





Every day, I meet people who are interested in passenger rail and who pepper me with questions about its past, present, and future. This interest isn't a surprise — for more than a century and a half, trains have been part of our heritage and our history. They enabled development of our great inland cities, settlement of our rural areas, and they opened up the West.

But trains are not just part of our past. They are a significant part of our present and a critical part of our future.

On a local level, passenger rail is a tried and true engine of economic growth. Study after study shows that when you introduce passenger rail service into a community, retail establishments flourish, commercial and residential property values go up, and people feel better about where they live and the choices they are able to make in their daily lives.

On a national level, passenger trains mean transportation options, mobility for underserved populations, congestion mitigation, and jobs, jobs, jobs – not just in the railroad but in the ancillary industries that support it and, most importantly, in the economic activity enabled by access to a variety of transportation options.

On a global level, passenger rail conserves energy, helps reduce greenhouse gas emissions, cuts down on other airborne particulate and toxic emissions, and provides an environmentally benign land use alternative to impermeable asphalt surfaces that contribute to the pollution of our waterways.

It's not a surprise that our own country invested significantly in building the original 19th century network of rail lines that crisscrossed our country. And it's no surprise why virtually all first-world and emerging first-world nations invest in passenger rail today.

Transportation writer Don Philips hit the nail on the head when he once wrote that for many people, their view of America is their view through the window of an Amtrak train, and it still amazes me how often I am approached by people eager for more information about investing in rail. It is for these people that we have compiled this booklet of handy facts about passenger rail. I hope they, and you, find it helpful.

Alex Kummant President and CEO

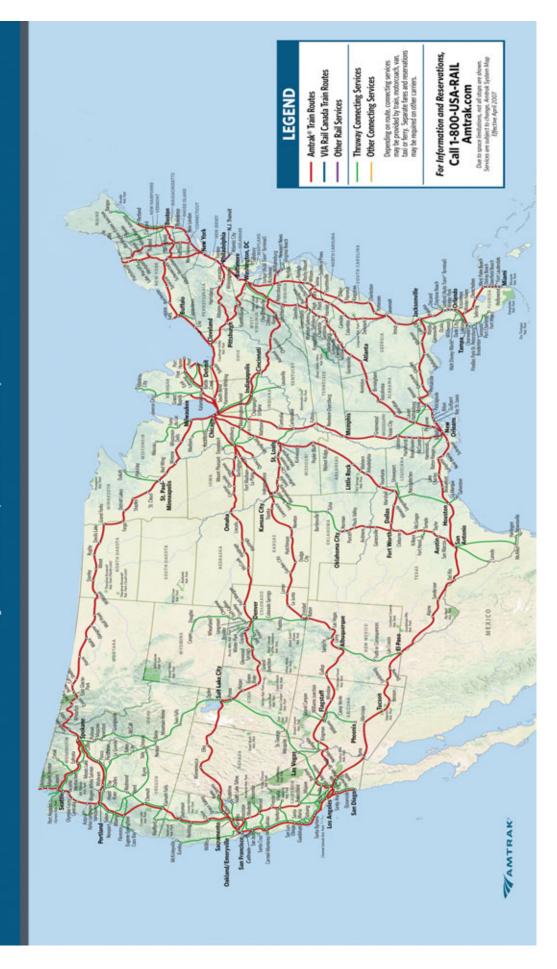
Critical Link

July 2007

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Backg	round Amtrak

THE AMTRAK® SYSTEM serving over 500 destinations > plus 400 destinations served by VIA Rail Canada



Additional time drivers must budget during rush hour due to congestion.

ND

SD

NE

TX

KS

OK

Chicago: 34

minutes per hour

AR

TN

Boston: 20

minutes per hour

Miami: 25

minutes per hour

1. Highway and Airport Congestion Mitigation

- The U.S. Department of Transportation calls air and highway congestion "chronic." 1
- Since 1982, the average delay per highway rush hour traveler has grown from 16 hours to 47 hours per year — in some areas, drivers lose as many as 93 hours per year to rush hour travel delays.² The number of urban areas with more than 20 hours of annual delay per

Seattle: 22

minutes per hour

Los Angeles: 45

minutes per hour

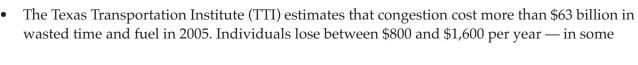
UT

co

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rush hour traveler increased tenfold in the two decades be tween 1983 and 2003.3

- Between 1995 and 2001, commute time over the same distance increased by more than 10 percent.⁴ The map at right shows delays caused by congestion in 2005.5
- In 1955, there were 65 million vehicles on U.S. highways. Today there are 246 million. By 2055 this number is expected to reach 400 million.6
- Not only are there an increased number of cars on the road, each individual car is also being driven more. The 11,000 miles per year an average car was driven in 1990 increased to 12,000 fifteen years later.⁷
- wasted time and fuel in 2005. Individuals lose between \$800 and \$1,600 per year in some



^{1 &}quot;FAA: Crowded skies to get more crowded," Associated Press story reproduced on CNN.com (March 16, 2007). See also "FAA Forecasts Steady Growth in Air Travel Demand," press release from FAA (March 15, 2007).

² "A new vision for the future Interstate system: Changing Function and Funding" by Dr. Anthony Kane, Director of Engineering and Technical Services for the American Association of State Highway and Transportation Officials (Jan. 22, 2007), slide 4.

³ "Annual study shows nation's traffic troubles growing worse", undated press release from Texas Transportation Institute accompanying release of the group's "2005 Urban Mobility Study" http://tti.tamu.edu/infofor/media/archive.htm?news_id=3851

^{4 &}quot;Summary of Travel Trends: 2001 National Household Travel Survey", U.S. Department of Transportation, Federal Highway Administration (Dec. 2004), p. 28, 46.

⁵ Map contains 2003 data and is taken from data compiled in "Table 1-64: Travel Time Index", National Transportation Statistics, U.S. Department of Transportation, Bureau of Transportation Statistics www.bts.gov/publications/national_transportation_statistics

⁶ "Transportation: Invest in our Future," American Association of State Highway and Transportation Officials (Feb. 2007), p. 18, 20.

⁷ Fuel Efficient Cars Dent States' Road Budgets," by Robert Guy Matthews. Wall Street Journal (April 25, 2007).

areas, TTI has calculated, commuters effectively pay a "congestion tax" of \$2 per traveler each workday.¹

A 2004 study calculated that an hour-long commute requires a 40 percent boost in salary to keep commuters as satisfied with their lives as their non-commuting peers, and a Harvard professor has calculated that "every ten minutes of commuting results in 10% fewer social connections."² Interstate travel is the fastest growing segment of vehicle miles traveled, and 90 percent of Interstates will soon be at or above capacity.

- Interstate travel currently accounts for one quarter of vehicle miles traveled and the fastest growing segment of vehicle miles traveled.³ By 2020, 90 percent of urban Interstates will be at or exceeding capacity.4
- Seattle residents can expect to see some stretches of Interstate traffic slow to below 30 mph by 2030, and as many as 70 percent of their freeways — and 90 percent of their HOV lanes — congested during rush hour.5
- Passenger miles traveled on highways increased by 18.1 percent between 1997 and 2004.6 Polls of Amtrak customers indicate that if the national railroad disappeared, 50.6 percent of customers would shift to the highway.
- Infrastructure improvements made to enable passenger rail often benefit freight rail, which helps reduce congestion. A single intermodal freight train can carry the same load as 500 trucks; shippers would have to add 50 million additional trucks on the roadways if rail was not a viable alternative.8
- The skies are gridlocked as well. Throughout the late 1990s, congestion increased steadily. While air travel shrank immediately after September 11, it has now surpassed prior levels. By the end of 2006, commercial



Milwaukee-Airport Station General Mitchell International Airport

air carrier enplanements exceeded pre-September 11 levels by more than 6 percent.⁹ The FAA

^{1 &}quot;Urban Mobility Information: 2005 Annual Urban Mobility Report," Texas Transportation Institute. From Q&As on the website at http://mobility.tamu.edu/ums/report. See the Q&A "What does Congestion cost us?" which estimates a cost of \$794 per traveler. ² "A Lonely Road Home for Commuters: How Longer Drives Exact Social Costs," Wall Street Journal, April 9, 2007, citing a story in The New Yorker of April 16, 2007.

³ "A New Vision for the Future Interstate System: Changing Function and Funding" by Dr. Anthony Kane, Director of Engineering and Technical Services for the American Association of State Highway and Transportation Officials (January 22, 2007). Slide 3.

⁴ "Transportation: Invest in our Future," American Association of State Highway and Transportation Officials (February 2007). p. 18, 20.

⁵ "Destination 2030," Puget Sound Regional Council of Governments (2002), p. A8:15.

^{6 &}quot;2006 Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance", Report to Congress prepared by the U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration (page xiii of the Executive Summary) ⁷ "Overview of U.S. Freight Railroads", Association of American Railroads (January 2007), p. 6.

^{8 &}quot;State of Nation's Intercity Rail," Surface Transportation Policy Project, part of their Decoding Transportation Policy & Practice series #12 (February 11, 2004), p. 1.

^{9 &}quot;FAA Aerospace Forecasts: Fiscal Years 2007-2020," U.S. Department of Transportation, Federal Aviation Administration, p. 12.

expects that the 63 million take-offs and landings in 2007 will increase to 81.1 million by 2012, and expects general aviation (private flying hours) to increase by 60 percent, further taxing capacity.1

Forty years ago, a United Airlines flight from Philadelphia to Los Angeles took 5 hours and 5 minutes. Today, it takes 6 hours and 1 minute.²

Amtrak removes almost 8 million cars from the road, and eases air congestion by eliminating the need for 50,000 airplanes each year.

- Capacity constraints further limit the air system's ability to adapt to weather or other disruptions. The FAA reports that 2006 was the worst year in history for delays, with more than 400,000 flights departing or arriving late.3
- Regional air service is experiencing "exceptional growth" according to the FAA. Activity at regional and low-cost airports led the way in air service expansion between 2000 and 2006.4
- A typical Amtrak corridor train has the same capacity as six or more 50-seat regional jets, and a single train's capacity can be increased by adding cars. Trains are particularly competitive in corridors of 100 to 500 miles, and can help ease airway congestion at many of the nation's air ports.



The State of Illinois doubled its passenger rail investment in FY 07 and ridership has responded, increasing 40 percent in the first three quarters over the same time period the year before. Pictured is a preview train along the *Saluki* route at the Matoon, Illinois station.

¹ "FAA Forecasts Steady Growth in Air Travel Demand," press release of Federal Aviation Administration (Mar. 15, 2007).

² "Farther, faster? Not Anymore," by Paul Nussbaum, Philadelphia Inquirer (April 23, 2007).

³ "FAA: Crowded skies to get more crowded," AP story reported on CNN.com (Mar. 16, 2007).

⁴ "FAA Aerospace Forecasts: Fiscal Years 2007-2020," U.S. Department of Transportation, Federal Aviation Administration, p. 11, 22.

2. Economic Development - National

According to the U.S. Department of Transportation, every \$1 billion invested in transportation creates approximately 47,500 transportation-related as well as ancillary jobs (service industry, finance, etc.).1

- On a network that extends 21,000 miles and reaches more than 500 stations in 46 states and Washington, DC, Amtrak carries more than 67,000 passengers each day, and carried 24.3 million passengers in 2006, almost equally split between the Northeast Corridor and the rest of Amtrak's system.
- Amtrak serves more passengers between Washington D.C. and New York than all airlines combined. It captures two thirds of the air-rail market between Portland (Oregon) and Seattle, and three quarters of that between San Diego and Los Angeles. In 2006



The Texas Eagle departs Dallas, Texas.

Air-rail market share nationwide

Amtrak captured 61 percent of the Philadelphia to Harrisburg (Pennsylvania) air-rail market – additional trains and faster times on the Keystone line in 2007 are expected to boost that market share significantly. Amtrak captures more than 90% of the air-rail market serving Albany to New York City, Chicago to Milwaukee, and Portland (Maine) to Boston.²

Carridas Danta	DVOC Dide-abia		FYOC Dell'Ale Chees
Corridor Route	FY06 Ridership	Miles	FY06 Rail/Air Share
Washington - Boston	9.431 million	457	55% Washington - NYC
Los Angeles - San Diego	2.658 million	128	74%
Sacramento - San Jose	1.264 million	133	No direct airline service
NYC - Albany - Niagra	1.216 million	141	93% NYC to Albany
Philadelphia - Harrisburg	0.823 million	104	61%
Oakland - Bakersfield	0.800 million	318	No direct airline service
Seattle - Portland	0.628 million	187	66%
Milwaukee - Chicago	0.580 million	86	99%
Pontiac - Detroit - Chicago	0.439 million	281	9% Chicago to Detroit
Washington - Newport News	0.401 million	187	43%

would rank 8th in the number of passengers served and have a market share of nearly five percent. Two of Amtrak's stations would be among the nation's top 50 airports on Amtrak ridership alone – not counting the hundreds of thousands of commuters who access transit at those facilities.3

If included among U.S. airlines, Amtrak

Source: Back Aviation

^{1 &}quot;The Benefits of Public Transportation," American Public Transportation Association quoting the comments of then-Secretary Norman Mineta at a conference of the American Road and Transportation Builders Association on June 25, 2002 and found at www.publictransportation.org

² Source: Back Aviation.

³ "State Transportation Statistics," U.S. Department of Transportation, Bureau of Transportation Statistics, (December 2006) p. A-11. NY Penn Station (7.55 million boardings/alightings) would be between Chicago Midway (8.38 million) and Oakland International (7.07 million enplanements); and Washington Union Station (3.86 million) would rank just behind Houston's Hobby Airport (3.96 million). Amtrak's boarding/alightings do not take into account the numerous additional transit users at its stations.

- More people travel through Amtrak's Penn Station in New York every day than through JFK, LaGuardia and Newark airports combined.
- In addition to Amtrak's own passengers, an additional 800,000 riders each weekday depend upon commuter rail services operated under contract by Amtrak or that use Amtrak-owned infrastructure, shared operations, or dispatching. According to the U.S. Government Accountability Office (GAO), the majority of commuter rail agencies in America rely on Amtrak for some level of infrastructure or services. Commuter authorities report that without Amtrak they would have strained capacity and increased costs.¹ The symbiotic partnership is nationwide, from the 90 percent of the trains on Amtrak's Northeast Corridor being commuter rail trains to Sound Transit's ability to avoid building a multi-million dollar maintenance facility by sharing use of Amtrak's Seattle shop.²



Whitefish, Montana station

- Amtrak stations are shared by other transportation providers who rely on Amtrak ownership (or on rental payments and other revenues associated with Amtrak's usage), as well as garner ridership and revenues from connecting Amtrak passengers. This is true not only in the historically transit-oriented cities that comprise Amtrak's four largest markets (New York, Washington, D.C., Philadelphia, and Chicago) but also in Los Angeles, Dallas, Denver, Fort Worth, Sacramento, San Diego, San Jose, Seattle, several south Florida stations and soon, St. Louis.
- More than sixty freight trains per day use Amtrak-owned or maintained tracks to serve industries, power plants, ports, and

other rail shippers or receivers throughout the Northeast and in portions of three Midwestern states. Virtually all of the freight traffic that moves by rail to Brooklyn/Queens, Long Island, and the DelMarVa Peninsula, and much of the rail freight traffic to and from Southern New England and the pots of Baltimore and Wilmington, travels over the Amtrak-owned Northeast Corridor.

- Freight rail has benefited from many state investments that were primarily inspired by passenger need, including "sealed corridor" construction in North Carolina, grade crossing safety in Florida, and rail capacity investments associated with the creation of the Los Angeles Metrolink system and the rising passenger service on San Joaquin and Capitol Corridor trains. These investments have created additional track capacity utilized for freight as well as passenger operations.
- In 2006, Amtrak procured \$815.6 million worth of goods and services, and paid wages of \$1.205 billion to almost 19,000 workers located across the United States.

¹ "Commuter Rail Issues Should be Considered in Debate over Amtrak", GAO (April 2006) p. 1-2, 13, 26, 30-32.

² <u>Ibid.</u>, p. 5, 11, 13.

3. Economic Development - Regional

- Amtrak provides an increasingly important link for communities around the country. A 2004
 Rutgers University study found that even in New Jersey, the most densely populated state in
 the country and one which is served by seven public airports, Amtrak garners two-thirds of the
 air-rail market to Washington, D.C. because of the limitations of regularly scheduled air travel.¹
- According to the GAO, the majority of commuter rail agencies in America rely on Amtrak for some level of access to infrastructure or services, including maintenance of way, maintenance of equipment, train operations, access to right-of-way, police and security, ticketing, traction power, stations and platforms and dispatching.²
- Amtrak serves 174 communities, mostly in rural areas, that are more than 75 miles from a large, medium, or small hub commercial airport, and 51 communities without intercity bus service.³

Amtrak serves more than 170 communities that have limited or no commercial air service, and more than 50 without intercity bus service.

- The University of Alaska's Institute for Social and Economic Research found that railroad payroll and procurement expenditures, as well as economic development opportunities enabled by \$108 million in railroad spending supported 1,100 non-railroad jobs, ranging from health care services to restaurants, to retail trade.⁴
- According to the <u>Wall Street Journal</u>, Washington D.C.'s Union Station now commands \$700 to \$800 in sales per square foot more than twice the national average for shopping malls.⁵ Many communities report a 10 to 15 percent premium sellers are able to charge for developable land near rail transit stations,⁶ and premium rents can

"There is no question that the Saco Island project would not be on the drawing board had it not been for the train station, and the potential expansion of passenger rail service in Maine. Our proposal is an economic development project for the entire Biddeford-Saco downtown area. Without the train, the project makes no sense."

Saco Island, LLC. Project Managers

¹ "The Role of Amtrak's Intercity Passenger Rail Services in New Jersey", prepared by the Alan M.

Voorhees Transportation Center of Rutgers University (June 2004), p. 4. The seven airports in which public information on status and delays at airports can be found at www.faa.gov are: Newark, Atlantic City and Teterboro (NJ); Philadelphia and Allentown (PA); La-Guardia and JFK (NY).

 $^{^{2}}$ "Commuter Rail Issues Should be Considered in Debate over Amtrak", GAO (April 2006), p. 1, 2.

³ Airport information from: http://www.faa.gov/airports_airtraffic/airports/planning_capacity/passenger_allcargo_stats/passenger media/cy05_primary_np_commercial.pdf.. Bus information from www.greyhound.com and www.strayhound.com.

⁴ Alaska Railroad Corporation press kit downloaded from www.akrr.com cites the study showing that the railroad's average annual expenditures of \$108 million per year on purchases and payroll supported almost 800 railroad employees as well as another 1,100 people employed in non-railroad jobs ranging from health care services to retail and tourist trade.

⁵ "Pricey Junction of Retail, Rail" by Ryan Chittum. Wall Street Journal (Jan. 31, 2007).

^{6 &}quot;Mass transit fills apartments but adds to unit cost" by Bendix Anderson in Housing Finance (May 2004).

be commanded by by residential and commercial units near rail. San Diego boasts a 17 percent price advantage for proximity to rail. A 2002 study in Texas documented that residential properties near rail stations rose in value over the period studied by 32.1 percent (while those without rail connections rose 19.5 percent) and that commercial properties near rail transit stations increased in value by 24.7 percent (while those without rail connections increased by less than half that rate).1

Even in smaller metropolitan communities, the return on investment in rail stations is dramatic. The Chamber of Commerce in Old Orchard Beach (Maine) credits new Amtrak service as spurring "tremendous growth" in the economy, specifically noting more than 200 condo developments since Amtrak rail service came to the city. According to Maine Governor John Baldacci, "Amtrak is part of Maine's long-term economic development strategy."²

"We in the City of Meridian, Mississippi credit our \$1.4 million share in rebuilding our rail station with being the catalyst for \$120 million in downtown development."

> Mayor John Robert Smith, Meridian, MS

"The way I see it is, it's eventually going to unlock the economy between Illinois and Wisonsin."

> Wisconsin Secretary of Transportation, Frank Busalacchi

discussing state investment in Madison-Chicago Amtrak rail service, as quoted in the Wisconsin State Journal

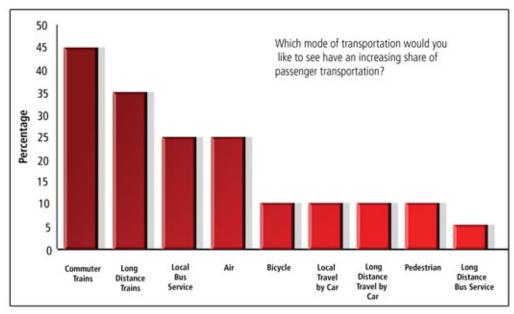
March 2, 2007

¹ APTA 2006 factbook p. ix.

² Old Orchard Beach Chamber of Commerce Executive Director Bud Harmon, former Governor Angus King, and Governor John Baldacci, in a video on economic development prepared by the Northern New England Passenger Rail Authority, http://www.thedowneaster.com/economicdev.html

4. Travel Choices

• Harris Polls have found that almost 4 in 5 adults would like to see more long distance and commuter passenger rail options, and 44 percent of Americans would like to see an increasing portion of travel by rail. Almost two-thirds of Americans surveyed in a 2004 study said their communities needed more transportation options.¹



Source: 2004 Harris Poll²

• If the national Amtrak system were to disappear, one out of six Amtrak passengers report they simply would not make the trip.



- Amtrak serves 174 communities, mostly in rural areas, that are more than 75 miles from a large, medium, or small hub commercial airport, and 51 communities without intercity bus service.³
- A pre-9/11 Boeing study found one in three Americans afraid of or anxious about flying, with anxiety about heights vastly outpacing reasons for fear of flight (e.g., fear of confined spaces, water, darkness or crowds).⁴

¹ www.harrisinteractive.com/harris%5Fpoll/index.asp?PID=638. Wirthlin poll at www.apta.com/media/release/20904_poll.cfm (2004); CNN/USA Today/Gallup poll (June 21-23, 2003); Washington Post Poll (Aug. 5, 2002).

² Graph taken from information in Harris Poll cited above. Percentages are: Commuter trains (44), Long-distance trains (35), Local bus service (23), Airlines (23), Travel by bicycle (11), Local travel by car (11), Long-distance travel by car (10), Pedestrian travel (8), Long-distance bus service (6), None of these/Not sure (13)

 $^{^3} Airport information from \ http://www.faa.gov/airports_airtraffic/airports/planning_capacity/passenger_allcargo_stats/passenger/media/cy05_primary_np_commercial.pdf. Bus information from www.greyhound.com and www.strayhound.com.$

⁴ Boeing study conducted in 1980 is cited at www.fearofflying.com/research.shtml and was the recommended source by staff at Virgin Atlantic's Fear of Flying program.

- Sixteen percent of Amtrak customers do not own a car.
- One in five Americans age 65 and older does not drive,¹ and the number of people aged 65 and older is expected to more than double between 2002 and 2030.² While half of older non-drivers report having a medical condition that impedes their ability to travel,³ finances also play a role.⁴ AARP calls on Congress to "support nationwide passenger rail service...and establish a dependable funding mechanism that ensures continuing broad-based nationwide passenger rail service."⁵
- According to the U.S. Department of Transportation, the average cost of driving a car in 2003 was 53 cents per mile; the average cost of an Amtrak trip was 23 cents per mile.⁶ The American

The per mile average cost of driving a car is more than double the average cost of an Amtrak ticket.

Automobile Association assigned even higher automobile costs — an average cost of 62 cents per mile and, depending on the type of automobile, as high as 74 cents per mile in 2007.⁷

• Americans spend three times as much money on driving as on health care, and 33 percent more on driving than on food. In fact, driving is second only to housing in terms of impact on

a family's budget.⁸ Cities with the fewest transportation choices have the highest transportation costs per household. The average Houston family spends 22 cents of every dollar on transportation, while one in transit-friendly Baltimore spends less than 5 cents.⁹

• Terrorism, natural disasters, major gatherings and protests can disable or overload any one component of a transportation system, leading one government agency to conclude that "the redundancy of major components of the transportation system is critical."¹⁰ Amtrak honored plane tickets, moved emergency crews and supplies in and out of New York, and had trains running within hours of the 9-11 attacks in New York and Washington D.C.; evacuated more than 700 people from Houston in advance of Hurricane Rita; and during the blizzard of 1996, Amtrak (in the words of Congress), "provide[d] the traveling public with, in many cases, the only mode of transportation operating."¹¹

¹ "Community Mobility Options: The Older Person's Interest" by Ari N. House, AARP Public Policy Institute (August 2005). www.aarp.org/research/housing-mobility/transportation/fs44r_com_mobility.html, citing an AARP analysis of statistics from the US DOT's National Household Travel Survey (2001).

² "Reimagining America: AARP's Blueprint for the Future", AARP (2005), p. 4, citing figures from the U.S. Department of Health and Human Service's Administration on Aging and Centers for Disease Control.

³ "Aging Americans: Stranded Without Options." Surface Transportation Policy Project, (2004).

^{4 &}quot;Community Mobility Options: The Older Person's Interest" by Ari N. House, AARP Public Policy Institute (August 2005), citing an AARP analysis of statistics from U.S. DOT's National Household Travel Survey of 2001 to conclude that residents 65+ with incomes below \$10,000 are 14 times as likely not to own a vehicle as households with the same age demographics but annual incomes over \$25,000

⁵ "The Policy Book: AARP Public Policies 2007," page 9-21. See also "Reimagining America: AARP's Blueprint for the Future", AARP (2005), page 20.

⁶ "Transportation Statistics Annual Report", U.S. Department of Transportation, Bureau of Transportation Statistics (November 2005), p. 10.

⁷ "Your Driving Costs: How much are you really paying to drive?" AAA, 2007 Edition, p. 2.

⁸ "Driven to Spend", Surface Transportation Policy Project (Mar. 19, 2000). Executive summary.

⁹ <u>Ibid.</u>

¹⁰ "Consideration of Security in 2007: Update of Destination 2030," Draft Technical Memorandum prepared for Puget Sound Regional Council by DKS Associates of Seattle, (Aug. 24, 2006). p. 6.

¹¹ House Report 104-63, Department of Transportation and Related Agencies Appropriations Bill, 1997.

5. Energy Efficiency and Environmental Benefits

- Most of the energy consumed in American transportation is fossil fuel (98 percent) and its consumption is vastly skewed to highway vehicle travel.¹
- The Intergovernmental Panel on Climate Change blames fossil fuel for increasing carbon dioxide concentration in our air.²
- Amtrak is 17 percent more energy efficient than either commercial airlines or automobiles. Air travel has an additional disadvantage of radiative forcing, which increases the climate effect of air travel by 2 to 4 times as compared to surface travel.³









* BTU stands for British Thermal Unit, a standard unit of energy. Figures listed refer to BTUs used per passenger mile from 2005, the most recent year for which data is available for all three modes.

- Even as it has increased train miles and frequencies in various states (such as California and Illinois), Amtrak has been consistently reducing its consumption of diesel fuel, thanks to improved operating practices and conservation measures. Amtrak's BTU per passenger mile improved from 2,800 in 2003 to 2,760 in 2004, 2,709 in 2005, and 2,650 in 2006. New energy efficient equipment is further improving conservation (e.g., in addition to Acela Express trains' regenerative braking system, Amtrak has acquired new more energy-efficient Auto Train vehicle carriers and is evaluating more fuel efficient switching locomotives).⁴
- Amtrak electrified 156 miles of the Northeast Corridor between New Haven and Boston in 2002, and restored electrified service to the 104-mile Philadelphia-Harrisburg line in October 2006 following a \$145 million investment by Amtrak and the Commonwealth of Pennsylvania. The Pennsylvania upgrades replaced 9 diesel powered roundtrip trains per weekday with 12 roundtrip trains powered by electricity; the New England upgrades enabled the introduction of high speed rail service with increased speeds and service frequencies. Most of the the electric power Amtrak uses between New York and Washington is generated from non-fossil fuel sources.
- Passenger rail-driven improvements have helped increase rail line capacity, which benefits
 freight trains that use the same tracks. Freight rail has a fuel consumption rate 11.5 times
 more energy efficient on a BTU per ton mile basis than trucks.⁵ According to the U.S. Department of Energy, locomotives added at a "record number" in recent years by American freight
 railroads are significantly improving capacity and business efficiency.⁶ A freight locomotive

¹ "Issues in Focus", part of the Annual Energy Outlook 2007, U.S. Department of Energy, Energy Information Administration, p. 44.

² Intergovernmental Panel on Climate Change: "Climate Change 2007: The Physical Science Basis." From Summary for Policymakers, formally approved at the 10th Session of Working Group 1 of the IPCC in Paris in February 2007, p. 2.

³ "Issues in Focus", part of the Annual Energy Outlook 2007, U.S. Department of Energy, Energy Information Administration, p. 44.

⁴ Transportation Energy Data Book, Edition 26, 2007, U.S. Department of Energy, Oak Ridge National Laboratory, Table 2.14 for 2003-2005 data; 2006 data is from Amtrak.

⁵ "Issues in Focus", part of the Annual Energy Outlook 2007, U.S. Department of Energy, Energy Information Administration, p. 44.

⁶ <u>Ibid.</u>, p. 40.

moving a ton of freight at an average of 235 miles per gallon in 1980 today moves more than 414 miles per gallon – a fuel efficiency improvement of more than 75 percent.¹

- While airlines have also seen significant energy-efficiency advances in equipment design, the industry has been forced to meet consumer demand for flight destination and availability with an increasing use of regional jets, which are 40 percent less efficient than narrow-body jets and carry fewer people.² The FAA predicts that both large established airlines and their discount competitors will continue to turn to smaller narrow-body aircraft to boost frequency and improve profitability.³
- The Texas Transportation Institute found in 2005 that in the 85 urban areas across America it studied, 2.3 billion gallons of fuel were wasted solely due to congestion – enough to fill 46 supertankers or 230,000 gasoline trucks.⁴
- By diverting traffic from highways and the air to a more efficient alternative, railroads save fuel. Amtrak removes 8 million cars from the road and eliminates the need for 50,000 fully-loaded passenger airplanes each year. Passenger rail improvements also benefit freight trains that share the same tracks. A single intermodal freight train can take up to 280 trucks or 1,100 cars off of the highway.⁵ Without rail as an option, freight shippers would have to add 50 million additional trucks on the roadways.6
- Encouraging cluster development in high-density corridors, Amtrak helps mitigate both identified and indirect sources of air pollution.
- In 2002, transportation vehicles emitted 58 percent of the nation's carbon monoxide pollution, 45 percent of nitrogen oxides, 36 percent of volatile organic compounds, 4 percent of

 $^{^{\}rm 4}$ "Urban Mobility Information: 2005 Annual Urban Mobility Report," Texas Transportation Institute. From Q&As on the website at http://mobility.tamu.edu/ums/report. See the Q&A "What does congestion cost us?" for both the figures and the analogy. ⁵ "Overview of U.S. Freight Railroads", Association of American Railroads (Jan. 2007). Page 6 – it also notes that "a train carrying other types of freight can take up to 500 trucks off of our highwavs.'

Rai	lroads: Th	e Best Cho (Emissions			ment
Rank (1 = Most Desirable)	Oxides of Nitrogen	Volatile Organic Compounds	Particulate Matter	Carbon Monoxide	Carbon Dioxide
1	Rail	Rail	Air	Rail	Rail
2	Water	Water	Rail	Water	Water
3	Truck	Air	Water	Air	Truck
4	Air	Truck	Truck	Truck	Air

⁶ STPP "State of Nation's Intercity Rail", Decoding Transportation Policy & Practice #12 (Feb.11, 2004). www.transact.org p. 1.

^{1 &}quot;Overview of U.S. Freight Railroads", Association of American Railroads, January 2007. Page 7.

² "Issues in Focus", part of the Annual Energy Outlook 2007, U.S. Department of Energy, Energy Information Administration,

³ "FAA Aerospace Forecasts: Fiscal Years 2007-2020," U.S. Department of Transportation, Federal Aviation Administration, p.

⁷ Association of American Railroads: "Overview of U.S. Freight Railroads" (Jan. 2007), p. 7.

particulates, 78 percent of ammonia, and 5 percent of sulfur dioxide. Highway vehicles accounted for almost all of those carbon monoxide emissions, 78 percent of the nitrogen oxides, and 77 percent of volatile organic compounds.¹

• Amtrak was an early member of the Chicago Climate Exchange, the world's first and North America's only voluntary, legally binding integrated greenhouse gas reduction and trading system for all six greenhouse gases. Amtrak is trading carbon dioxide credits and committed to a greenhouse gas reduction of 1 percent per year between 2003 and 2006, with an additional 0.5 percent per year between 2007 and 2010.

CARBON EMISSIONS (per passenger mile)				
Rail	.21 kg			
Car	.35kg			
Air	.48 kg			

Emissions factors based on calculations from the World Resorces Institute (WRI) and Carbonfund.org. Calculations assume single-occupant car and the added impact of high-altitude emissions for air.

- Many state investments on behalf of passenger rail have served to benefit freight rail as well.
 Freight trains are responsible for 6-12 times less pollution per mile than trucks. The EPA estimates that for every mile, a typical truck emits three times more nitrogen oxides and particulates than a locomotive, and much more greenhouse gas.²
- Railroads reduce the amount of impervious surface (paved roads, parking lots, and interchanges) required for transportation. Paved surfaces hasten erosion, wash toxic chemicals (including lead, copper, cadmium and zinc) into waterways, alter water temperature and thereby threaten aquatic life, and prevent filtration and recharge of groundwater supplies.³ Studies have noted that when more than ten percent of the acreage of a water-shed is covered in impervious surfaces, rivers and streams within the watershed become seriously degraded, but damage can be detected with as little as five percent coverage.⁴
- 125 million people in the U.S. lived in areas of non-attainment for national ambient air quality standards in 2003 (non-attainment measures exposure to ozone, carbon monoxide, nitrogen dioxide, lead, sulfur dioxide, and particulate matter).⁵ Smog and acid rain damage agricultural crops and damage buildings at a cost of between \$2 and \$3 billion each year.⁶

Amtrak is an early participant in North America's only legally binding greenhouse gas reduction and trading system, the Chicago Climate Exchange.

Commission, 2002, p. 9-10.

¹"Transportation Statistics Annual Report", U.S. Department of Transportation, Research and Innovative Technology Administration. Bureau of Transportation Statistics, November 2005, p. 15"State of the Nation's Intercity Rail," Surface Transportation Policy Project, part of its Decoding Transportation Policy & Practice series (#12), February 11, 2004, p. 2

² "Overview of U.S. Freight Railroads", Association of American Railroads, January 2007. p. 7 The U.S. Environmental Protection Agency estimates that for every ton-mile, a typical truck emits roughly three times more nitrogen oxides and particulates than a locomotive."

³ "Coastal Sprawl: The effects of Urban Design on Aquatic Ecosystems in the United States", by Dana Beach, prepared for the Pew Oceans

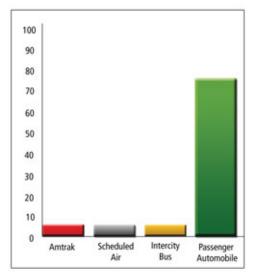
⁴ Ibid., p. 7

⁵ "Table 4-48: Areas in Nonattainment of National Ambient Air Quality Standards for Criteria Pollutants," National Transportation Statistics, U.S. Department of Transportation, Bureau of Transportation Statistics, www.bts.gov/publications/national_transportation_statistics, citing U.S. EPA figures.

^{6 &}quot;Transportation and the Environment", Surface Transportation Policy Project, undated fact sheet, downloaded March 12, 2007, www.transact.org/library/facthseets/environment.asp

6. Safety

- Almost 95 percent of transportation fatalities are highway-related.¹
- Rail transit passengers are 40 times less likely to be involved in a fatal accident and 20 times less likely to be involved in an accident that results in an injury than automobile passengers.²
- The vast majority of "railroad" fatalities occur at highway-rail grade crossings or when people are illegally walking, driving, or otherwise on (i.e., biking, snowmobiling, playing) railroad tracks, bridges, and rights of way.³ Three out of every four commuter railroad fatalities are trespassers,⁴ and that cause so overwhelms other causes that the Federal Transit Administration has listed reduction of collisions with other vehicles and with trespassers as its top two priorities for rail transit safety.⁵



Passenger Fatalities Per 10 Billion Passenger Miles, 1994-2003.⁶ A passenger mile is one passenger traveling one mile.

- Even in the arena in which railroads have the least control accidents at highway-rail grade crossings due to cars crossing in front of approaching trains remarkable safety improvements have been achieved. In 1972, there were more than 12,000 such accidents nationwide; 34 years later, despite population growth and skyrocketing growth in automobile miles traveled, there were fewer than 3,000 highway-grade crossing accidents.⁷
- By removing cars and trucks from highways, railroads are diverting traffic to a safer mode. Polls of Amtrak customers indicate that if the national railroad disappeared, more than half of the train riders would shift to the highways more than 12 million people each year. A single intermodal freight train can take up to 280 trucks or 1,100 cars off of the highway.⁸ Without rail as an option, freight shippers would have to add 50 million additional trucks on the roadways.⁹

¹ "Transportation Statistics Annual Report", U.S. Department of Transportation, Research and Innovative Technology Administration. Bureau of Transportation Statistics (Nov. 2005), p. 7.

² "State Safety Oversight (SSO) Program Annual Report for 2005," U.S. Department of Transportation, Federal Transit Administration, Office of Safety and Security (Oct. 2006), p. 9.

³ Operation Lifesaver Inc. statistics, which are based on FRA data. Downloaded Mar. 18, 2007. http://www.oli.org/statistics/statistics_overview.htm

⁴ "Commuter Rail Safety Study" prepared by the U.S. Department of Transportation, Federal Transit Administration, Office of Safety and Security (Nov. 2006). p. 20.

⁵ "State Safety Oversight (SSO) Program Annual Report for 2005", U.S. Department of Transportation, Federal Transit Administration, Office of Safety and Security (Oct. 2006). p. 14.

⁶ Statistics compiled from Amtrak and from <u>Injury Facts</u>, National Safety Council. Passenger deaths per 10 billion passenger miles, 1994-2003. Amtrak - 2.94, Intercity bus - 2.28, Scheduled airlines - 2.52. Passenger autos - 84.15.

⁷ Operation Lifesaver Inc. statistics, based on FRA data. Downloaded March 18, 2007.

http://www.oli.org/statistics/statistics_overview.htm

⁸ "Overview of U.S. Freight Railroads", Association of American Railroads, January 2007. p. 6.

^{9 &}quot;State of Nation's Intercity Rail", Surface Transportation Policy Project, Decoding Transportation Policy & Practice #12 (Feb. 11, 2004).

7. International Comparisons

- The European Union has invested billions of euros in an "ambitious network" of highways, bridges, tunnels, ports and rail lines. Included among these are the \$50 billion Chunnel between England and France and a network of high speed rail lines that connect the entire continent.¹ In addition, European railroads own power generation plants or have access to reduced-rate hydroelectric or nuclear power, they benefit from policies that encourage passenger rail patronage, and they benefit from alignments they do not share with slower moving freights.
- Describing how Spain has blossomed from an "economic minnow" 25 years ago to the world's ninth-largest economy, the <u>Wall Street Journal</u> credited a "building bonanza," which has left the country "crisscrossed" by new railroads.²
- Premier Wen Jiabao announced a campaign to upgrade China's rail system to improve links throughout the country, a plan that calls for the government to quadruple its spending on the railroad to nearly \$200 billion by 2010.³ China is also planning to build more than 7,500 miles of high-speed rail lines at a cost of between \$210 billion and \$310 billion.⁴
- France already spends twenty times more per capita on rail than the U.S. government does, and is planning a \$7 billion expansion of its TGV line.⁵
- Rail in Japan benefits from governmental roles financing infrastructure improvements and off-setting loses on rural lines federal contributions that have continued well after privatization of the railroads. In addition, the national government has proposed an ambitious high-speed rail expansion program that will invest \$30 billion over the next ten years, financed by both the government and from revenues currently generated by high-speed lines.⁶



Photo courtesy of Japan Railways

Most American railroads were built on curving terrain that followed the historical settlement
patterns of the nation, with passenger and freight trains sharing tracks. This requires American
passenger trains to adapt to the limitations of existing infrastructure that in most cases is used
primarily by freight trains. In contrast, Asian and European railroads, many of which were
built or rebuilt in the last half century, have been able to develop infrastructure used primarily

¹ "Transportation: Invest in our Future", American Association of State Highway and Transportation Officials (Feb. 2007),. p. 28, citing The United States of Europe by T.R. Reid.

² "Solid Foundation Braces Spain" by Keith Johnson. <u>Wall Street Journal</u> (Jan. 31, 2007). More information on Spain's efforts is at www.railway-technology.com/projects/spain/

³ "China Expands Rail System in Effort to narrow Prosperity Gap," Bruce Stanley, Wall Street Journal (March 20, 2007).

⁴ "French train breaks rail speed record," Associated press on MSNBC.com (April 3, 2007).

⁵ "A Unified Northeast Corridor; Dream, Necessity, or Both?" Neal Peirce in APTA's Passenger Transport (March 12, 2007), p. 2, quoting former Governor Michael Dukakis for the per capita statistic and Chairman Jim Oberstar for the TGV budget.

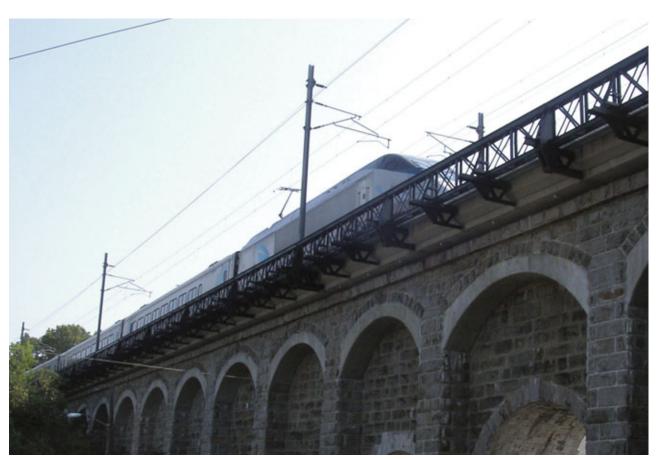
⁶ "Passenger rail privatization: A lesson from Japan," Robert Letteney, The Hill (April 7, 2005).

or exclusively by passenger trains. Freed from the need to accommodate slower and heavier freight trains, these passenger rail lines can operate at much higher speeds with better comfort for passengers and greater reliability.

- According to the <u>Wall Street Journal</u>, it would cost tens of billions of dollars today to build just one single European style dedicated passenger rail route in the United States.¹
- Because speed is a factor of both equipment and track, Amtrak has calculated that shaving even ten minutes from Amtrak's fastest route that between Washington, DC and New York -- would

According to the <u>Wall Street</u>
<u>Journal</u>, it would cost tens of billions of dollars to build a single
European-style high-speed dedicated passenger rail route in the
United States today.

- cost approximately \$600 million in infrastructure and equipment improvements. Shaving the next ten minutes from the schedule would require \$10 billion, or \$1 billion per minute saved.
- Amtrak's electric catenary includes components built in the 1920s, and the railroad runs on numerous bridges built before 1920 (two of which were built a century ago). It was not until 2006 that Amtrak was able to replace 1930s-era transmission cables along the tunnels under the city of Baltimore.



Amtrak high-speed Acela train crossing Canton viaduct in Massachusetts, built in 1835.

 $^{^{\}rm 1}$ "Amtrak is Switching Tracks" by Dan Machalba, <u>Wall Street Journal</u> (Nov. 3, 2006).

8. Federal Investment

- Every transportation mode receives financial support from the federal government. Such support comes from federal, state or local grants derived from user fees or the general fund, direct payments to corporations and individuals, tax subsidies, and/or credits.
- Commercial airlines received billions of dollars in direct payments to offset losses after September 11th, are paid more than \$100 million per year for the Essential Air Service (EAS) program (direct payments of up to \$200 per passenger to maintain money-losing service to under-served rural communities), billions of taxpayer dollars for infrastructure, and the support of tens of thousands of federal employees who run and provide security for the nation's aviation system. Among these costs: FAA issues aircraft registrations, pilot medical and airline certifications and pilot licenses for free or reduced fees, at a cost that the Congressional Budget Office and GAO have calculated to be at least \$5 million per year. Moreover, as a result of recent airline bankruptcies, airlines have shifted a large portion of their pension obligations to the federal government's Pension Benefit Guaranty Corporation.¹
- Airlines received per-passenger EAS subsidies in 2006 for 21 cities served by Amtrak: Altoona (PA), Burlington (IA), Deming (NM), Devils Lake (ND), Dodge City (KS), Garden City (KS), Glasgow (MT), Havre (MT), Jefferson City (MO), Johnstown (PA), Kingman (AZ), Lancaster (PA), Laurel (MS), McCook (NE), Merced (CA), Plattsburgh (NY), Quincy (IL), Rutland (VT), Staunton (VA), White Sulphur Springs (WV), and Wolf Point (MT). In March 2007, a one-way Kansas City-Dodge City airplane ticket cost \$146, of which the airline received \$50 (nearly the entire cost of the equivalent Amtrak ticket) in direct federal EAS payment.²
- Hundreds of smaller airports, "running the gamut from remote rural air strips serving cropduster and hobbyists, to 'executive' airports serving corporate jets and resort destinations," have had access to billions of dollars in federal funds for airport enhancements, according to the Associated Press.3
- A new regional airport intended to ease congestion at Los Angeles area airports was only able to attract a major carrier when it offered to subsidize carrier losses and pay for advertising and marketing. The Los Angeles World Airports authority is expected to spend at least \$300 for every passenger using the Palmdale airport in its first year.4

The Los Angeles airport authority expects to subsidize airlines to the tune of \$300 per passenger in the first year of Palmdale airport's operation.

¹ Congressional Budget Office Budget Options, February 2005, p. 137; GAO-07-1163T, page 15; Wall Street Journal (July 31, 2006); New York Times (June 21, 2007).

² GAO-07-793T, p. 7.

³ "Some U.S. Passenger Taxes Subsidize Smaller Airports," by the Associated Press as reported in the Wall Street Journal (April 16, 2007). "A chunk of the federal taxes and fees paid by airline passengers are awarded to small airports used mainly by private pilots and globetrotting corporate executives. Some of these 'general aviation' facilities used the federal dollars – more than \$7 billion over the past decade - for enhancements such as longer runways and passenger terminals aimed at luring traffic, an Associated Press review has found."

⁴ "An L.A. Airport Attempts to Take Off," Scott McCartney, Wall Street Journal (March 13, 2007).

- Ports and waterways benefit from tens of billions of taxpayer dollars to maintain infrastructure, as well as law enforcement and life safety for commercial and recreational boaters. Included among these are \$4.6 billion in 2007 for the Army Corps of Engineers to maintain ports and waterways for commercial and recreational boat users, and law enforcement/life safety support provided for passenger ferry systems and cruise lines at a cost of more than \$8 billion to the federal government.¹
- The Department of Homeland Security spent about \$7.13 per passenger on aviation security (a total of \$5.5 billion), while it spent 30 cents per passenger for intercity passenger rail security. Had DHS made a per-passenger commitment to Amtrak on the level of air passengers, Amtrak would have received \$171 million instead of \$7.2 million in 2006.²

On a per-passenger basis, Amtrak received 4% of the support the Department of Homeland Security invested in airlines in 2006.

- Highways accounted for 61 percent of total government spending on transportation in 2001, and for 73 percent of infrastructure investment.³
- Current individual highway projects costing as much or more than Amtrak's annual appropriations include: Replacement of the Woodrow Wilson bridge project on Interstate 95 south of Washing ton, D.C. - \$2.4 billion; Marquette Interchange in Wisconsin - \$1.4

billion; Ohio River Bridges connecting Indiana and Kentucky - \$3.9 billion; Rebuild of the Oakland-San Francisco Bay Bridge after the 2002 earthquake - \$1 billion; Foothill Freeway (California) - \$1.1 billion.⁴

- The CATO Institute notes that on non-toll roads, diesel powered vehicles (which consume half the fuel used by regular cars and therefore pay less into the gas tax) and heavy vehicles do not pay for their additional wear and tear that imposes additional costs on road maintenance.⁵
- Automakers are asking the federal government to spend \$500 million over the next five years to subsidize the development of advanced batteries that could power electric vehicles. According to the <u>Wall Street Journal</u>, they have "rejected suggestions their companies were looking for government to help the kind of development efforts the industry should fund on its own."⁶
- The national rail network is approaching capacity on many routes. From 1980 through 2005, track-miles among the Class I freight railroads decreased 39% but ton-miles increased by 85%

¹ President of the United States' FY08 Budget.

² PL 109-90 and GAO-07-459T.

³ "Transportation Statistics Annual Report", U.S. Department of Transportation, Research and Innovative Technology Administration. Bureau of Transportation Statistics, November 2005, p. 12.

⁴ All figures are from "A new vision for the future Interstate system: Changing Function and Funding" by Dr. Anthony Kane, Director of Engineering and Technical Services for the American Association of State Highway and Transportation Officials (Jan. 22, 2007), slide 9, except for the Woodrow Wilson Bridge, which comes from "Transportation: Invest in our Future," American Association of State Highway and Transportation Officials, February 2007. p. 31. Officials (Feb. 2007), p. 84.

⁵ "Liberating the Roads: Reforming U.S. Highway Policy" by Gabriel Roth, CATO Institute Policy Analysis, (March 17, 2005), p. 3.

⁶ "Big Three Seek Battery Subsidies" by Neal Boudette and John Stoll, Wall Street Journal, (Jan. 9, 2007).

and is expected to keep growing. In other words, compared to years past, there now is more traffic competing for space on fewer miles of track.¹

• Even as the Class I railroads invest twice as much today as they invested a decade ago in capacity expansions, the American Association of State Highway and Transportation Officials (AASHTO) has concluded that "the railroads continue to be unable to finance enough expansion from private sources to add to the capacity needed." AASHTO estimates that \$2.75 billion in public support will be needed each year, in order to supplement \$9.25 billion in private funding each year.² According to the Wall Street Journal, this is true for the smaller railroads as well: "Short lines are a viable busi-



Alameda Corridor

ness, but maintaining and upgrading track lines is expensive and that led the industry to look to the government for help."³

- The need for capacity improvements is spurring efforts to expand infrastructure using government dollars through public-private partnerships such as that in Chicago, where a project to reduce freight rail congestion is being undertaken with \$100 million from the private railroads and \$230 million in government funds.⁴
- Under legislation enacted in 2004 and due to expire in 2008, short line railroads receive a tax benefit estimated by Congress to be worth \$100 million per year for expenditures on track improvements.⁵
- Mass transit systems receive tens of billions of dollars of highway tax receipts and general funds, as well as tens of millions of dollars in subsidies to federal employees who use mass transit. Federal employees are eligible for \$1,320 in annual transit subsidies or \$2,400 in parking subsidies. These subsidies can not be used for intercity rail tickets, including on the heavily traveled commuter corridors in the Northeast, Chicago area, or California.

"Only 4 percent of federal transportation dollars are dedicated to rail programs, yet rail provides incredible potential to carry millions of passengers on energy-efficient and time-competitive services in corridors of national significance."

Wisconsin Secretary of Transportation

Frank Busalacchi

revenues, increased by 52.2 percent between 1997 and 2004, from \$26 billion to \$39.5 billion – an increase of 36.3 percent in constant dollars. This period also saw investments by state and local government. While federal dollars increased from \$4.7 billion to \$7 billion (a 31.3 percent increase in constant dollar terms), state and local funding increased from \$12.7 billion to \$21.5 billion – a 50.9 percent increase in constant dollar terms.

^{1 &}quot;Railroad Facts", 2006 edition, Association of American Railroads (Nov. 2006), p. 27 (ton-miles) and p. 45 (track-miles).

² "Transportation: Invest in our Future", American Association of State Highway and Transportation Officials (February 2007), p. 47.

³ "Railroads Seek Tax Aid" by Robert Guy Matthews, <u>Wall Street Journal</u> (January 20, 2007).

⁴ "Transportation: Invest in our Future", American Association of State Highway and Transportation Officials (February 2007), p. 86. \$100 million from railroads, \$100 million in SAFETEA-LU funds, \$100 million from the State of Illinois, and \$30 million from the City of Chicago. ⁵ "Railroads Seek Tax Aid" by Robert Guy Matthews, <u>Wall Street Journal</u>. (January 20, 2007).

^{6 &}quot;2006 Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance", Report to Congress prepared by the U.S. Department of Transportation, Federal Highway Administration, and Federal Transit Administration (page xii of the Executive Summary).

- Amtrak's revenue per passenger mile increased 85 percent since 1990,¹ which helped lead to a cost recovery ratio of 70 percent in 2006. Amtrak consistently leads passenger railroads in fare box recovery (the percentage of operating costs that are recovered by passenger fares).
- Amtrak was begun when freight railroads cited insupportable losses incurred by passenger rail
 operations.
- Private railroad operators with an expressed interest in taking over Amtrak operations have said they are concerned about their ability to comply with federal regulatory safety requirements, as well as their ability to attract trained and experienced railroad employees.² When Bombardier took over Metrolink maintenance services in California, difficulties in retaining staff contributed to a lengthy and "turbulent" transition, according to Metrolink officials.³
- Freight railroads, nearly all of whose revenues are generated by freight,⁴ have balked at returning to passenger operations because of concerns about losing money on passenger service, limited capacity of rail lines to adequately serve both freight and passenger service, and legal risk and liability issues.⁵
- In 1970, the rail industry employed 640,000 people, of whom 566,000 were employed by the Class I railroads. By 2005, total employment in the rail industry had dropped by 60 percent to 233,000 people and Class I railroads employed only 162,000 a 70 percent drop in employment. Amtrak's 19,000 employees constitute almost 10 percent of all railroad employees in the United States.
- It's hard to make a profit in any type of passenger transportation. Airlines' long history of financial problems prompted Warren Buffet to quip that capitalism would have been better off if the Wright Brothers had not taken off. Virgin Atlantic owner Richard Branson has said that the best way to become a millionaire is "start as a billionaire, and then buy an airline." The numerous

¹ Calculated from figures on "Table 3-16: Average Passenger Revenue per Passenger-Mile," National Transportation Statistics, U.S. Department of Transportation, Bureau of Transportation Statistics, www.bts.gov/publications/national_transportation_statistics. The Table assigns revenues a value based on 1990 as a baseline (1990 = 100). For 2004, Amtrak was assigned a value of 185.

² "Commuter Rail Issues Should be Considered in Debate over Amtrak", GAO (April 2006), p. 36-38.

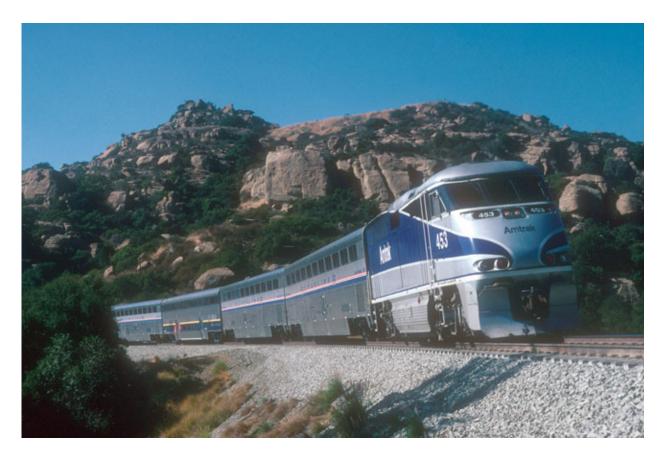
³ <u>Ibid.</u>, GAO (April 2006) p. 38.

⁴ "Nearly all of our revenues are generated by freight," Mark Davis, spokesman for Union Pacific, quoted in "Domino effect travels down railway," by Patrick May of the <u>San Jose Mercury News</u>, as reported in the <u>Contra Costa Times</u>, Monday (February 26, 2007).

⁵ "Commuter Rail Issues Should be Considered in Debate over Amtrak", GAO (April 2006), p. 136-37.

^{6 &}quot;JetBlue: Now Just Another Airline in a Lousy Business," Alan Murray. Wall Street Journal, Wednesday (February 21, 2007).

airlines emerging from bankruptcy over the last few years have permitted airlines to defer or avoid repayment of billions of dollars of debt obligations and shift pension obligations to the federal government. Between 2001 and 2006, the industry posted cumulative net losses of \$37.6 billion.¹



Amtrak *Surfliner* train descends scenic Santa Susana Pass north of Chatsworth, California. The *Surfliner* carried 2.6 million passengers in FY06 making it the second busiest corridor in the United States.

¹ "FAA Aerospace Forecasts: Fiscal Years 2007-2020," U.S. Department of Transportation, Federal Aviation Administration, p. 17.





Background: Amtrak

- During FY 2006, Amtrak boarded more than 24.3 million passengers, representing the fourth straight fiscal year of record ridership when comparing the same routes. An average of more than 67,000 passengers ride on up to 300 Amtrak trains per day.
- Amtrak operates a nationwide rail network, serving more than 500 destinations in 46 states on 21,000 miles of routes, with nearly 19,000 employees.
- In FY 2006, Amtrak earned approximately \$2.05 billion in revenue and incurred approximately \$3.07 billion in expenses, covering 67% of its operating costs.
- An average of nearly 800,000 people every weekday depend on commuter rail services that use Amtrak-owned infrastructure, dispatching, shared operations, or that ride commuter trains operated by Amtrak under contracts with local or regional agencies.
- Amtrak's Northeast Corridor is the busiest railroad in North America, with more than 1,700 trains operating over some portion of the Washington-Boston route each day.
- If included among U.S. airlines, Amtrak would rank 8th (2005) in the number of passengers served, with a market share of nearly 5%. On average, there are nearly twice as many passengers on an Amtrak train than there are on a domestic airline flight.
- The Boston-New York-Washington portion of the Northeast Corridor carried 9,431,279 passengers in FY 2006 on Acela Express, Regional Service or other trains. Two other corridors had ridership that topped one million or more: Pacific Surfliner Service (San Diego-Los Angeles-San Luis Obispo, 2,657,773) and Capitol Corridor Service (San Jose-Oakland-Sacramento-Auburn, 1,263,504).
- Amtrak-owned equipment includes 1,437 railroad passenger cars, 436 locomotives, 80 Auto Train vehicle carriers and 74 baggage cars.

- Amtrak-owned property includes 363 miles of the 456-mile Northeast Corridor connecting Washington, Philadelphia, New York and Boston, the busiest passenger line in the country, with trains regularly reaching speeds of 125-150 mph; a 60.5-mile track segment from New Haven, Conn., to Springfield, Mass.; 104 miles of up to 110 mph track in Pennsylvania between Philadelphia and Harrisburg, the first new high-speed corridor in the 21st century; a 97-mile segment of 95 mph (soon to be 110 mph) track in Michigan, the first high-speed positive train control system in revenue service.
- The Northeast Corridor is one of the most complex and valuable railroad operations in the world where high speed trains share right of way with heavy freight and commuter operations.
- Amtrak has 17 tunnels consisting of 29.7 miles of track and 1,186 bridges consisting of 42.5 miles of track.
- Amtrak owns three heavy maintenance facilities in Wilmington and Bear, Del., and Beech Grove, Ind., as well as other maintenance facilities in Washington, D.C.; New York City, Rensselaer and Niagara Falls, N.Y.; Boston; Hialeah, Fla.; Chicago; New Orleans; Los Angeles; Oakland; and Seattle.
- Seventy percent of the miles traveled by Amtrak trains are on tracks owned by other railroads. Known as "host railroads," they range from large publicly traded companies based in the U.S. or Canada, to state and local government agencies and small businesses.

The six largest host railroads and associated annual train miles for Amtrak trains are:

- BNSF Railway, 6.5 million train miles
- CSX Transportation, 5.54 million train miles
- Union Pacific Railroad, 5.43 million train miles
- Norfolk Southern Railway, 2.27 million train miles
- Metro North Railroad, 1.30 million train miles
- CN railway, .98 million train miles
- Fourteen states contract with Amtrak for the operation of trains that supplement the national Amtrak network by extending the reach of passenger rail services or providing additional frequencies on Amtrak routes.



