	BNSF	Lee County	Ortho Road	$ 23,040
Polk	603710E	IAIS	Des Moines	Southeast Fifth Street	$ 37,200
Black Hawk	308802F	CEDR	Cedar Falls	Dunkerton Road	$ 36,060
Lee	078040R	BNSF	Lee County	245th Avenue	$ 23,040
Crawford	308332A	CC	Crawford County	Nelson Park Road	$ 32,880
Floyd	308897R	CC	Floyd County	220th Street	$ 31,800
Lee	078041X	BNSF	Lee County	245th Avenue	$ 23,040
Linn	190500U	UP	Cedar Rapids	Ninth Avenue Southeast and Fourth Street	$ 98,430
Mitchell	309012D	CC	Mitchell County	Mitchell County Road A-19	$ 28,800
Lee	078276H	BNSF	Lee County	180th Street	$ 23,040
Sac	190931L	CC	Sac County	360th Street	$ 48,960
Linn	190499C	UP	Cedar Rapids	10th Avenue Southeast – 400 Block	$ 40,200
Total					$ 995,638

Railway-Highway Grade Crossing Safety Program
(Federal-Aid)
2009 Preliminary Engineering and 2010 Construction Program

Federal ID #	Applicant*	Railroad	Highway jurisdiction	Road location	Present warning device	Type of improvement	B/C ratio	Federal funds
191103A	RR	UP	Pottawattamie County	Joslin Avenue	Signals	Signals w/gate arms	5.2	$ 175,000
307110 M	RR	CC	Waterloo	North Evans Road	Crossbucks	Signals w/gate arms	3.2	$ 175,000
307177U	RR	CC	Waterloo	Wagner Road	Signals	Signals w/gate arms	2.8	$ 125,000
385521E	RR	ICE	Ventura	McIntosh Road	Crossbucks	Signals	2.8	$ 150,000
307112B	RR	CC	Waterloo	Osage Road	Crossbucks	Signals w/gate arms	2.6	$ 175,000
095276C	RR/HA	BNSF	Mills County	262nd Street	Crossbucks	Signals w/gate arms	2.3	$ 180,000
876128R	RR	UP	Hardin County	140th Street	Crossbucks	Signals w/gate arms	2.3	$ 200,000
190676E	RR	UP	Marshall County	Canfield Avenue	Crossbucks	Signals w/gate arms	2.3	$ 210,000
608601T	RR	UP	Winnebago County	20th Avenue	Signals	Signals w/gate arms	2.3	$ 180,000
185856S	HA	UP	Osceola County	260th Street	Crossbucks	Signals w/gate arms	2.2	$ 200,000
191084X	RR	UP	Pottawattamie County	Desota Avenue	Signals	Signals w/gate arms	2.1	$ 175,000
876184X	RR/HA	UP	Cerro Gordo County	130th Street	Crossbucks	Signals w/gate arms	2.0	$ 190,000
876082E	RR	UP	Story County	210th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
378243Y	HA	IAIS	Council Bluffs	South 17th Street	Crossbucks	Signals w/gate arms	1.9	$ 175,000
876083L	RR	UP	Story County	200th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
191348R	RR/HA	UP	Sioux City	Donner Avenue	Crossbucks	Signals w/gate arms	1.9	$ 185,000
876113B	RR	UP	Hardin County	220th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
307510F	HA	CC	Storm Lake	Ontario Street	Crossbucks	Signals w/gate arms	1.8	$ 175.000
307185L	RR	CC	Cedar Falls	Main Street East	Signals	Signals w/gate arms	1.8	$ 175,000
						Crossing closures		$ 22,500
						statewide yield sign pilot project		$ 40,000
Total								$ 3,567,500

2010 Railway-Highway Grade Crossing Safety Program
(Federal-Aid)
Surface Repair Projects

County	Federal ID #	Railroad	Highway jurisdiction	Road location	Federal safety funds (60%)
Des Moines	078061J	BNSF	Des Moines County	120th Avenue	$ 23 040
Muscatine	606835P	IAIS	Muscatine County	Muscatine County Road X-54	$ 36,000
Muscatine	606824C	IAIS	Wilton	Chestnut Street	$ 36,000
Muscatine	606821G	IAIS	Muscatine County	Muscatine County Road Y-14 and Taylor Avenue	$ 36,000
Muscatine	606822N	IAIS	Wilton	Cypress Street	$ 36,000
Muscatine	606828E	IAIS	Wilton	Liberty Street	$ 36,000
Woodbury	382070T	BNSF	Sioux City	Hamilton Boulevard	$ 67,200
Muscatine	607211C	ICE	Muscatine	Oregon Street	$ 157,000
Woodbury	064026E	BNSF	Sioux City	18th Street	$ 90,000
Woodbury	064029A	BNSF	Sioux City	11th Street	$ 67,200
Washington	607322U	ICE	Washington	North Fourth Avenue	$ 77,601
Woodbury	382038A	BNSF	Sioux City	Virginia Street	$ 48,000
Muscatine	607215E	ICE	Muscatine	Sampson Avenue	$ 111,524
Buchanan	307085G	CC	Jesup	Main Street	$ 71,919
Cerro Gordo	385471D	ICE	Cerro Gordo County	Thrush Avenue	$ 327,692
Total					$ 931,976

Railway-Highway Grade Crossing Safety Fund
(Federal-Aid)
2010 Accomplishment Program Candidates

Federal ID #	Applicant*	Railroad	Highway jurisdiction	Road location	Present warning device	Type of improvement	B/C ratio	Federal funds
191103A	RR	UP	Potawattamie County	Joslin Avenue	Signals	Signals w/gate arms	5.2	$ 180,000
307110M	RR	CC	Waterloo	North Evans Road	Crossbucks	Signals w/gate arms	3.2	$ 175,000
307177U	RR	CC	Waterloo	Wagner Road	Signals	Signals w/gate arms	2.8	$ 140,000
385521E	HA	ICE	Ventura	McIntosh Road	Crossbucks	Signals	2.8	$ 160,000
307112B	RR	CC	Waterloo	Osage Road	Crossbucks	Signals w/gate arms	2.6	$ 175,000
095276C	RR/HA	BNSF	Mills County	262nd Street	Crossbucks	Signals w/gate arms	2.3	$ 180,000
876128R	RR	UP	Hardin County	140th Street	Crossbucks	Signals w/gate arms	2.3	$ 200,000
190676E	RR	UP	Marshall County	Canfield Avenue	Crossbucks	Signals w/gate arms	2.3	$ 210,000
608601T	RR	UP	Winnebago County	20th Avenue	Signals	Signals w/gate arms	2.3	$ 180,000
185856S	HA	UP	Osceola County	260th Street	Crossbucks	Signals w/gate arms	2.2	$ 200,000
191084X	RR	UP	Pottawattamie County	Desota Avenue	Signals	Signals w/gate arms	2.1	$ 180,000
876184X	RR/HA	UP	Cerro Gordo County	130th Street	Crossbucks	Signals w/gate arms	2.0	$ 190,000
876082E	RR	UP	Story County	210th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
378243Y	HA	IAIS	Council Bluffs	South 17th Street	Crossbucks	Signals w/gate arms	1.9	$ 175,000
876083L	RR	UP	Story County	200th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
191348R	RR/HA	UP	Sioux City	Donner Avenue	Crossbucks	Signals w/gate arms	1.9	$ 195,000
876113B	RR	UP	Hardin County	220th Street	Crossbucks	Signals w/gate arms	1.9	$ 220,000
307510F	HA	CC	Storm Lake	Ontario Street	Crossbucks	Signals w/gate arms	1.8	$ 175,000
307185L	RR	CC	Cedar Falls	Main Street East	Signals	Signals w/gate arms	1.8	$ 175,000
						Crossing closures statewide yield sign pilot project		$ 22,500
								$ 40,000
Total								$ 3,612,500

*HA = Highway authority

Highway-Railroad Grade Crossing Surface Repair Fund

This sate-funded program is similar to the federal crossing safety fund. Railroad companies, private rail operators or governmental jurisdictions may apply for funding from the Iowa DOT. This fund will support 60 percent of the project costs, with the remainder coming from the railroad (20 percent) and public road jurisdiction (20 percent), both of whom enter into a project agreement with the Iowa DOT.

Projects are approved by the Iowa DOT and Iowa Transportation Commission. Funding stands at approximately $900,000 per year, but is currently backlogged by four years (Iowa Admin. Code r. 761-821).

2008 Highway-Railroad Grade Crossing Surface Repair Program (State Funded)

County	Federal ID #	Railroad	Highway jurisdiction	Road location	State surface repair fund (60%)
Muscatine	606733W	ICE	Muscatine	Steward Road	$ 54,863
Muscatine	607216L	ICE	Muscatine	33rd Street	$ 31,792
Hancock	385572P	COOP	Hancock County	Eden Avenue	$ 26,820
Hancock	385572P	ICE	Hancock County	Eden Avenue	$ 24,318
Clay	385734P	COOP	Everly	North Main Street	$ 28,009
Clay	385734P	ICE	Everly	North Main Street	$ 28,009
Polk	607889Y	IAIS	Mitchellville	Center Avenue South	$ 44,035
Polk	607886D	IAIS	Polk County	Cotton Avenue Northwest	$ 37,721
Polk	607887K	IAIS	Mitchellville	Elm Avenue Northwest	$ 32,518
Polk	607890T	IAIS	Mitchellville	Arch Avenue Southeast	$ 44,083
Jasper	607891A	IAIS	Jasper County	West 148th Street South	$ 31,316
Webster	308165D	CC	Webster County	Webster County Road P-29	$ 33,960
Webster	307410B	CC	Webster County	Webster County Road P-29	$ 33,960
Pocahontas	307461L	CC	Pocahontas County	130th Avenue	$ 31,035
Pocahontas	307451F	CC	Pocahontas County	190th Avenue	$ 31,035
Pocahontas	307458D	CC	Pocahontas County	140th Avenue	$ 40,230
Linn	840221V	CIC	Cedar Rapids	76th Avenue Southwest	$ 35,300
Clinton	376043H	ICE	Clinton	30th Avenue North	$ 51,815
Clinton	865520Y	ICE	Clinton	13th Avenue South	$ 37,900
Crawford	308276V	CC	Crawford County	C Avenue	$ 29,520
Black Hawk	607684F	IANR	La Porte City	Bishop Avenue	$ 37,338
Black Hawk	307897M	CC	Waterloo	Rainbow Drive	$ 54,900
Marion	484075K	BNSF	Hamilton	East Depot Street	$ 32,040
Black Hawk	607534X	IANR	La Porte City	Cedar Street	$44,274
Total					$ 876,791

2009 Highway-Railroad Grade Crossing Surface Repair Program (State Funded)

County	Federal ID #	Railroad	Highway jurisdiction	Road location	State surface repair fund (60%)
Floyd	607724B	IANR	Rockford	Fourth Street Southwest	$ 20,400
Floyd	607725H	IANR	Rockford	West Main Avenue	$ 29,700
Scott	604343C	IAIS	Davenport	Brown Street	$ 60,000
Chickasaw	385296P	ICE	Chickasaw County	Chickasaw County Road B-57	$ 42,433
Chickasaw	385310H	ICE	Chickasaw County	Chickasaw County Road T-76	$ 30,296
Clayton/Allamakee	385177F	ICE	Clayton/Allamakee County	Hardin Drive	$ 40,306
Calhoun	307418F	CC	Calhoun County	Xavier Avenue	$ 34,260
Calhoun	308187D	CC	Calhoun County	Sigourney Avenue	$ 34,260
Calhoun	308234J	CC	Calhoun County	Dakota Avenue	$ 34,800
Calhoun	308219G	CC	Calhoun County	Jennings Avenue	$ 34,800
Appanoose	375695Y	ICE	Appanoose County	200th Avenue	$ 33,780
Appanoose	375697M	ICE	Appanoose County	Appanoose County Road J-29	$ 33,780
Appanoose	375692D	ICE	Appanoose County	First Street	$ 33,780
Wright	197025R	UP	Goldfield	Cedar Street	$ 49,815
Black Hawk	308807P	CEDR	Black Hawk County	Black Hawk County Road C-57	$ 34,740
Washington	607323B	ICE	Washington County	12th Avenue	$ 38,975
Washington	375878S	ICE	Washington County	North B Avenue	$ 41,010
Lee	063235J	BNSF	Fort Madison	20th Street	$ 18,238
Lee	063236R	BNSF	Fort Madison	19th Street	$ 18,238
Lee	063240F	BNSF	Fort Madison	18th Street	$ 18,238
Lee	078036B	BNSF	Fort Madison	Henry Layden Road	$ 18,238
Dallas	603374X	IAIS	Dexter	Marshall Street	$ 72,120
Dallas	603371C	IAIS	Dexter	Barton Street	$ 60,540
Black Hawk	307900T	CC	Waterloo	Maynard	$ 35,640
Total					$ 868,928

2010 Highway-Railroad Grade Crossing Surface Repair Program
(State Funded)

County	Federal ID #	Railroad	Highway jurisdiction	Road location	State surface repair fund (60%)
Black Hawk	307119Y	CC	Waterloo	Glenwood Street	$ 91,200
Mills	074388T	BNSF	Mills County	Allis Road	$ 21,000
Mills	074379U	BNSF	Mills County	Hanna Road	$ 21,000
Clay	385702J	ICE	Clay County	260th Avenue	$ 60,510
Clay	385693M	ICE	Clay County	300th Street	$ 60,510
Clay	385699D	ICE	Clay County	270th Avenue	$ 60,510
Clay	385690S	ICE	Clay County	320th Street	$ 60,510
Buena Vista	307528R	CC	Buena Vista County	West Highway M-31	$ 37,980
Buena Vista	307475U	CC	Buena Vista County	Rogers Road	$ 37,980
Total					$ 451,200

2009 Highway-Railroad Grade Crossing Surface Repair Program by Highway Jurisdiction
(State Funded)

County	Federal ID #	Railroad	Highway jurisdiction	Road location	Government funding source	
Cost distribution		20%	20%		State surface repair fund 60%	Federal-aid rail-highway safety fund 60%
Appanoose	375695Y	ICE	Appanoose	200th Avenue	$ 33,780	
Appanoose	375697M	ICE	Appanoose	Appanoose County Road J-29	$ 33,780	
Appanoose	375692D	ICE	Appanoose	First Street	$ 33,780	
Black Hawk	308807P	CEDR	Black Hawk	Black Hawk County Road C-57	$ 34,740	
Calhoun	307418F	CC	Calhoun	Xavier Avenue	$34,260	
Calhoun	308187D	CC	Calhoun	Sigourney Avenue	$ 34,800	
Calhoun	308234J	CC	Calhoun	Dakota Avenue	$ 34,800	
Calhoun	308219G	CC	Calhoun	Jennings Avenue	$ 34,800	
Cedar	606860X	IAIS	Cedar	Baker Avenue		$ 36,688
Black Hawk	911786J	CEDR	Cedar Falls	Lone Tree Road		$ 33,120
Black Hawk	308802F	CEDR	Cedar Falls	Dunkerton Road		$ 36,060
Linn	376722W	CIC	Cedar Rapids	L Street Southwest – 900 Block		$ 45,000
Linn	190494T	UP	Cedar Rapids	10th Street Southeast and Otis Road		$ 74,415
Linn	**190500U**	**UP**	**Cedar Rapids**	**Ninth Avenue Southeast and Fourth Street**		**$ 98,430**
Linn	190499C	UP	Cedar Rapids	10th Avenue Southeast – 400 Block		$ 40,200
Chickasaw	385296P	ICE	Chickasaw	Chickasaw County Road B-57	$ 42,433	
Chickasaw	385310H	ICE	Chickasaw	Chickasaw County Road T-76	$ 30,296	
Clayton/Allamakee	385177F	ICE	Clayton/Allamakee	Hardin Drive	$ 40,306	
Clinton	376036X	ICE	Clinton	17th Avenue North		$ 63,485
Clinton	190350N	ICE	Clinton	Fourth Avenue North		$ 32,100
Crawford	308332A	CC	Crawford	Nelson Park Road		$ 32,880
Scott	604343C	IAIS	Davenport	Brown Street	$ 60,000	
Polk	603713A	IAIS	Des Moines	Southeast Second Street		$ 37,200
Polk	603710E	IAIS	Des Moines	Southeast Fifth Street		$ 37,200
Dallas	603374X	IAIS	Dexter	Marshall Street	$ 72,120	
Dallas	603371C	IAIS	Dexter	Barton Street	$ 60,540	
Dubuque	306988P	CC	Farley	Third Street Northeast		$ 39,720
Floyd	308897R	CC	Floyd	220th Street		$ 31,800
Lee	063235J	BNSF	Fort Madison	20th Street	$ 18,238	
Lee	063236R	BNSF	Fort Madison	19th Street	$ 18,238	
Lee	063240F	BNSF	Fort Madison	18th Street	$ 18,238	
Lee	078036B	BNSF	Fort Madison	Henry Layden Road	$ 18,238	
Wright	197025R	UP	Goldfield	Cedar Street	$ 49,815	
Black Hawk	607537Y	IANR	La Porte City	Commercial and Eighth streets		$ 21,246
Lee	078050W	BNSF	Lee	Ortho Road		$ 23,040
Lee	078040R	BNSF	Lee	245th Avenue		$ 23,040
Lee	078041X	BNSF	Lee	245th Avenue		$ 23,040
Lee	078276H	BNSF	Lee	180th Street		$ 23,040
Mitchell	309012D	CC	Mitchell	Mitchell County Road A-19		$ 28,800
Floyd	607724B	IANR	Rockford	Fourth Street Southwest	$ 20,400	
Floyd	607725H	IANR	Rockford	West Main Avenue	$ 29,700	
Sac	190931L	CC	Sac	360th Street		$ 48,960
Benton	607647D	IANR	Vinton	Eighth Street		$ 39,480
Washington	607323B	ICE	Washington	12th Avenue	$ 38,975	

Washington	375878S	ICE	Washington	North B Avenue	$ 41,010	
Black Hawk	307173S	CC	Waterloo	Burton Avenue	$ 79,680	
Hamilton	307338M	CC	Webster City	Broadway Street		$ 55,260
Muscatine	606852F	IAIS	West Liberty	North Calhoun Street		$ 34,263
Muscatine	606851Y	IAIS	West Liberty	Prairie Street		$ 37,171
Totals					$ 912,968	$ 995,638

2010 Highway-Railroad Grade Crossing Surface Repair Program by Highway Jurisdiction (State Funded)

County	Federal ID #	Railroad	Highway jurisdiction	Road location	Government funding source	
Cost Distribution		20%	20%		state surface repair fund 60%	Federal-aid rail-highway safety fund 60%
Story	196987F	UP	Ames	16th Street	$ 24,600	
Story	197071S	UP	Ames	Ninth Street	$ 19,680	
Buena Vista	307528R	CC	Buena Vista	West Highway M-3	$ 37,980	
Buena Vista	307475U	CC	Buena Vista	Rogers Road	$ 37,980	
Cerro Gordo	385471D	ICE	Cerro Gordo	Thrush Avenue		$ 37,692
Clay	385702J	ICE	Clay	260th Avenue	$ 60,510	
Clay	385693M	ICE	Clay	300th Avenue	$ 60,510	
Clay	385699D	ICE	Clay	270th Avenue	$ 60,510	
Clay	385690S	ICE	Clay	320th Avenue	$ 60,510	
Des Moines	078061J	BNSF	Des Moines	120th Avenue		$ 23,040
Buchanan	307086N	CC	Jesup	Sixth Street		$ 42,731
Buchanan	307085G	CC	Jesup	Main Street		$ 71,919
Mills	074388T	BNSF	Mills	Allis Road	$ 21,000	
Mills	074379U	BNSF	Mills	Hanna Road	$ 21,000	
Muscatine	606835P	IAIS	Muscatine	Muscatine County Road X-54		$ 36,000
Muscatine	606821G	IAIS	Muscatine	Muscatine County Road Y-14 and Taylor Avenue		$ 36,000
Muscatine	607211C	ICE	Muscatine	Oregon Street		$ 157,800
Muscatine	607215E	ICE	Muscatine	Sampson Avenue		$ 111,524
Woodbury	382070T	BNSF	Sioux City	Hamilton Boulevard		$ 67,200
Woodbury	064026E	BNSF	Sioux City	18th Street		$ 90,000
Woodbury	064029A	BNSF	Sioux City	11th Street		$ 67,200
Woodbury	382038A	BNSF	Sioux City	Virginia Street		$ 48,000
Washington	607322U	ICE	Washington	North Fourth Avenue		$ 77,601
Black Hawk	307119Y	CC	Waterloo	Glenwood Street	$ 91,200	
Black Hawk	307116D	CC	Waterloo	Polk Street	$ 93,600	
Black Hawk	307167N	CC	Waterloo	Dawson Street	$ 93,600	
Black Hawk	307168V	CC	Waterloo	Columbia Street	$ 88,620	
Black Hawk	307115W	CC	Waterloo	Colorado Street	$ 64,920	
Black Hawk	307900T	CC	Waterloo	Maynard Street	$ 35,640	
Muscatine	606824C	IAIS	Wilton	Chestnut Street		$ 36,000
Muscatine	606822N	IAIS	Wilton	Cypress Street		$ 36,000
Muscatine	606828E	IAIS	Wilton	Liberty Street		$ 36,000
Totals					$ 871,860	$ 974,707

Highway Grade Crossing Safety Program

This state-funded program helps railroads pay for up to 75 percent of the maintenance costs of active warning systems installed after 1973. Applicable expenses include costs incurred by a railroad associated with the repair or replacement of obsolete, worn out, damaged or missing component parts of an approved active warning device.

This program is administered by the Iowa DOT's Office of Rail Transportation, which may be contacted for more information (Iowa Admin. Code r. 761-820).

Capital improvement and maintenance programs

Railroad Rehabilitation and Improvement Financing (RRIF) Program

This program, administered by the FRA, provides direct loans and loan guarantees to acquire, improve or rehabilitate intermodal or rail facilities, develop new intermodal or rail facilities, or refinance outstanding debt. The program is open to a wide range of rail interests, including railroads, railroad partnerships, local and state governments, and government-sponsored authorities.

The program was reauthorized under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and was granted the authority to offer financial assistance of up to $35 billion. Of this amount, $7 billion is reserved for Class II and III railroads. SAFETEA-LU also increased the scope and focus of potential applicants, allowing loans to focus on congestion problems on nationally significant rail lines.

Applications and further program information can be found on FRA's Web site at www.fra.dot.gov or the Railroad Rehabilitation and Improvement Financing Program's Web site at http://www.fra.dot.gov/us/content/177.

Appendix C. Midwest Regional Rail Initiative

The MWRRI is a cooperative, multi-agency effort that began in 1996 and involves nine Midwest states (Indiana, Illinois, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin). The MWRRI is an evolving plan to expand passenger rail service throughout the Midwest from a Chicago hub. Cooperation between a consortium of the state departments of transportation (DOTs), Amtrak and FRA has produced a plan for a proposed 3,000-mile rail network connecting major Midwestern cities by high-performance rail service, with additional feeder bus routes connecting other communities to rail stations.

The focus of the MWRRI is to:

- Reduce travel times.
- Improve service reliability.
- Expand regional travel services.
- Improve passenger and freight train safety.
- Create development opportunities.

Routes
The system is modeled as a “hub-and-spoke” network, with the center (or hub) located in Chicago and spokes radiating out to other cities. The following map shows the general route plan.

The system would utilize existing freight tracks (via agreements with freight railroads). Trains moving at maximum speeds ranging from 79 to 110 mph would serve the major metropolitan corridors of the region. The study found that approximately 90 percent of the region’s population would be within a one-hour ride/drive of a railroad station and/or within 30 minutes of a feeder bus station, as shown as dashed lines in following map.

Proposed MWRRI Network

Source: Midwest Regional Rail System, Executive Report, September 2004

The 1998 Iowa Rail Route Alternatives Analysis study evaluated the potential for rail passenger service on three routes across Iowa: the existing Amtrak routing on the BNSF following U.S. 34 through southern Iowa; IAIS along I-80; and UP following U.S. 30 through Cedar Rapids and Ames. This Iowa study concluded that the most attractive route would be the IAIS because of its superior connectivity, convenience and proximity to population centers. Details of the study are located at http://www.iowarail.com/passenger/mwrail_iarouteanaylysis_1998.pdf.

Ridership

Systemwide ridership has been projected at 13.6 million passengers in 2025, assuming the system is fully constructed at that time. Ridership along the Iowa portion of the Chicago-Omaha corridor is projected to be 605,000 in 2010 and increase to 688,000 in 2020.

Fares

For the markets served, the MWRRI is expected to provide a level of service, comfort, convenience, and a wide range of fares that will attract a broad spectrum of travelers.

Example of one-way fares

City pairs	Estimated fares	
	Nonbusiness	Business
Des Moines-Omaha	$30	$40

Source: Midwest Regional Rail System, Executive Report, September 2004

Schedule

The schedule was designed to first attract the business traveler, and second the social traveler. The normal travel time schedule assumes that service would stop in all principal towns en route, while the express schedule would skip several stops along the way. The MWRRI service plan includes four round trips per day Omaha and Des Moines, and five round trips each day from Des Moines to Chicago. According to the operating schedule, the operating speed from Chicago to Omaha averages about 67 mph.

Proposed operating schedule
Chicago to Omaha

Station	Milepost	Travel time (normal)	Travel time (express)
Chicago, Ill.	0.0	0:00	0:00
Naperville, Ill.	28.4	0:21	
Princeton, Ill.	104.4	1:13	
Quad Cities, Ill.	165.5	2:08	2:01
Iowa City, Iowa	221.0	3:06	3:00
Newton, Iowa	306.7	4:21	4:15
Des Moines, Iowa	341.9	5:02	4:55
Atlantic, Iowa	424.2	6:14	6:08
Omaha, Neb.	479.0	7:11	7:05

Source: Iowa Rail Route Alternative Analysis

Improvements and funding

The MWRRI would require improvements in track infrastructure to handle the proposed speeds of the trains. Approximate needs for improvements were estimated to be $638 million for infrastructure (including track, signaling and stations) and $167 million for train equipment, totaling $805 million for the entire Chicago-Omaha corridor in 2004 (2002 dollars). These costs would be shared between Illinois, Iowa, Amtrak, and the federal government.

Revenues and expenses

The goal of the MWRRI is to improve rail passenger service with public investments in infrastructure and equipment. The MWRRI is expected to be a cost-effective system to operate and its financial performance to improve as the system matures. All corridors are projected to generate sufficient operating revenues to cover operating costs by the year 2025. However, during the construction and startup phases, system revenues will not be sufficient to cover all system operating costs.

Operating revenues and expenses

	Operating revenues (millions of 2002 $)		Operating and maintenance cost (millions of 2002 $)		Operating ratio	
	2014	2025	2014	2025	2014	2025
Chicago-Omaha	$53	$61	$59	$60	0.90	1.02
Total MWRRI System	$528	$632	$453	$466	1.17	1.36

Source: Midwest Regional Rail System, Executive Report, September 2004

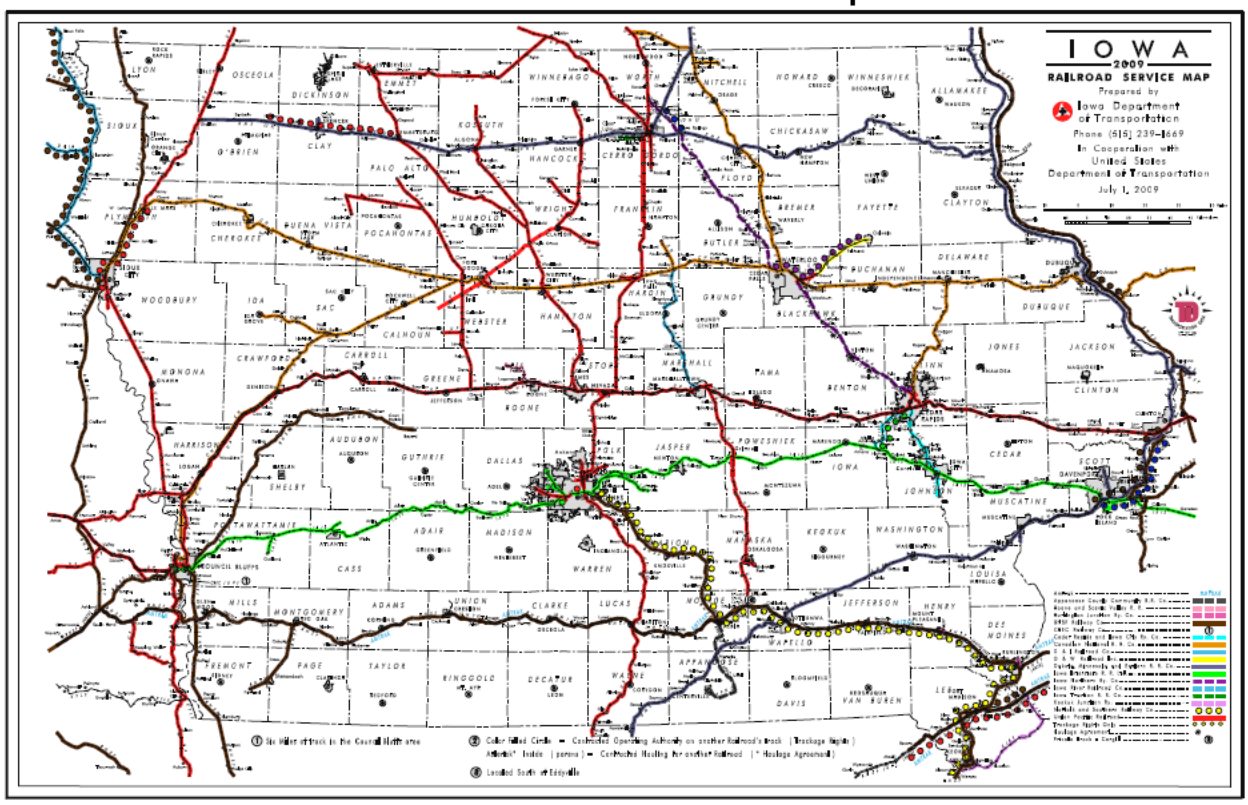
Appendix D. 2008 Iowa railroad profiles

Iowa is served by 19 railroad companies that operate a total of 3,947 miles of track within the state. Five of these railroads are Class I railroads, operating throughout the United States. These railroads operate approximately 66 percent of Iowa's total route miles.

Of the remaining 14 railroads, three are Class II and 11 are Class III. The Class II railroads account for nearly 25 percent of the total route miles, Class III have just more than 8 percent.

The following pages provide information for each railroad operating in Iowa. The map on the next page shows the current (July 2009) railroad network in Iowa.

2009 Iowa Railroad Service Map



Appanoose County Community Railroad Inc. (APNC) - 2008
The APNC was formed in 1983 by the town of Centerville, utilizing abandoned sections of the Burlington Northern, Rock Island and Norfolk Southern railroads. The railroad is a nonprofit railroad headquartered in Centerville.

The APNC operates 35 miles from Centerville to Albia. The line connects with the BNSF and Norfolk Southern Railway (NS) at Albia, and Dakota, Minnesota & Eastern Railroad (DME, formerly the Iowa, Chicago & Eastern Railroad) at Moravia. Current employment totals six people, all located in Iowa.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	APNC		
FRA classification	Class III		
Type of service	Switching		
States operated in	1		
Miles operated	35	35	100
Operating revenues (millions)	$0.2	$0.2	100
Operating expenses (millions)	$0.7	$0.7	100
Net ton-miles (millions)	0.04	0.04	100
Cars received and forwarded	138	138	100
Rehabilitation expenses (millions)	$0.00	$0.00	100
Track maintenance expenses (millions)	$0.03	$0.03	100
Freight cars in service	NA	NA	NA
Locomotives in service	2	2	100
Fuel used in gallons	10,207	10,207	100
Employment	6	6	100

NA = Not available

BNSF Railway Co. (BNSF) - 2008
BNSF began operating in Iowa Sept. 22, 1995, following the merger of the Burlington Northern and Atchison, Topeka and Santa Fe railroads. BNSF is owned by its holding company Burlington Northern Santa Fe Corp., which is headquartered in Fort Worth, Texas.

BNSF is among the largest railroads in the United States today with operating mileage totaling nearly 32,200 miles covering 28 states and two Canadian provinces. BNSF covers the western two-thirds of the United States from major Pacific Northwest and California ports to the Midwest, Southeast and Southwest; and from Canada to Mexico. The railroad operates 673 miles of track in Iowa, which runs from Burlington to Glenwood in southern Iowa (Amtrak also operates on this stretch under trackage rights) and northward from Sioux City in northwest Iowa. BNSF also operates several branch lines that stem off its main line, including a line from Des Moines to Albia. The railroad employs nearly 40,000 people.

The main products handled by the BNSF in Iowa include coal, food products, grain, chemicals, and fertilizers.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	BNSF		
FRA classification	Class I		
Type of service	Line-haul		
States operated in	28		
Miles operated	32,166	673	2.1
Operating revenues (millions)	$18,132.4	$424.1	2.3
Operating expenses (millions)	$14,308.9	NA	NA
Net ton-miles (millions)	670,381.5	21,717.4	3.2
Tons hauled (millions)	620.2	155.2	25.0
Rehabilitation expenses (millions)	$2,078.9	NA	NA
Track maintenance expenses (millions)	$1,937.6	NA	NA
Freight cars in service	82,319	NA	NA
Locomotives in service	6,510	NA	NA
Fuel used in gallons	1,415,015,000	NA	NA
Employment	39,639	NA	NA

NA = Not available

Boone & Scenic Valley Railroad (BSV) - 2008
BSV is a nonprofit operating museum located in Boone. In 1983, BSV purchased 12 miles of track that was scheduled for abandonment from the Chicago and North Western. A nonprofit historical society was established and began passenger service later that year. Since 1983, BSV has operated a passenger excursion train over the 12 miles of track from Boone to Wolf. In February 2001, BSV obtained an additional 1.66 miles of right of way from downtown Boone eastward to the Boone Industrial Park from the UP to serve the industries located in the park.

Freight service is only provided on the 1.66 miles to the Boone Industrial Park. Current employment totals six people, all located in Iowa.

The main commodity handled by the BSV is empty containers.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	BSV		
FRA classification	Class III		
Type of service	Switching		
States operated in	1		
Miles operated	1.66	1.66	100
Operating revenues (millions)	$0.020	$0.020	100
Operating expenses (millions)	$0.002	$0.002	100
Net ton-miles (millions)	0.0	0.0	100
Tons hauled (millions)	0.0	0.0	100
Rehabilitation expenses (millions)	$0.0	$0.0	100
Track maintenance expenses (millions)	$0.0	$0.0	100
Freight cars in service	NA	NA	NA
Locomotives in service	0	0	100
Fuel used in gallons	280	280	100
Employment	6	6	100

NA = Not available

Burlington Junction Railway (BJRY) - 2008
BJRY was formed in 1985 to operate the former Chicago, Rock Island & Pacific Railroad track in Burlington in southeastern Iowa. In 1996, the BJRY began switching operations in Mount Pleasant. In 2003, BJRY leased two line segments near Quincy, Ill., from the BNSF and began operations. The railroad is headquartered in Burlington.

Currently, BJRY provides switching operations in Iowa at Burlington, West Burlington, Mount Pleasant, and Ottumwa; and Illinois at Quincy, Rochelle and Montgomery connecting to the BNSF. The railroad operates a total of 22 miles of which 4.5 miles are located in Iowa. BJRY employs a total of 22 people of which six are located in Iowa.

Major commodities handled by BJRY include lumber, wallboard, flour, salt, fertilizer, grain, paper rolls, plastic pellets, and miscellaneous products.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	BJRY		
FRA classification	Class III		
Type of service	Switching		
States operated in	2		
Miles operated	22.0	4.5	20.5
Operating revenues (millions)	$4.3	$1.8	41.9
Operating expenses (millions)	$3.7	NA	NA
Net ton-miles (millions)	NA	NA	NA
Cars received and forwarded	NA	3,325	NA
Rehabilitation expenses (millions)	$0.34	$0.09	17.6
Track maintenance expenses (millions)	$0.02	$0.01	50.0
Freight cars in service	NA	NA	NA
Locomotives in service	10	NA	NA
Fuel used in gallons	38,456	NA	NA
Employment	22	6	27.3

NA = Not available

CBEC Railway Inc. (CBEC) - 2008
CBEC was formed in 1992 by MidAmerican Energy Co. in Council Bluffs. CBEC is a wholly-owned subsidiary of MidAmerican, and is headquartered in Des Moines.

CBEC owns 6 miles of track in the Council Bluffs area, which were installed in 1997. The track is primarily used by BNSF and UP to haul coal to the utility plant located south of Council Bluffs. Administrative services are provided by MidAmerican Energy.

The main product handled by the CBEC is coal.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	CBEC		
FRA classification	Class III		
Type of service	Switching		
States operated in	1		
Miles operated	6	6	100
Operating revenues (millions)	$3.6	$3.6	100
Operating expenses (millions)	$0.9	$0.9	100
Net ton-miles (millions)	42.1	42.1	100
Tons hauled (millions)	7.2	7.2	100
Rehabilitation expenses (millions)	$0	$0	--
Track maintenance expenses (millions)	$0.3	$0.3	100
Freight cars in service	0	0	--
Locomotives in service	0	0	--
Fuel used in gallons	0	0	--
Employment	0	0	--

Cedar Rapids and Iowa City Railway Co. (CIC) - 2008
CIC (also known as the CRANDIC) began operations in 1904. The railroad operated as a passenger line until 1953. CIC is a wholly-owned subsidiary of Alliant Energy Transportation, and is headquartered in Cedar Rapids.

The railroad operates 60 miles of track in eastern Iowa. CIC's main line runs from Cedar Rapids to Iowa City. In 1981, the railroad expanded by purchasing 23 miles of the Milwaukee Road from Cedar Rapids to Homestead. It also purchased the Iowa City to Hills line from the Chicago, Rock Island & Pacific Railroad in 1982. CIC also provides switching operations in Cedar Rapids. The railroad interchanges traffic with the Chicago, Central and Pacific Railroad (CC), Iowa Northern Railway and UP in Cedar Rapids. The railroad interchanges with the IAIS in Homestead and Iowa City. The railroad employs 78 people, all located in Iowa.

The main products handled by the CIC include food products, coal, grain, and paper.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	CIC		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	1		
Miles operated	60	60	100
Operating revenues (millions)	$24.4	$24.4	100
Operating expenses (millions)	$16.0	$16.0	100
Net ton-miles (millions)	4.4	4.4	100
Tons hauled (millions)	3.6	3.6	100
Cars received and forwarded	26,783	26,783	100
Rehabilitation expenses (millions)	$5.9	$5.9	100
Track maintenance expenses (millions)	$0.9	$0.9	100
Freight cars in service	400	400	100
Locomotives in service	9	9	100
Fuel used in gallons	301,106	301,106	100
Employment	78	78	100

Cedar River Railroad Co. (CEDR) - 2008
CEDR was established in 1991 with acquisition of the Cedar Valley Railroad. Cedar Valley was formed in 1984 with the purchase of track from the Chicago, Rock Island & Pacific Railroad. CEDR is a subsidiary of the Chicago Central and Pacific Railroad (CC). CC is part of CN as a result of a merger with the Illinois Central Railroad.

CEDR operates 103 miles of track from Waterloo to Glenville, Minn., approximately, 83 miles are located in Iowa, including a branch line to Stacyville. The railroad interchanges traffic with the CC at Waterloo, as well as with the DM&E in Charles City and Lyle, Minn., and with the DM&E and the UP in Glenville, Minn. CEDR does not directly employ any people; the employees are part of the CC.

The main products handled by the CEDR include grain, food products and chemicals.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	CEDR		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	2		
Miles operated	103	83	80.6
Operating revenues (millions)	$5.8	$5.4	93.1
Operating expenses (millions)	$5.2	NA	NA
Net ton-miles (millions)	57.9	53.3	92.1
Tons hauled (millions)	0.9	0.7	77.8
Rehabilitation expenses (millions)	$2.0	$2.0	100.0
Track maintenance expenses (millions)	$0.10	$0.08	80.0
Freight cars in service	NA	NA	NA
Locomotives in service	0	NA	NA
Fuel used in gallons	93,526	NA	NA
Employment	NA	NA	NA

NA = Not available

Chicago, Central and Pacific Railroad Co. (CC) - 2008
The CC was formed in December 1985 as a spin-off from the Illinois Central Gulf Railroad. In June 1996, the Illinois Central Railroad repurchased the CC. Currently, the CC is a subsidiary of the CN system, which resulted from the CN and Illinois Central Railroad merger July 1, 1999.

CC operates 732 miles of track in Iowa, Illinois and Nebraska, with 558 miles located in Iowa. The line in Iowa extends from Dubuque through Fort Dodge to Council Bluffs. The railroad also operates a line from Fort Dodge to Sioux City, along with several branches. CC currently employs 240 people system-wide, with 203 people located in Iowa.

The main products handled by the railroad include coal, farm products, food products, and chemicals/fertilizers.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	CC		
FRA classification	Class II		
Type of service	Line-haul		
States operated in	3		
Miles operated	732	558	76.2
Operating revenues (millions)	$115.6	$70.1	60.6
Operating expenses (millions)	$64.3	NA	NA
Net ton-miles (millions)	3,055.5	1,861.0	60.9
Tons hauled (millions)	10.0	8.6	86.0
Rehabilitation expenses (millions)	$17.0	$11.9	70.0
Track maintenance expenses (millions)	$2.4	$1.8	75.0
Freight cars in service	NA	NA	NA
Locomotives in service	0	NA	NA
Fuel used in gallons	5,017,188	NA	NA
Employment	240	203	84.6

NA = Not available

D & I Railroad Co. (DAIR) - 2008
DAIR was incorporated in 1981 to operate part of the Milwaukee Road purchased by South Dakota in northwest Iowa. The railroad is owned by L.G. Everist Inc., a construction company, and is headquartered in Sioux Falls, S.D.

DAIR operates on 266 miles of track that is owned by South Dakota from Sioux City to Dell Rapids, S.D., and from Hawarden to Bereford, S.D. DAIR also has trackage rights from Canton, S.D., to Wolsey, S.D. About 39 miles are located in Iowa. The railroad shares trackage rights with the BNSF. DAIR connects with the BNSF, CC and the UP in Sioux City. In Sioux Falls, the railroad connects with the BNSF and DM &E in Wolsey, S.D. The railroad employs 10 people, none located in Iowa.

The main products handled by DAIR include nonmetallic metals, stone products, food products, and grain.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	DAIR		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	2		
Miles operated	266	39	14.7
Operating revenues (millions)	$5.2	$1.8	34.6
Operating expenses (millions)	$4.3	NA	NA
Net ton-miles (millions)	119.6	40.7	34.0
Tons hauled (millions)	1.5	0.8	53.3
Rehabilitation expenses (millions)	$0	$0	--
Track maintenance expenses (millions)	$0	$0	--
Freight cars in service	NA	NA	NA
Locomotives in service	25	NA	NA
Fuel used in gallons	300,508	NA	NA
Employment	10	0	0.0

NA = Not available

D & W Railroad, LLC (DWRV) - 2008
With an agreement dated December 2005, Transco Railway Products and Hawkeye Renewables formed the DWRV. Transco transferred the existing assets of the DWRV, which was formed in 2002 by Transco to acquire the rail line from Dewar to Oelwein from the UP in lieu of abandonment. Their headquarters are located in Fairbank, Iowa.

DWRV owns 19 miles of track. The railroad has contracted with the Iowa Northern Railway to maintain the line and provide service to shippers.

The main products handled on the line include grain, ethanol, feed, and rail cars to be repaired or rebuilt.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	DMRV		
FRA classification	Class III		
Type of service	Contracts with IANR to provide service.		
States operated in	1		
Miles operated	19	19	100
Operating revenues (millions)	$0.0	$0.0	--
Operating expenses (millions)	$0.0	$0.0	--
Net ton-miles (millions)	*	*	
Tons hauled (millions)	*	*	
Rehabilitation expenses (millions)	$0.0	$0.0	--
Track maintenance expenses (millions)	$0.04	$0.04	100
Freight cars in service	NA	NA	NA
Locomotives in service	0	0	--
Fuel used in gallons	0	0	--
Employment	0	0	--

* Information reported by the Iowa Northern Railway.
NA = Not available

Dakota, Minnesota & Eastern Railroad Corp. (DME)
DME was formed in 1986, taking over lines owned by the Chicago and North Western located in South Dakota and Minnesota. The railroad is based in Sioux Falls, S.D. In 2002, DME formed the ICE, which took over the operations of the I & M Rail Link (IMRL). On Oct. 30, 2008, the Canadian Pacific Railroad (CP) acquired the DME and ICE through its U.S. subsidiary, the Soo Line Railroad Co. To simplify the corporate structure of CP's holdings in the United States, ICE has been merged into the DME, and ICE no longer exists. Currently, DME plans to build 262 miles and rebuild 650 miles of track, allowing the railroad access to coal located in the Powder River Basin in Wyoming.

The combined DME operates more than 2,500 miles of track running from Rapid City, S.D., to Winona, Minn. (located on the Mississippi River); and Minneapolis to Chicago and Kansas City, paralleling the Mississippi River through Iowa. The railroad has access to all major railroads at gateways in Chicago, Kansas City and St. Paul.

See ICE for Iowa information.

Iowa, Chicago & Eastern Railroad Corp. (ICE) — 2008
ICE purchased the assets of the former IMRL and began operation July 31, 2002. ICE is a railroad formed by DME. Both ICE and DME are under the common management of Cedar American Rail Holdings Inc. that is headquartered in Sioux Falls, S.D. On Oct. 30, 2008, the Canadian Pacific Railroad (CP) acquired DME and ICE through its U.S. subsidiary, the Soo Line Railroad Co. To simplify the corporate structure of CP's holdings in the United States, ICE was merged into DME.

ICE operates 1,412 miles of track from Minneapolis to Chicago and Kansas City, paralleling the Mississippi River through Iowa. The railroad also operates a line across northern Iowa and one across southern Minnesota. Iowa operations consist of 660 miles. The railroad has access to all major railroads at gateways in Chicago, Kansas City and St. Paul. Current employment totals 1,002, with 312 located in Iowa.

The main products handled by ICE include coal, farm products, food products, chemicals, waste products, primary metal products, nonmetallic metals, and stone.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	ICE		
FRA classification	Class II		
Type of service	Line-haul		
States operated in	5		
Miles operated	1,412	660	46.7
Operating revenues (millions)	$232.5	$141.0	60.6
Operating expenses (millions)	$154.8	NA	NA
Net ton-miles (millions)	7,504.9	4,552.5	60.7
Tons hauled (millions)	21.2	18.7	88.2
Rehabilitation expenses (millions)	$35.4	$24.0	67.8
Track maintenance expenses (millions)	$13.9	$6.4	46.0
Freight cars in service	NA	NA	NA
Locomotives in service	98	NA	NA
Fuel used in gallons	12,161,372	NA	NA
Employment	1,002	312	31.1

NA = Not available

Iowa Interstate Railroad, Ltd. (IAIS) - 2008
IAIS was founded in 1984 to operate the former Chicago, Rock Island & Pacific Railroad line between Chicago and Omaha. IAIS is a subsidiary of Railroad Development Corp. (RDC), which acquired both the railroad and property from Heartland Rail Corp. in December 2003. Effective July 1, 2006, IAIS purchased OmniTRAX's Great Western Railway of Iowa consisting of 30 miles of yard and industry tracks in Council Bluffs. RDC is headquartered in Pittsburgh, Pa., and operates several overseas railroads. IAIS is headquartered in Cedar Rapids.

The railroad operates 597 miles of track from Chicago to Omaha through the Quad Cities, Iowa City and Des Moines, as well as several branch lines. Intermodal service is provided at Chicago, and Council Bluffs. IAIS operations in Iowa include 361 miles. Employees of the railroad total 194 with 128 located in Iowa.

The main products handled by the IAIS in Iowa include farm products, food products, waste and scrap products, lumber, and chemicals/fertilizers.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	IAIS		
FRA classification	Class II		
Type of service	Line-haul		
States operated in	2		
Miles operated	597	361	60.5
Operating revenues (millions)	$70.8	$39.9	56.4
Operating expenses (millions)	$56.5	NA	NA
Net ton-miles (millions)	1,376.9	775.9	56.4
Tons hauled (millions)	9.4	8.1	86.2
Rehabilitation expenses (millions)	$10.8	$8.6	79.6
Track maintenance expenses (millions)	$5.1	$3.8	74.5
Freight cars in service	NA	NA	NA
Locomotives in service	45	NA	NA
Fuel used in gallons	4,157,696	NA	NA
Employment	194	128	66.0

NA = Not available

Iowa Northern Railway Co. (IANR) - 2008
IANR was incorporated in 1984 and is one of the first short-line railroads in the state. IANR was formed from the bankrupt Chicago, Rock Island & Pacific Railroad. The railroad is headquartered in Greene. The railroad was originally owned by a group of grain elevators located along the line. The line was sold in 1994 to its current owners.

IANR operates 169 miles in Iowa between Cedar Rapids and Manly in north central Iowa, including the line (18.8 miles) between Dewar and Oelwein under an operating agreement with DWRV. The railroad connects with CIC in Cedar Rapids; CC in Cedar Rapids and Waterloo; DME in Nora Springs and Plymouth Junction.; UP in Cedar Rapids and Manly; and DME in Manly. The railroad employs 83 people, all located in Iowa.

The main products handled by the IANR include grain, chemicals/fertilizers, food products, stone, ethanol, and machinery.

2008 Information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	IANR		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	1		
Miles operated	169	169	100
Operating revenues (millions)	$16.6	$16.6	100
Operating expenses (millions)	$15.1	$15.1	100
Net ton-miles (millions)	164.5	164.5	100
Tons hauled (millions)	3.2	3.2	100
Rehabilitation expenses (millions)	$2.3	$2.3	100
Track maintenance expenses (millions)	$1.2	$1.2	100
Freight cars in service	500	500	100
Locomotives in service	21	21	100
Fuel used in gallons	973,414	973,414	100
Employment	83	83	100

Iowa River Railroad Inc. (IARR) - 2008
IARR was formed in 2006 when the railroad purchased UP's line from Marshalltown to Steamboat Rock. The railroad also acquired the rail-banked (dormant) portion of track from Steamboat Rock to Ackley from the North Central Railway Association (shippers on the formerly operational line). The railroad is headquartered in Steamboat Rock.

IARR operates 43 miles in Iowa between Marshalltown and Ackley in central Iowa. The railroad connects with UP in Marshalltown and CC (owned by CN) at Ackley. The railroad employs three people, all located in Iowa.

The main products handled by the IARR include ethanol, grain and chemicals/fertilizers.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	IARR		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	1		
Miles operated	43	43	100
Operating revenues (millions)	$0.43	$0.43	100
Operating expenses (millions)	$0.86	$0.86	100
Net ton-miles (millions)	0.18	0.18	100
Tons Hauled (millions)	0.18	0.18	100
Rehabilitation expenses (millions)	$0.0	$0.0	100
Track maintenance expenses (millions)	$0.16	$0.16	100
Freight cars in service	NA	NA	100
Locomotives in service	1	1	100
Fuel used in gallons	15,729	15,729	100
Employment	3	3	100

NA = Not available

Iowa Traction Railroad Co. (IATR) -2008
IATR was incorporated in 1986 and is privately owned. IATR is the last freight-hauling 600-volt DC-electric railroad in the country. The line was previously known as the Iowa Terminal Railroad, and it is headquartered in Mason City.

IATR operates 13 miles between Clear Lake and Mason City in northern Iowa. The railroad connects with ICE and UP in Mason City. IATR employs four people, all located in Iowa.

The main products handled by IATR include food products, and waste and scrap materials.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	IATR		
FRA classification	Class III		
Type of service	Switching		
States operated in	1		
Miles operated	13	13	100
Operating revenues (millions)	$0.96	$0.96	100
Operating expenses (millions)	$0.84	$0.84	100
Net ton-miles (millions)	0.82	0.82	100
Tons hauled (millions)	0.33	0.33	100
Rehabilitation expenses (millions)	$0.0	$0.0	--
Track maintenance expenses (millions)	$0.50	$0.50	100
Freight cars in service	NA	NA	NA
Locomotives in service	5	5	100
Fuel used in gallons	0	0	--
Employment	4	4	100

NA = Not available

Keokuk Junction Railway Co. (KJRY) - 2008
KJRY was incorporated in May 1980 to purchase the Chicago, Rock Island & Pacific Railroad yard track in Keokuk. In December 1986, the railroad expanded its operations by purchasing the line between Keokuk, Iowa, and La Harpe, Ill., from the Atchison, Topeka and Santa Fe Railway. In March 1996, KJRY was purchased by Pioneer Railcorp, which is a short-line railroad holding company operating 16 railroads in 10 states totaling more than 535 miles. Its headquarters are located in Peoria, Ill. The KJRY has a main office in Keokuk.

In December 2001, KJRY purchased 12 miles from La Harpe to Lomax, Ill., and acquired trackage rights to Fort Madison, Iowa. KJRY added 76 miles in February 2005, acquiring the line from La Harpe to Peoria, Ill. With these purchases, the railroad currently operates a total of 127 miles, with 1 mile located in Iowa, which serves as a switching carrier in Keokuk. KJRY interchanges with a number of railroads in Peoria, as well as BNSF in Keokuk and UP in Fort Madison.

The KJRY employs a total of 21 people, with 18 located in Iowa. The main products handled by the KJRY include grain, transportation equipment, food products, and waste products.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	KJRY		
FRA classification	Class III		
Type of service	Line-haul		
States operated in	2		
Miles operated	127	1	0.8
Operating revenues (millions)	$5.7	$4.1	71.9
Operating expenses (millions)	$5.7	NA	NA
Net ton-miles (millions)	29.7	0.4	1.3
Tons hauled (millions)	0.8	0.4	50.0
Cars received and forwarded	4,903	NA	NA
Rehabilitation expenses (millions)	$1.04	$0.18	17.3
Track maintenance expenses (millions)	$0.45	$0.06	13.3
Freight cars in service	NA	NA	NA
Locomotives in service	11	NA	NA
Fuel used in gallons	212,248	NA	NA
Employment	21	18	85.7

NA = Not available

Norfolk Southern Railway Co. (NS) - 2008
NS was formed June 1, 1982, with the merging of the Norfolk and Western Railway and Southern Railway. In June 1997, NS and CSX Transportation filed a joint application to purchase the Conrail property. NS began operating about 7,200 miles of the former Conrail property June 1, 1999. NS is owned by Norfolk Southern Corp., which is based in Norfolk, Va.

The railroad operates 20,831 miles of track in 23 states in the Southeast and Midwest, as well as in Ontario, Canada. NS serves all major eastern ports. NS operates 44 miles of track in Iowa running from Des Moines to Burlington, most of which are trackage rights on the BNSF. The railroad employs more than 31,000 people systemwide.

The main products handled by NS in Iowa include grain and food products.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	NS		
FRA classification	Class I		
Type of service	Line-haul		
States operated in	23		
Miles operated	20,831	44	0.21
Operating revenues (millions)	$10,661.3	$6.0	0.06
Operating expenses (millions)	$7,803.7	$4.4	0.06
Net ton-miles (millions)	195,616.4	108.1	0.01
Tons hauled (millions)	437.3	0.7	0.16
Rehabilitation expenses (millions)	$1,133.2	NA	NA
Track maintenance expenses (millions)	$1,350.5	$0.7	0.05
Freight cars in service	94,486	NA	NA
Locomotives in service	3,914	NA	NA
Fuel used in gallons	482,555,186	NA	NA
Employment	31,078	NA	NA

NA = Not available

Union Pacific Railroad Co. (UP) - 2008
UP was chartered in 1862 through an act of Congress. The railroad is comprised of the original Union Pacific, Missouri Pacific, Chicago and North Western, and Southern Pacific railroads. UP is a wholly owned subsidiary of the Union Pacific Corp., which is based in Omaha, Nebr.

UP is the largest railroad in the United States, operating 32,012 miles in 25 states in the western two-thirds of the United States. UP operation links major West Coast and Gulf ports with major gateways to the east including Chicago, St. Louis, Memphis, and New Orleans, and is a primary connection between the United States and Mexico. The railroad operates 1,435 miles in Iowa, including a main line from Clinton to Council Bluffs, and another north-south route through central Iowa, along with many branch lines. The railroad employs 48,951 people systemwide, with 2,042 located in Iowa.

The main products handled by UP in Iowa include grain, food products, coal, chemicals/fertilizers, and miscellaneous mixed shipments.

2008 information

Item	Systemwide	In Iowa	Percent in Iowa
Railroad abbreviation	UP		
FRA classification	Class I		
Type of service	Line-haul		
States operated in	25		
Miles operated	32,012	1,435	4.5
Operating revenues (millions)	$17,934.8	$997.3	5.6
Operating expenses (millions)	$14,075.0	$809.3	5.7
Net ton-miles (millions)	567,817.1	37,819.4	6.7
Tons hauled (millions)	611.3	152.8	25.0
Rehabilitation expenses (millions)	$2,653.9	NA	NA
Track maintenance expenses (millions)	$2,216.3	$129.0	5.8
Freight cars in service	90,005	NA	NA
Locomotives in service	8,448	NA	NA
Fuel used in gallons	1,240,874,008	NA	NA
Employment	48,951	2,042	4.2

NA = Not available

Appendix E. Performance measures for Iowa's railroad system

Having performance measures is important for determining whether goals are being met and assessing whether progress is being made. The following performance measures are intended to measure progress being made regarding railroad system safety, rail efficiency and impacts of railroad operations on the quality of life of the citizens of Iowa.

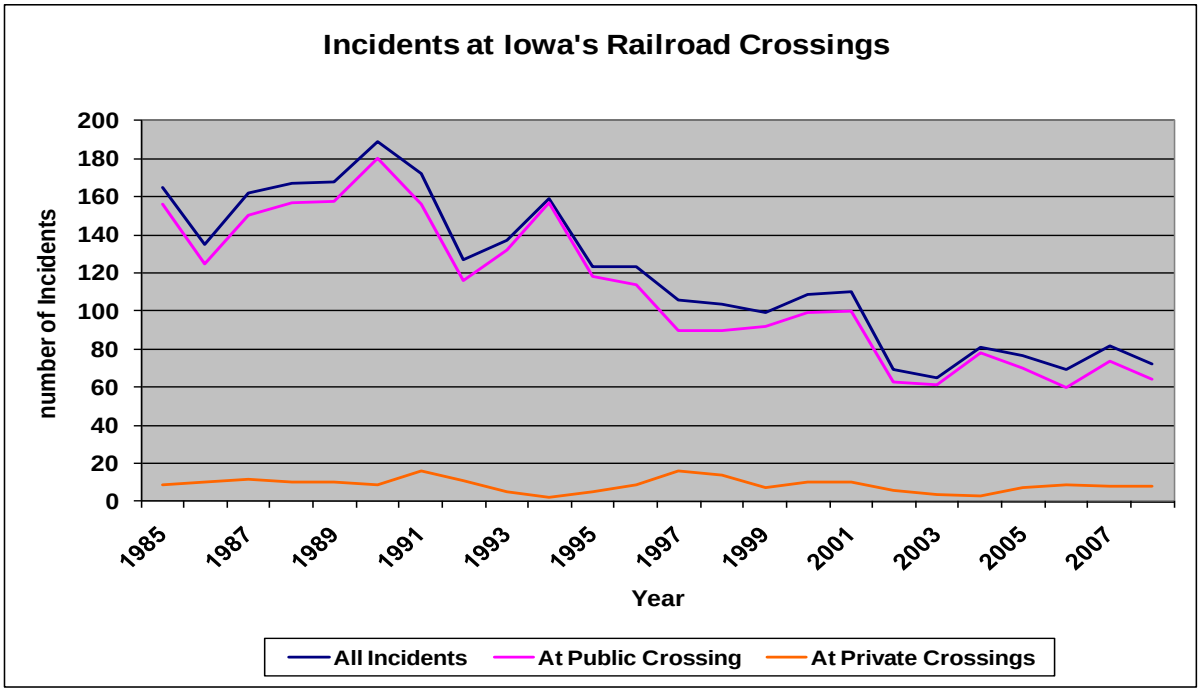
Freight performance measures

Total incidents at highway-railroad crossings (safety)

What this performance measure means. The total number of incidents at highway-rail crossings is a measure of safety calculated by summing all incidents that occur where roadways cross railroad tracks in Iowa.

Why this performance measure is important. The total number of incidents indicates the safety of the Iowa railroad crossings. With fewer incidents at these crossings, it is safer for trains to travel across the state and for motor vehicles to cross the railroad tracks.

Recent data and interpretation. The data shown in Figure 1 indicate a strong downward trend, which is desirable. One factor explaining this trend is that the number of grade crossings in Iowa has also been decreasing. In 1985, there were 165 incidents at highway crossings. Since then, this number has declined to 72, which is less than one-half of the total in 1985.



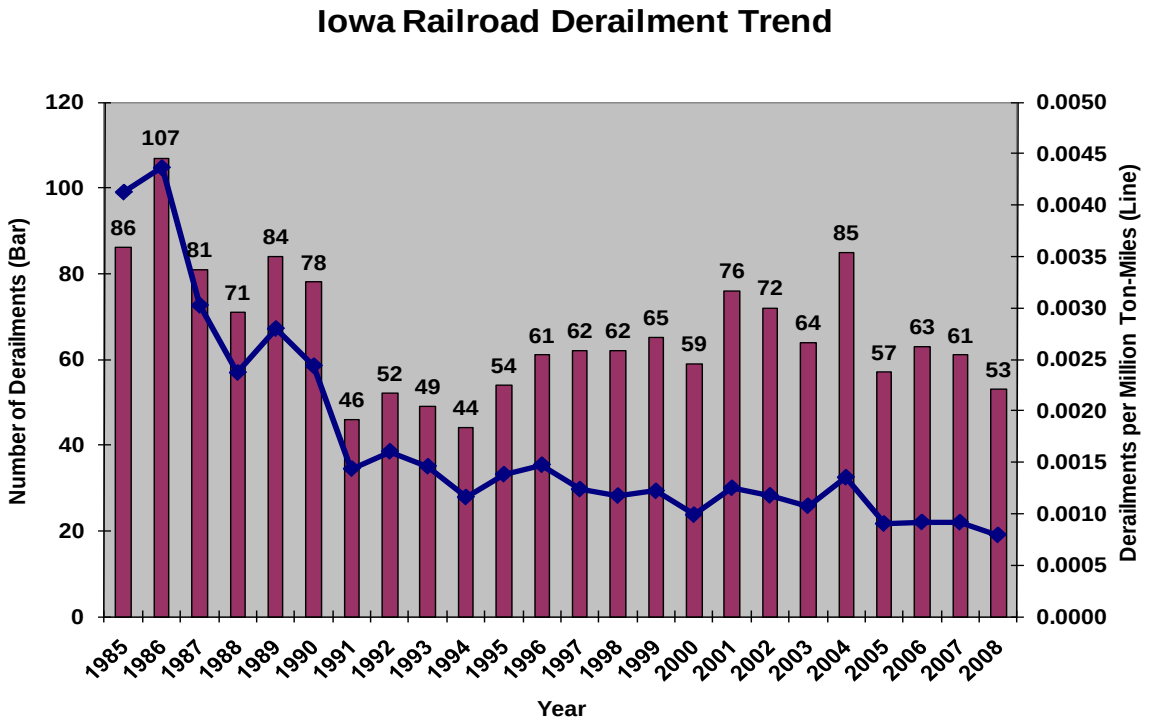
Source: FRA's Office of Safety Analysis

Railroad derailments per one million ton-miles (safety)

What this performance measure means. The number of train derailments per million ton-miles is a primary measure of the safety of Iowa railroad lines. This measure indicates the number of derailments in moving one ton of freight 1 million miles. A derailment is defined as one or more cars or locomotives leave the tracks for a reason other than a collision, explosion, or similar event. In 2008, Iowa's railroads moved nearly 67.1 billion ton-miles of freight across the state.

Why this performance measure is important. Derailments per million ton-miles are a measure of how safe it is to use Iowa railways. The lower this rate, the less likely it is to see a derailment in Iowa. A decrease in derailments not only means a safer railroad system in Iowa, but also a decrease in the cost of rail services.

Recent data and interpretation. Since 1985, the overall derailment rate has decreased drastically. Derailments per one million ton-miles have been cut by more than three-fourths since 1985, when it peaked at 0.004. Even in the last four years, this rate has decreased by approximately three-fourths, to under 0.001 per 1 million ton-miles. There were 33 fewer derailments in 2008 (53) than in 1985 (86), even though there was an increase of more than 9 billion ton-miles during that same time span. This performance measure, in conjunction with the crashes at highway-rail crossings, indicates a strong increase in safety performance.



Source: FRA's Office of Safety Analysis and railroads' annual reports

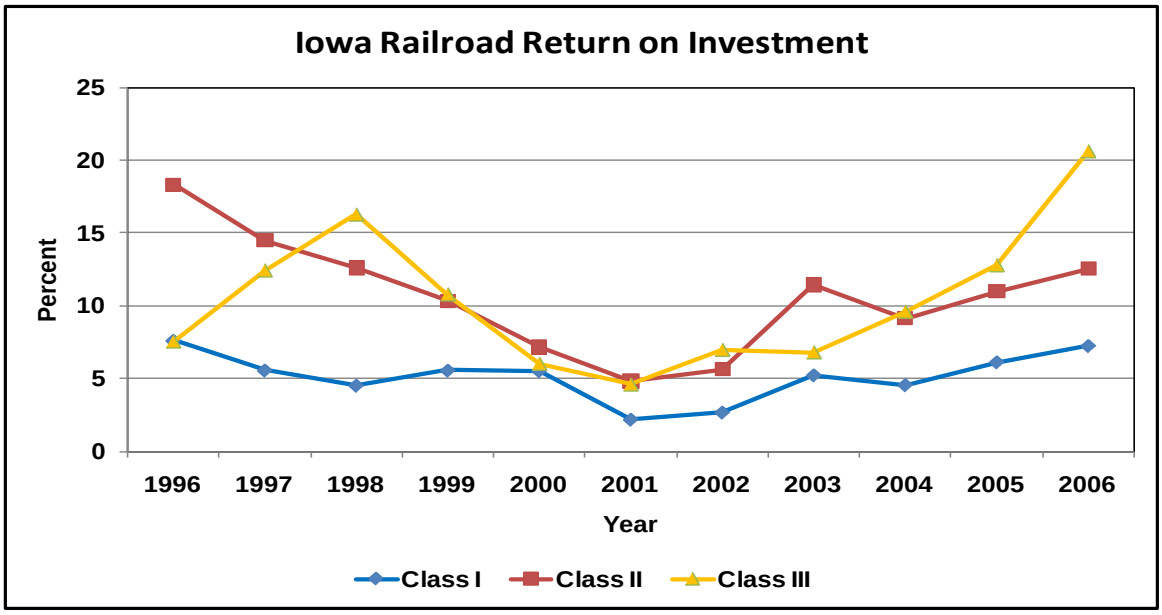
Railroad return on investment (efficiency)

What this performance measure means. The percentage of Iowa rail carriers earning a reasonable return on investment is a measure of efficiency. A higher return on investment means that for the money a railroad company puts into its business, the more it receives in profits. One measure of reasonable return on investment is whether the railroad company is meeting its cost of capital. This figure describes how much money (as a percentage) the company needs to make to maintain its physical capital.

Why this performance measure is important. The return on investment percentage of Iowa rail carriers measures the efficiency of those railroad companies that operate in Iowa. Railroad companies need to have a return on investment that is high enough to pay for upkeep of capital and investors to have returns on investments made. If a railroad cannot maintain a reasonable return, they may continue to shed some of their less profitable routes or in extreme cases go bankrupt.

Recent data and interpretation. Over the past decade, none of the Class I railroads have earned a return on investment of more than 10 percent. This indicates that these companies are not earning what would be considered a minimal reasonable return on their investments. This is not as big an issue as it may seem, as these railroads may be allocating more money into their important routes in Iowa and making up the difference in some other portion of their system. Overall, the average return on investment for the Class I railroads has been quite steady between 5 and 8 percent over the last 10 years.

The Class II and III railroads operating within the state show much more volatility because of their smaller sizes and revenues. Iowa routes account for a major percent of their trackage, if not their entire system. That mentioned; the variability of the return on investment for these railroads is obvious. In many cases, the return on investment for individual, smaller class railroads is negative because any system improvement will account for a much larger percent of their revenue as compared to the Class I railroads.



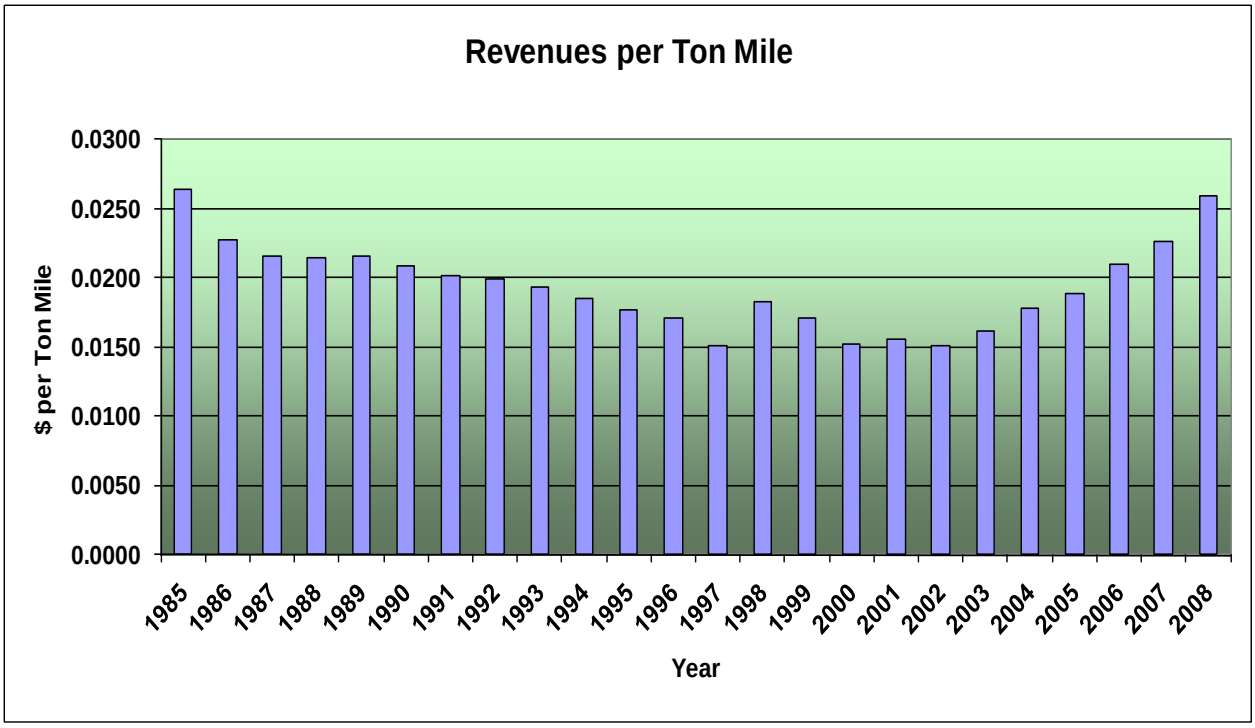
Source: Railroads' annual reports

Average rail revenue per ton-mile (efficiency)

What this performance measure means. Average rail revenue per ton-mile is a measure of efficiency that is calculated by dividing the total revenue by the number of ton-miles in Iowa. A ton-mile measures one ton of freight traveling one track-mile. Iowa had more than 67.1 billion ton-miles in 2008, showing a steady increase over the past two decades.

Why this performance measure is important. Average rail revenue per ton-mile is a measure of how efficient the railroad companies are that operate in Iowa. An increase in revenue per ton-mile would generally indicate a more efficient railroad system in Iowa. For the many railroad companies operating in Iowa, an increase in revenue per ton-mile would be necessary to achieve reasonable profits.

Recent data and interpretation. The overall trend since 1985 has been somewhat downward until 2000. Since then, the average rail revenue per ton-mile has risen 69 percent. The total revenue reached $1.74 billion moving 67.1 billion ton-miles in 2008. The downward trend from 1985 to 2000 is one factor in the poor returns on investment for most rail carriers in Iowa during that same period.



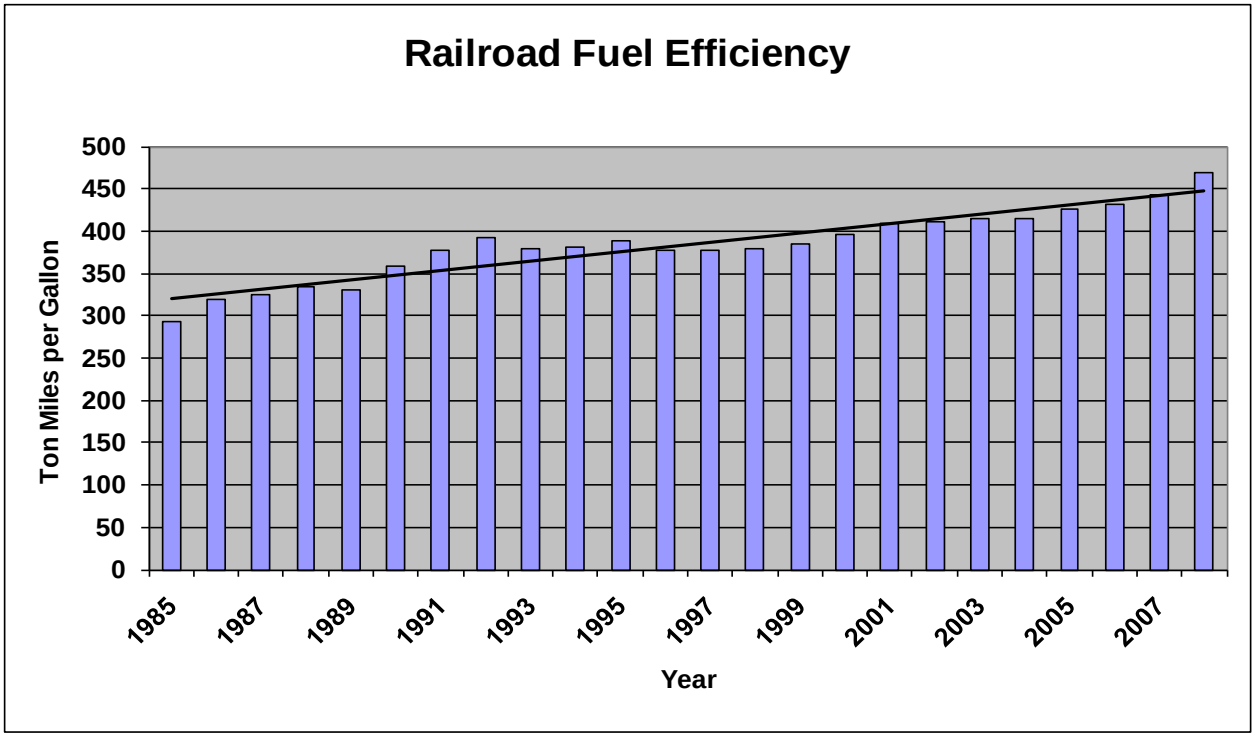
Source: Railroads' annual reports

Rail fuel use per ton-mile (efficiency)

What this performance measure means. Across Iowa in 2008, there were nearly 67.1 billion ton-miles of rail traffic. A ton-mile measures 1 ton of freight traveling 1 mile on railroad track. Rail fuel use per ton-mile, a measure of fuel efficiency, is the number of gallons of fuel it takes to move 1 ton of freight 1 mile.

Why this performance measure is important. Rail fuel use per ton-mile measures the efficiency of the railroad companies that operate in Iowa. With lower fuel consumption, operating costs and air pollution can decrease. Railroads are comparatively energy-efficient, but they can become even more efficient with targeted improvements.

Recent data and interpretation. In 1985, there were approximately 20.8 billion ton-miles in Iowa, which means ton-miles in Iowa have more than tripled since that time. Fuel consumption, however, has only doubled. The overall result is a fairly consistent downward trend in fuel use per ton-mile. Thus, Iowa railroads have become considerably more energy efficient over the past 23 years. Since 1985, railroads have increased their fuel efficiency by 175 ton-miles per gallon. A fleet of increasingly fuel-efficient of locomotives, especially in the Class I railroads, is undoubtedly a major factor in this trend. As railroads continue to upgrade their roster with newer, more efficient locomotives this trend should persist.



Source: Railroads' annual reports

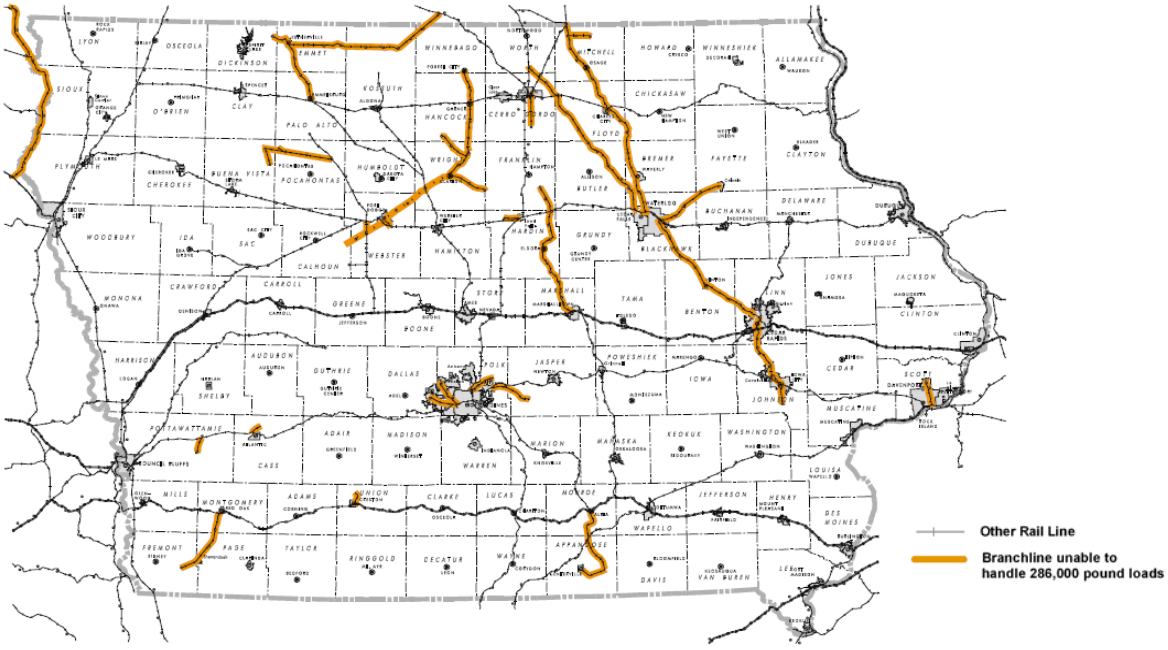
Percent of track-miles able to handle 286,000-pound cars (efficiency and quality of life)

What this performance measure means. The percent of track-miles able to handle 286,000-pound cars measures efficiency. This measure is calculated by comparing the track-miles that can carry this weight to those that cannot.

Why this performance measure is important. As the inventory of rolling stock becomes increasingly heavier, it is important that Iowa's railroad system be able to handle these cars. The industry standard for rail cars is 286,000 pounds (formerly it had been 263,000 pounds), and percent of track miles able to carry these cars is a measure of efficiency. Track unable to hold heavier loads require trains to either be split into multiple trains or train moved at a much slower speed. This affects the attractiveness of a community or rural area to development investments in agricultural or industrial businesses.

Recent data and interpretation. There are 3,947 track-miles in Iowa, of which 3,237 are able to carry 286,000-pound cars and 710 track-miles incapable of carrying that weight. Approximately 82 percent of Iowa's rails are able to carry cars of the critical weight, leaving 18 percent of the track-miles needing improvement.

Track-miles unable to handle 286,000-pound cars



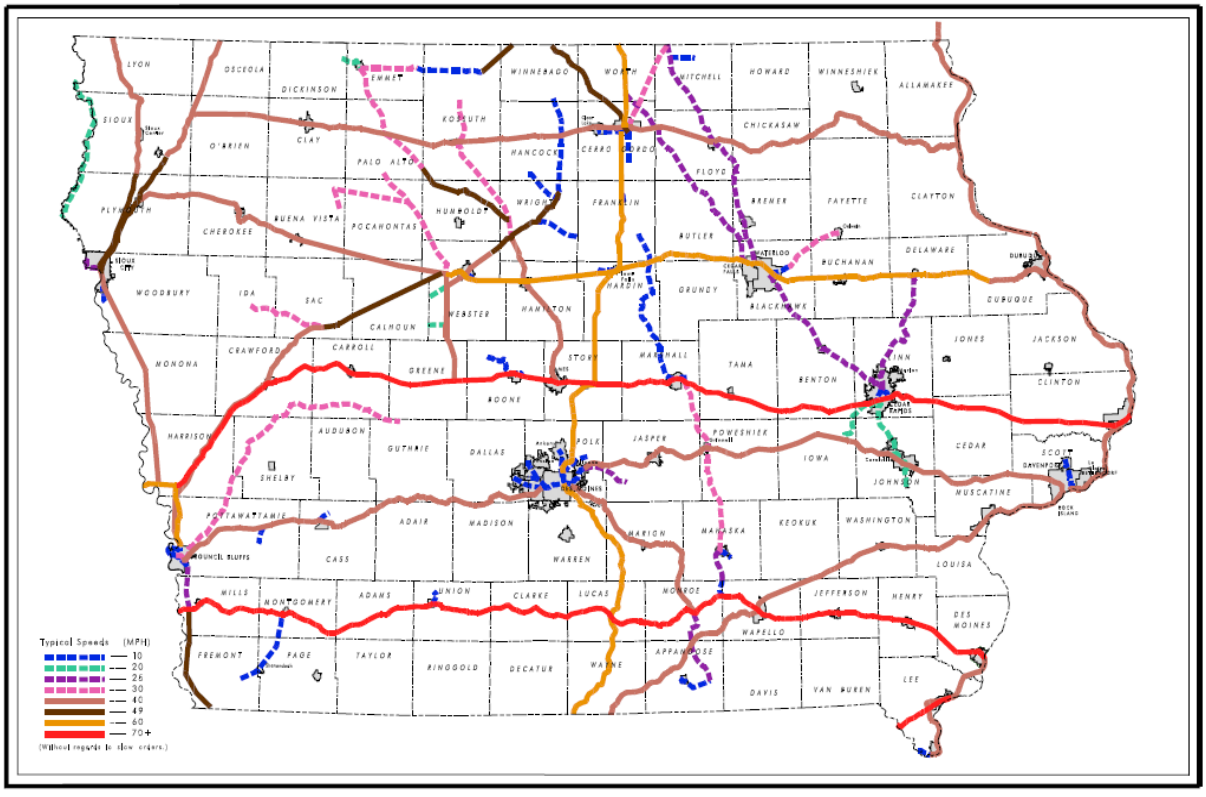
Percent of track-miles able to operate at least 40 mph (efficiency and quality of life)

What this performance measure means. The percentage of track-miles able to operate at 40 mph or more is a measure of speed for freight movement throughout Iowa. This measure compares track-miles that can operate at this speed.

Why this performance measure is important. The percentage of track-miles able to operate at 40 mph or more is another measure of the efficiency of railroads in Iowa. With an increase in speed, companies are able to send and receive freight faster and more efficiently. As the percentage of track-miles able to operate at this speed increases, freight movement around and across the state becomes faster and more efficient, allowing companies to spend less time with freight in transit. Slow track speeds usually indicate potential safety problems or tracks blocked by vehicular and pedestrian traffic, thus negatively impacting the local quality of life.

Recent data and interpretation. There are currently 3,947 track miles in Iowa. Of these, 2,756 (70 percent) can operate at 40 mph or more, which leaves 1,191 miles (30 percent) operating at less than 40 mph. The track miles owned by Class III rail companies operate at 30 mph or less. Most of the track operating at 40 mph or more is owned by Class I rail companies.

Railroad track speeds in Iowa



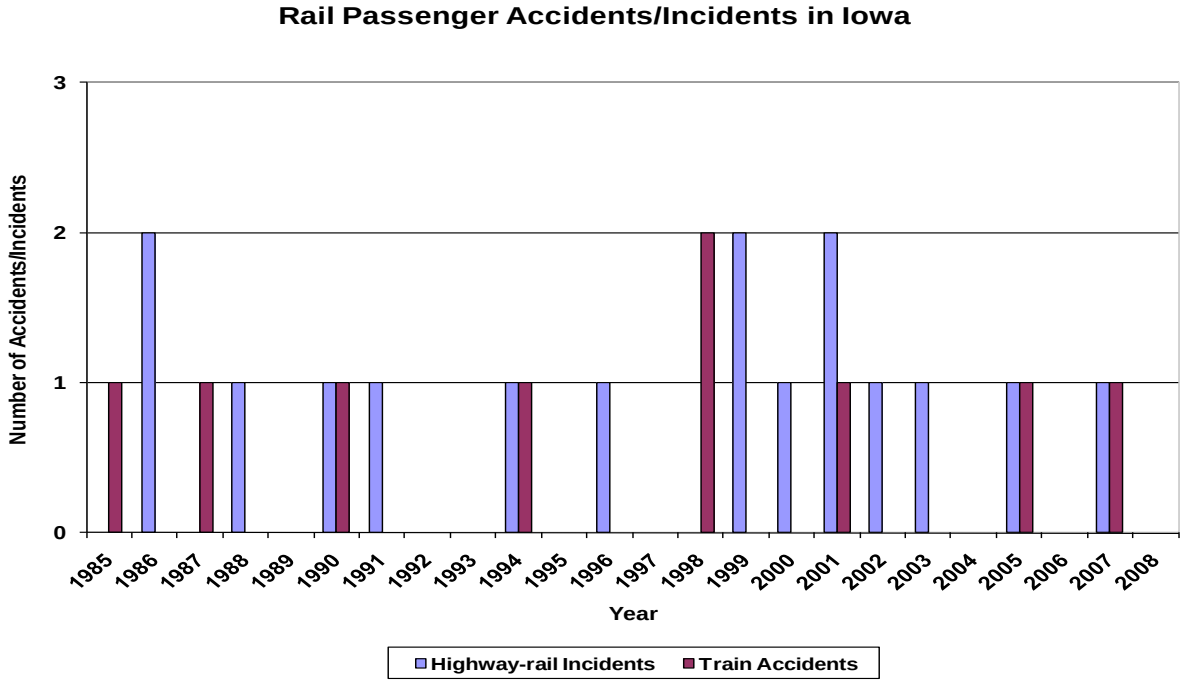
Passenger performance measures

Total accident/incidents relating to rail passenger service in Iowa (safety)

What this performance measure means. The total number of train accidents and highway-rail incidents at highway-rail crossings is a measure of safety calculated by summing all accidents/incidents relating to rail passenger operations in Iowa.

Why this performance measure is important. The total number of accidents/incidents indicates the safety of the Iowa train operations and crossings located along the rail lines that have passenger service. With fewer accidents/incidents, it is safer for trains to travel across the state and for motor vehicles to cross the railroad tracks. A decrease in the number of accidents/incidents not only means a safer rail passenger system in Iowa, but also a decrease in the cost of rail passenger services.

Recent data and interpretation. Since 1986, the overall number of accidents/ incidents has fluctuated between zero and two per year. The number of train accidents averaged 0.4 per year, while crossing incidents averaged 0.7 per year. During this time period, rail passenger service has remained the same, while the track structure and traffic control have improved. This performance measure indicates a strong safety performance.



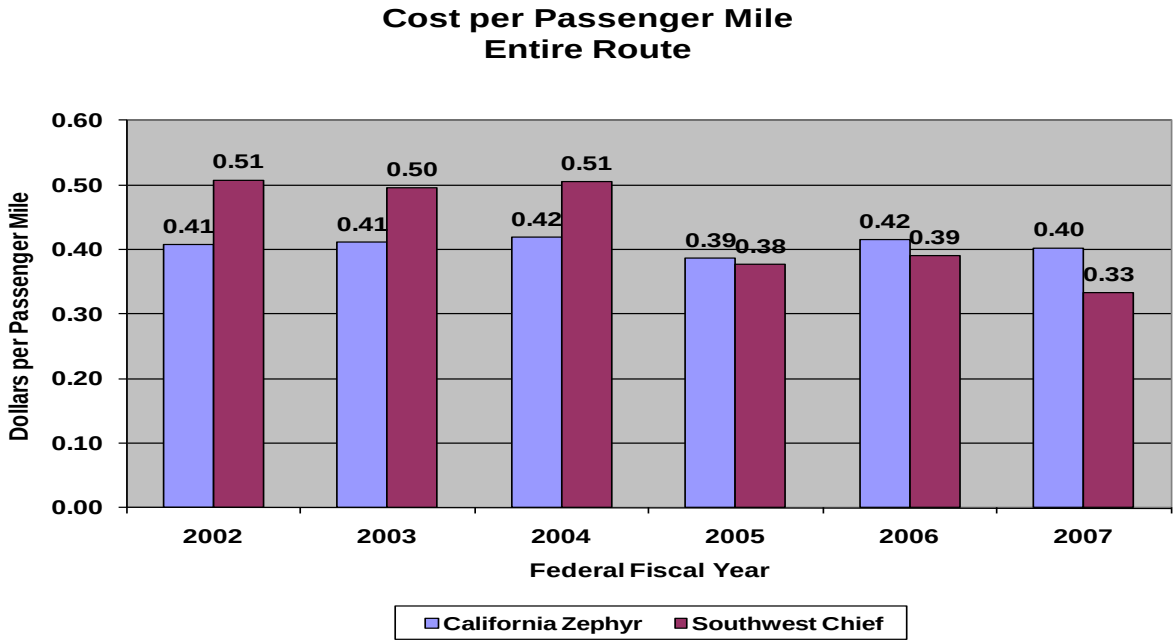
Source: FRA's Office of Safety Analysis

Cost per passenger-mile (efficiency)

What this performance measure means. Average rail cost per passenger-mile is a measure of efficiency, which is calculated by dividing the total cost by the number of passenger miles for the specific rail passenger route.

Why this performance measure is important. Average rail cost per passenger-mile is a measure of how efficient the passenger rail routes are that serve Iowa. Maintaining or decreasing the cost per passenger mile would generally indicate a more efficient rail passenger system serving Iowa.

Recent data and interpretation. The cost per passenger-mile on the entire California Zephyr route has remained the same since 2002 (approximately 40 cents). Cost per passenger mile on the entire Southwest Chief route has decreased by 35 percent since 2004 from 51 to 33 cents.



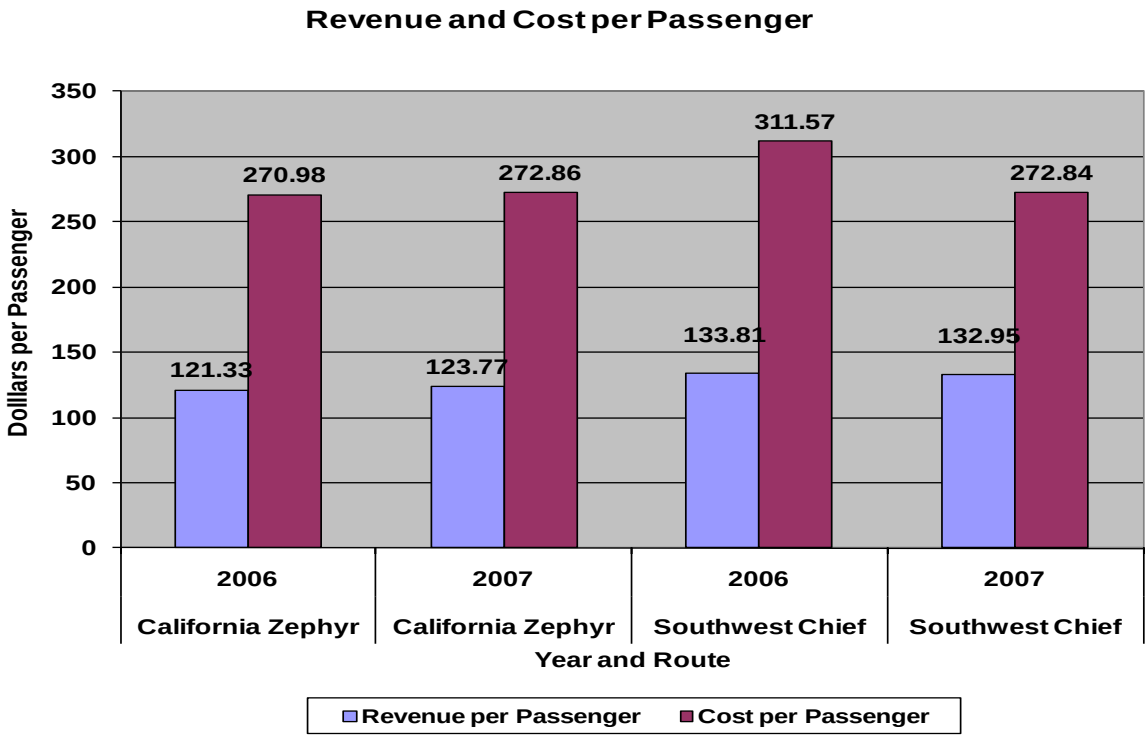
Source: Amtrak

Rail passenger revenue and cost per passenger (efficiency)

What this performance measure means. Average rail passenger revenue and cost per passenger is a measure of efficiency that is calculated by dividing the total revenue and cost by the number of passengers for the specific rail passenger route.

Why this performance measure is important. Average rail revenue per passenger compared to the average cost per passenger is a measure of how efficient the rail passenger routes are that serve Iowa. Narrowing this gap, either through an increase in revenue per passenger or a decrease in cost per passenger, would generally indicate a more efficient rail passenger system serving Iowa.

Recent data and interpretation. Both passenger routes serving Iowa narrowed the gap between revenues and costs from 2006 to 2007. During this period, there was a slight decrease of about 50 cents in the gap for the California Zephyr, while the Southwest Chief improved by nearly $40. Overall, there is a gap of nearly $150 per passenger that must come from other sources to cover the operating costs for these routes serving Iowa.



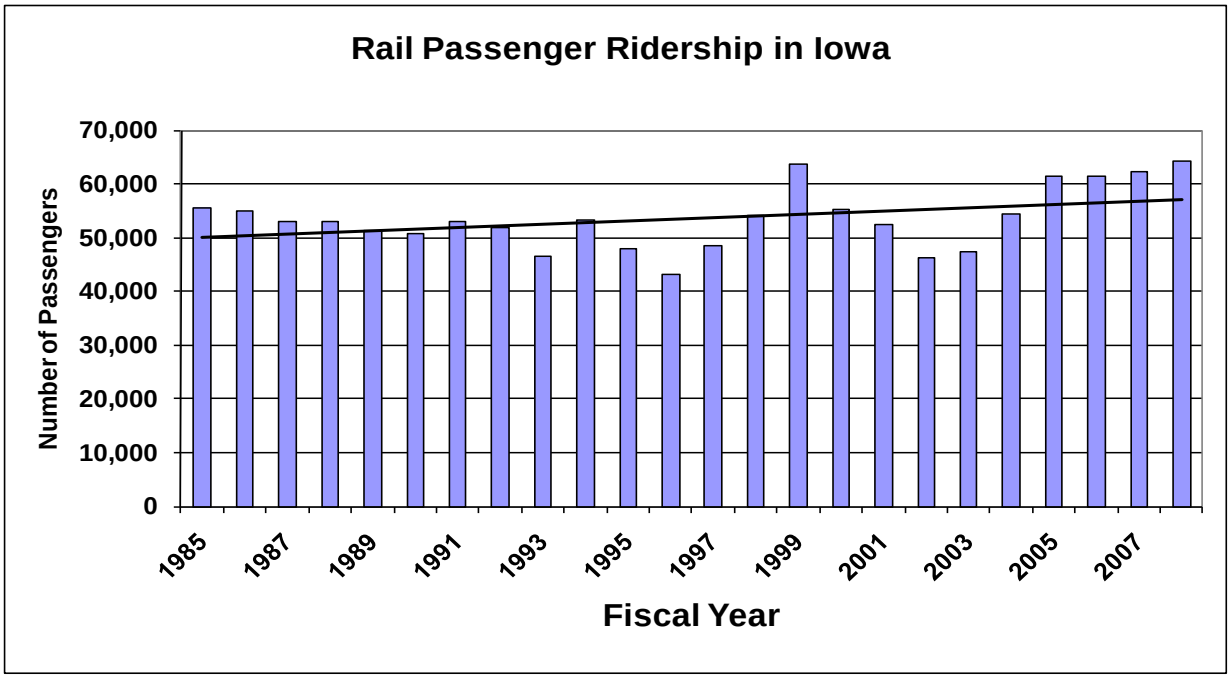
Source: Amtrak

Rail passenger ridership in Iowa (quality of life)

What this performance measure means. The amount of rail passenger ridership is a measure of quality of life calculated by summing the ridership at all passenger stations served in Iowa.

Why this performance measure is important. The number of riders served indicates the amount of people who have chosen another travel alternative. With higher ridership, more people are using rail passenger service as a mobility option other than the personal auto for travel. Using rail passenger service would help reduce some of the anxiety and stress from driving a personal vehicle.

Recent data and interpretation. The data below shows that ridership over the last four years has been more than 60,000. It also indicates a slight upward trend since 1985. One factor explaining this trend is that the number of rail passenger stations in Iowa has remained the same. Plus rail passenger service is provided in southern Iowa, which has lower population and population density.



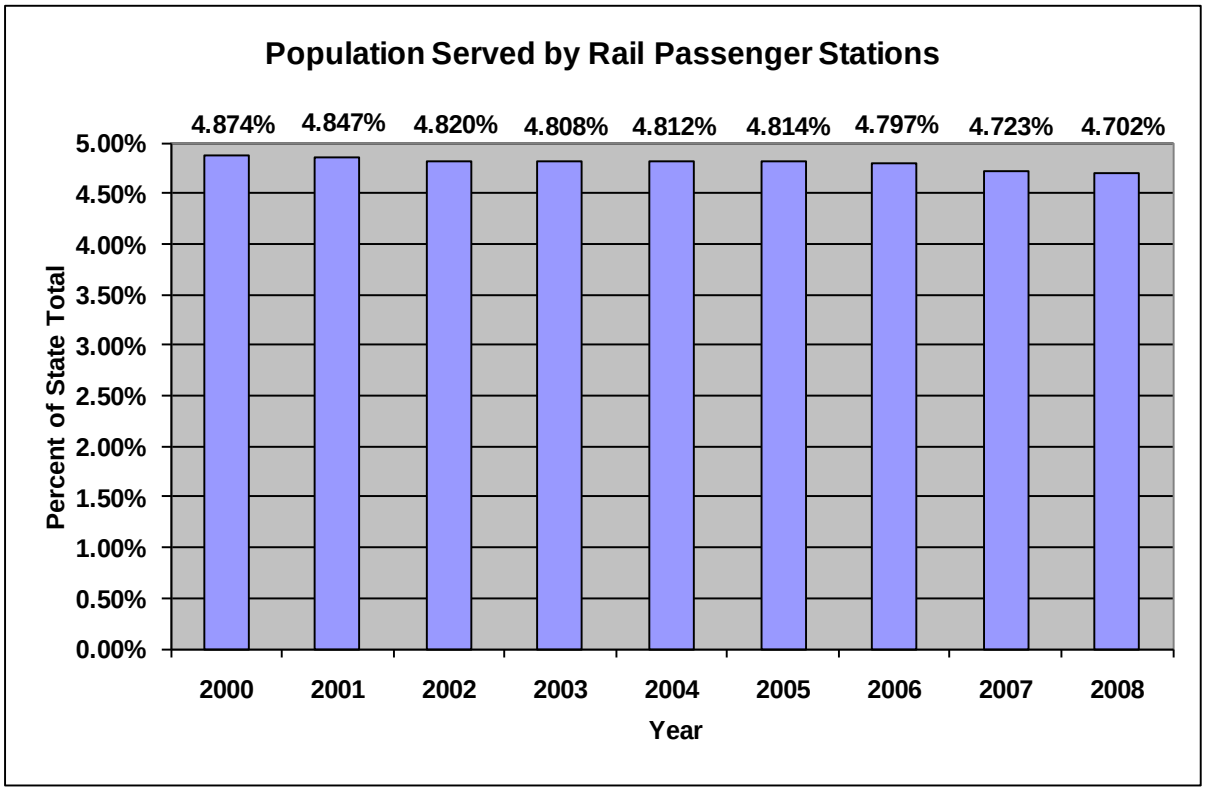
Source: Amtrak

Population served by rail passenger stations (quality of life)

What this performance measure means. The population served by rail passenger stations is a measure of quality of life calculated by summing the city population at all passenger stations served in Iowa.

Why this performance measure is important. The percent of population served indicates the amount of people who have another travel alternative. With higher percent of population served, more people have rail passenger service as a mobility option other than the personal auto for travel.

Recent data and interpretation. Data shows that a small percentage of Iowa's total population is located in a city that has a rail passenger service. It also indicates a slight downward trend, which is not desirable. One factor explaining this trend is that the number of rail passenger stations in Iowa has remained the same since 2000. Plus rail passenger service is provided in southern Iowa, which has lower population density.

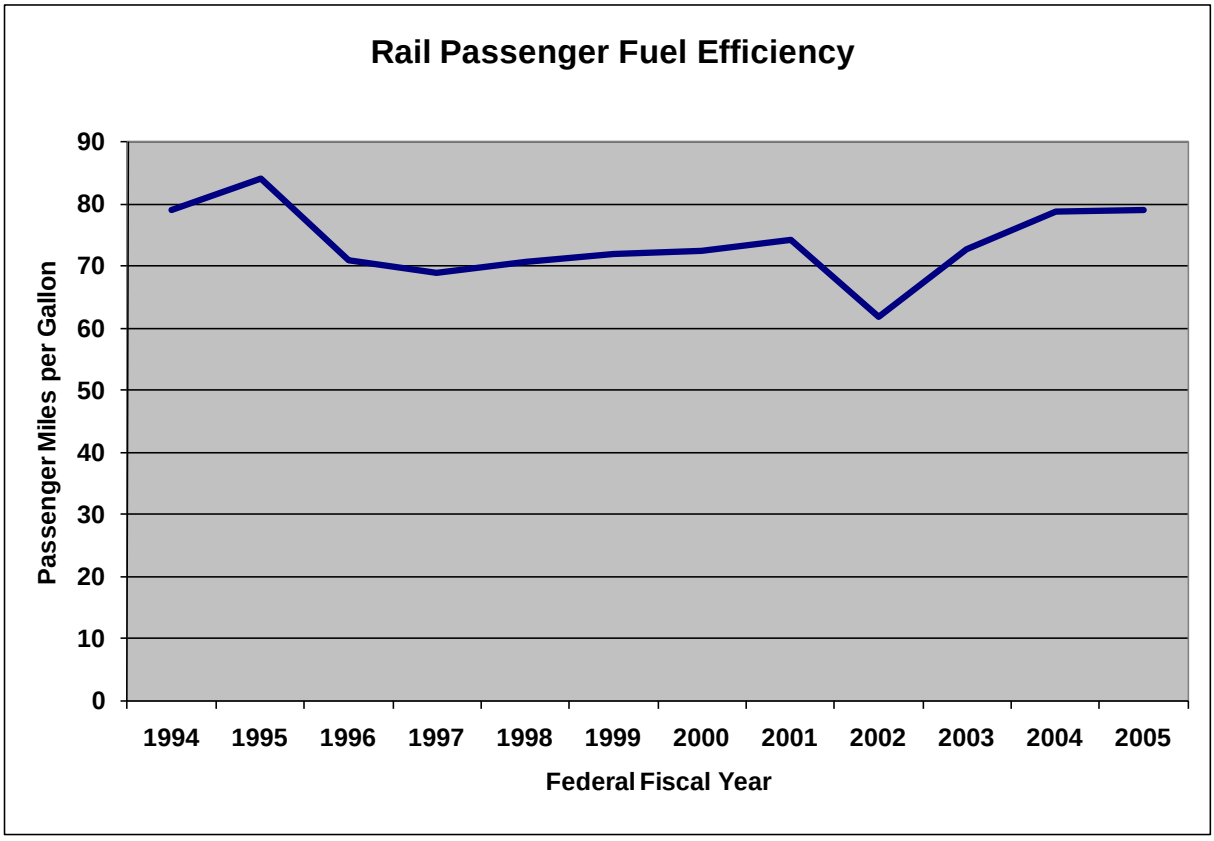


Rail passenger-miles per gallon (quality of life)

What this performance measure means. In 2004, there were more than 5.5 billion passenger-miles of rail traffic on Amtrak. A passenger-mile measures one rider traveling one mile on railroad track. Rail fuel use per passenger-mile, a measure of fuel efficiency, is the number of gallons of fuel it takes to move one passenger one mile.

Why this performance measure is important. Rail fuel use per passenger-mile measures the efficiency of Amtrak passenger service. With lower fuel consumption, operating costs and air pollution can decrease. Railroads are comparatively energy-efficient, but they can become even more efficient with targeted improvements.

Recent data and interpretation. Rail passenger service has become slightly more energy efficient since 1996. Since 1996, Amtrak has increased their fuel efficiency by 10 passenger-miles per gallon. As Amtrak continues to upgrade their roster with newer, more-efficient locomotives this trend should continue.



Source: Amtrak

Federal and state laws prohibit employment and/or public accommodation discrimination on the basis of age, color, creed, disability, gender identity, national origin, pregnancy, race, religion, sex, sexual orientation or veteran’s status. If you believe you have been discriminated against, please contact the Iowa Civil Rights Commission at 800-457-4416 or Iowa Department of Transportation's affirmative action officer. If you need accommodations because of a disability to access the Iowa Department of Transportation’s services, contact the agency's affirmative action officer at 800-262-0003.