High Flyers

How Private Jet Travel Is Straining the System, Warming the Planet, and Costing You Money



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The Working Group on Extreme Inequality (extremeinequality.org) is coordinated by the Institute for Policy Studies and was formed to promote public policies to reduce the concentration of wealth and power – and promote investments in education, housing, and asset-building that broaden prosperity.

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Summary

The private jet is one of the most powerful symbols of extreme inequality. While flying has become more costly, uncomfortable and degrading for the general public, the growing class of the ultra-rich are flying high in the comfort of their own aircraft. This sharp division is not merely a symbolic matter. The private jet boom imposes real costs on taxpayers, shareholders, and other air travelers, while undermining our environment, social cohesion, and public security.

1. Private jet travel has expanded dramatically.

- The number of private jets in active service in the United States has increased tenfold since 1970, from about 1,000 to over 10,000 in 2006. This number is projected to double again by 2017.
- During the same period, commercial aviation increased by only a bit more than 150 percent. Until 1997, private jet expansion paralleled the increase in commercial aviation. But in the last decade, private jet aircraft has skyrocketed compared to commercial air travel.
- Between 2003 and 2007, worldwide annual sales of private jets more than doubled to \$19.4 billion.

2. Private jets impose costs and burdens on the rest of us.

A. Costs to the Environment

- An hour of flying in a private jet burns as much fuel as an *entire year* of driving, according to the Helium Report, an online guide to luxury vacations.
- Four passengers flying in a private Cessna Citation X from Los Angeles to New York will each emit 8,892 pounds of CO₂ into the atmosphere. This is more than five times as much CO₂ emitted by a commercial air passenger making the same trip.
- Compared to other forms of transport, those four private jet passengers would burn 26 times more
 carbon than a group of four making the same trip in a Toyota Prius, or six times more than taking
 the Amtrak from LA to New York.

B. Costs to Taxpayers

- Corporate executives who fly private jets on vacation or for other personal business get a privatecharter level of service but pay personal income taxes based on imputed income that is based on much lower commercial airfares.
- In 2008, the private jet lobby won special tax breaks for purchasers of new aircraft. A measure to allow "bonus depreciation" will allow ultra-rich owners of private business jets to take much larger tax deductions in the first year after their purchase. Although the measure was adopted as part of the 2008 Economic Stimulus Act, experts predict it will be ineffective as an anti-recession strategy.

C. Costs to Corporate Stakeholders

• Chief executives of large U.S. corporations often bill their companies for hundreds of thousands of dollars per year for the use of a private jet. In 2007, the CEO with the largest jet perk was Lewis Campbell of Textron, with \$494,700 in trips. The runners-up were by IBM CEO Samuel Palmisano with \$406,200, and Shaw Group CEO James Bernhard, Jr., with \$405,600.

• Shareholders are also often asked to pick up the tab for the personal jet travel of executives' family members. Angelo Mozilo, the CEO of Countrywide Financial, for example, threatened to quit if his board of directors forced his wife to ride commercial.

D. Costs to Commercial Air Travelers

- Private jet travelers don't pay their fair share of the costs associated with air traffic safety. A commercial flight from New York's LaGuardia airport to Miami International Airport would pay \$2,015 in taxes. A corporate-owned Gulfstream flying from Teterboro airport outside New York City to Miami would incur the same air traffic control costs, but pay only \$236.
- According to the FAA, commercial aviation pays 95 percent of total air traffic control costs, even though it uses only 73 percent of the FAA's services. Meanwhile, general aviation the segment of the industry that includes corporate jets, charters, air taxis, and recreational pilots uses 16 percent of the services, but pays just three percent of the cost.
- Of the \$7 billion in federal funds spent on airport improvement between 2005 and 2007, a substantial portion \$2.2 billion went to small remote airports that primarily serve private jets. Among them are elite destinations such as California's Napa Valley Airport, Aspen's Sardy Field, and the Regional Airport in Pittsfield, Massachusetts that serves Tanglewood concert-goers.
- Private jets may be a factor in contributing to air traffic congestion, but the limited studies to date
 suggest that they are not the leading cause. Crowding of commercial flights on runways and the increased use of smaller commercial regional jets are likely more serious problems. However, more
 research needs to be done, particularly on the impact of crowding in the New York City area's airspace and how that ripples into national delays.

E. Costs to Public Security and Social Cohesion

- The Department of Homeland Security has identified the proliferation of private jets and lax controls over these aircraft as a security risk. And although new regulations are reportedly in the works, they have not yet been initiated seven years after 9/11.
- As the super-rich and wealthy "opt-out" of the public commercial air travel system, they withdraw their considerable political clout from making sure that the system works well for everyone.

3. Congress and shareholders should act to restore fairness to the system and limit the burdens of private jet travel on the environment, taxpayers, shareholders, and other travelers.

- Private jet users should pay their fair share of the National Airspace System with a combination of higher general aviation fuel taxes and user fees.
- Congress should institute an excise or "luxury" tax on purchase and operation of private jets and a progressive consumption tax that includes private jet travel.
- Congress should institute a price on carbon to accurately charge private jet users for the environmental damage they cause. This could take the form of a carbon tax, a cap and auction/dividend system, or a cap-and-lease system.
- Funds should be invested in transportation infrastructure that is environmentally sustainable, creates good jobs, reduces the need for air travel, relieves air traffic congestion, and serves all types of travelers. There are a number of proposals for high-speed rail, such as the Midwest Regional Rail System described later in this report, that would be an alternative to short-haul air travel and a better investment than continuing to subsidize private jet travel.

- Private jet travelers should be subject to many of the same reasonable security screening provisions as commercial travelers.
- Shareholders should create and enforce shareholder limits on corporate jet use.
- 4. Driving the expansion of private jets are extreme economic inequalities in the U.S. economy. The concentration of wealth and power must be addressed directly through public policies that tax the top and encourage investments that create a healthy economy with equality of opportunity.
 - In the last twenty years, the concentration of income and wealth among the wealthiest one-tenth of
 one percent, those most likely to use private jets, has dramatically increased.
 - The Working Group on Extreme Inequality was formed to promote public policies to reduce the concentration of wealth and power and promote investments in education, housing, and asset-building that broaden prosperity. Our proposals are discussed at www.extremeinequality.org.

INVOICE -	< ==<		
FROM: PRIVATE JET TRAVELERS	TO: THE REST OF US		
ENVIRONMENT: GLOBAL WARMING			
TAXPAYERS: TAX BREAKS ON AIRCRAFT PURCHASES			
SHAREHOLDERS: EXECUTIVE PERKS			
AIRLINE PASSENGERS: AIR TRAFFIC AND AIRPORT COSTS			
PUBLIC: SECURITY RISKS AND SOCIAL DIVISIONS			
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Introduction: A Tale of Two Air Travelers

The plight of the ordinary U.S. commercial traveler has become unquestionably grimmer over the last decade. The indignities of air travel include longer lines, going shoeless and beltless through multiple security checks, shrinking seats and evaporating leg room, lost baggage, and (if you're lucky) pretzel cuisine. The year 2007 was the second-worst in U.S. history for airline delays – and airline abuses have spawned web sites, blogs and new consumer groups. Meanwhile, airlines are seeking new ways to squeeze their beleaguered customers with added fees, limited flexibility for changing tickets, and charging for food and luggage service.

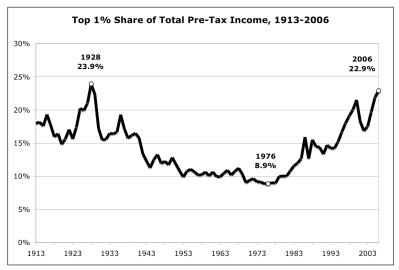
Private jet travel places an enormous burden on the rest of us.

Most travelers are unaware of the largely invisible world of private jets and its special privileges. High flyers drive to small terminals, usually far away from the bustle of commercial passenger hubs. These terminals may be located at major airports, but have separate entrances and parking areas. Often, drivers are permitted to bring VIP passengers right up to the plane, where their unscreened luggage can be loaded directly into the cargo hold. Passengers greet their pilots and flight attendants and board the aircraft with their pocket knives and water bottles. Private flyers don't have to bother with little plastic bags with three-ounce containers of shampoo or strangers rifling through their undergarments. No one dumps their personal items and water bottles into a trash bin or frisks their bodies. A weather delay doesn't lead to compounding cancellations or passengers marooned for days. Flights might be pushed to a later window, but are rarely cancelled.

Does it matter? After all, private jet flyers pay a steep premium for their privileges. Most people would love to avoid the hassle of commercial travel and bask in the luxury of private jet travel. But there are real costs to ordinary citizens and other travelers as a result of the

growth in private jet travel. As this report shows, the environmental costs of private jets are enormous. The carbon footprint per passenger of private jets is several times greater than flying on a commercial aircraft. Ordinary taxpayers and commercial air travelers subsidize private jets because of an outdated fee system that enables private jet travelers to pay lower taxes and fees. In sum, private jet travel places an enormous burden on the rest of us.

The rapid expansion in private jet travel has paralleled the growing inequality of income and wealth. As the concentration of wealth has increased, so has the frequency of elite private jet use. In the last twenty years, most of the growth in income and assets has flowed up to the



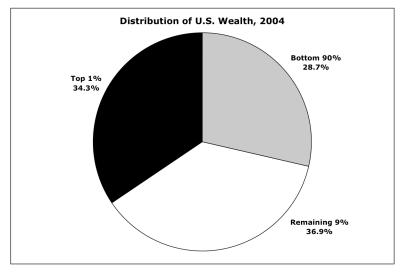
Source: Analysis of income tax data in Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913 - 1998," *Quarterly Journal of Economics*, 118(1), 2003. Updated to 2006 at http://emlab.berkeley.edu/users/saez/.

wealthiest one percent of households – and within that, the top one-tenth of one percent.

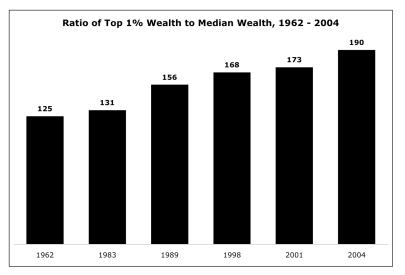
For example, the top one percent of households received 22.9 percent of all pre-tax income in 2006, more than double their share in the 1970s. This represents the greatest concentration of income since 1928, when 23.9 percent of all income went to the richest one percent.¹

Wealth inequality is even more pronounced than income inequality. In 2004, the latest year for which figures are available, the richest one percent of U.S. households owned 34.3 percent of the nation's private wealth, more than the combined wealth of the bottom 90 percent.² Further, this wealth inequality has worsened over time. In 1962, the wealth of the richest one percent of U.S. households was roughly 125 times greater than that of the typical household. By 2004, it was 190 times greater.³

The expansion of private jet travel is symptomatic of these inequalities. It is important that we do a proper accounting of the social, environmental and taxpayer costs of private jet travel – and ensure that high flyers pay their fair share.



Source: Analysis of Federal Reserve Survey of Consumer Finances data in Economic Policy Institute, *The State of Working America* 2006-07 (Cornell: 2007), p. 251, Table 5.1.



Source: Analysis of Federal Reserve Survey of Consumer Finances data in Economic Policy Institute, The State of Working America 2006-07 (Cornell: 2007), p. 256, Figure 5B.

1. Private Jet Bonanza

A. Boomtown Growth in Private Jets

As the New York Times observed in 2007, "Once a largely American niche item, business jets have ridden an updraft of wealth creation at the very top to become the fastest-growing segment of the global aerospace industry." 4

Combine that concentration of wealth with time-consuming post-9/11 airline security measures, plus crowded runways and increased delays, and you have the makings of a boomtown market for private jets. Until about 1997, the number of private jets in service in the United States closely tracked the number of commercial jets. Beginning with the tech boom of the late 1990s, however, the private jet market has surged ahead.

The bursting of the tech bubble in 2000 and the 2001 recession briefly slowed private jet sales, but the industry proved resilient. Annual worldwide sales of private jets have more than doubled since 2003, to \$19.4 billion in 2007. The number of jets sold increased 28 percent between 2006 and 2007 alone,⁵ topping 1,000 deliveries for the first time in 2007. In the first quarter of 2008, deliveries were up 41 percent over the same quarter in 2007.

Overall, the number of private jets in the U.S. has increased tenfold since 1970, when they

numbered less than 1,000, to more than 10,000 in active service today.⁶ In the future, the FAA predicts that the number of private jets operating in the U.S. will more than double, to 21,000, by 2017.⁷

12,000

10.000

8,000

6,000

4,000

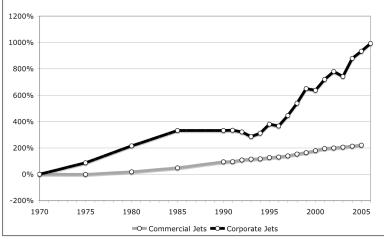
2,000

1975

1980

1985

■O= Commercial Jets ■O= Corporate Jets % Change in Number of U.S. Active Aircraft Since 1970 1200% 1000% 800% 600% 400% 200% -200%



1990

1995

2000

2005

Number of U.S. Active Aircraft, 1970-2006

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Statistics, Chapter I, Section B, Table I-13.

Private jets are in such high demand right now that used planes often sell for more than the price at which they were bought – since the waiting time for a new plane is often several years. Vref, the standard price guide for the private jet industry, released data showing that new planes bought in 2006 sold on the used market for an average of 22 percent higher than their purchase price. The extraordinary demand has attracted speculators who "flip" used planes as if they were tract houses during the real estate boom, and it has even generated a market where places on waiting lists for new private jets are themselves valuable

investments. Speculators are now putting down deposits on planes and then turning around and selling that place in line to another buyer who can't wait the typical three to five years to take delivery.⁹

The growth of the private jet fleet has boosted the charter business and spawned entirely new industries, such as fractional jet ownership, a time-share arrangement where buyers share the use of a single private jet with up to 31 others. Pioneered in the mid-1980s by industry leader NetJets, fractional ownership offers private jet luxury and convenience to a broader market of travelers for whom purchasing and maintaining a \$25 million plane of their own is out of reach.

As for the future, the private jet market is poised to expand at both the high and low ends. At the high end, Texas billionaire Robert Bass is preparing to build the world's first supersonic business jet, the Aerion, which will retail for \$80 million. In November 2007, Sheikh Rashid Bin Humaid Al Nuaimi of the United Arab Emirates became the first person to agree to buy an Aerion. In March 2008, five more Aerions were sold to buyers in India. With actual manufacturing yet to begin, the buyers expect to take delivery of their planes in 2014.¹⁰

At the other end of the market, the recent development of diminutive, relatively affordable, four-six seat "Very Light Jets" (VLJs) has potential as a luxury leisure purchase in the same price neighborhood as a yacht or a vacation home. More importantly, there's a good chance that VLJs will spawn a continental air taxi industry that could fly passengers into the smallest of airports at a price not that much higher than a full-fare ticket on a commercial airliner. In September 2006, the FAA approved the first VLJs: the Eclipse 500 and the Cessna Citation Mustang. The Eclipse, a small, six-seat plane selling for \$1.5 million, already has a list of 2,500 people lined up to buy it. 11 Currently, the wait for one is 11 years. 12

On the other hand, there are indications that the current uncertainty in financial markets has the VLJ industry concerned for the immediate future. In May 2008, DayJet, a new air taxi firm that began operating Eclipse 500s in Florida in 2007, was forced to put off expansion plans and lay off 40 percent of its workforce after the freeze in credit markets prevented it from raising the \$40 million it needed to expand. And in March 2008, as Wall Street was gripped by crisis, Pogo Jet, a startup air taxi service that planned to begin ferrying passengers in Eclipses in the spring of 2009, had to postpone a planned IPO.¹³

B. Not Everyone Can Own One

For flyers who want the convenience, privacy, or status of private jet travel but who can't justify outright ownership, there are several options. First, private jets can be chartered at an hourly rate. Chartering airplanes goes back almost to the Wright Brothers. With the ondemand charter business now dominated by brokers who match passengers with available planes, the market is decentralized and charter rates aren't standard. Each charter is an individual transaction, and the price depends on plane availability, repositioning fees, the number of passengers and the size of the plane requested.

Texas billionaire
Robert Bass is
preparing to build
the world's first
supersonic
business jet, the
Aerion, which will
retail for \$80
million.

What Does It Cost to Fly in a Private Jet?					
Aircraft	Retail Price (millions)	Typical Charter Rate (per hour)	Range (statute miles)	Top Speed (mph)	Capacity
Eclipse 500 VLJ	\$1.5	\$1,350	1,400	425	4
Cessna CJ3	\$6.3	\$2,500	2,158	480	8
Bombardier Learjet 45XR	\$11.2	\$2,500	2,284	535	9
Dassault Falcon 2000EX	\$27.2	\$4,200	4,371	555	8
Gulfstream 550	\$47.7	\$7,500	6,675	572	14
Boeing Business Jet BBJ1	\$52.0	\$12,000	6,100	528	18
Aerion Supersonic SSBJ*	\$80.0	NA	4,600	1,056	12

^{*} Production scheduled for 2014.

Source: Halogen Guides; Douglas MacMillan, "Best Selling Corporate Jets," Business Week, July 2, 2007; company websites.

Another segment of the industry is fractional ownership, pioneered by NetJets, which became a unit of Warren Buffet's Berkshire Hathaway Corp in 1998. Under fractional ownership, a buyer purchases a share of a jet, typically one-eighth or one-sixteenth, which gives him the right to reserve a flight on that plane, or on a similar one, with as little as four hours notice. The hourly charge on a fractional jet is fixed and is usually less than a charter rate for the same aircraft. The fractional owner has the right to sell his share in the plane to someone else, but he must also pay a monthly maintenance and management fee whether or not he uses the plane. According to the 2005 NetJets buying guide, the total cost of a one-eighth interest in a 1995 Hawker 800XP, a popular mid-size jet with a capacity of 14 passengers, was \$1,131,250 for the fractional ownership with \$282,813 of capital cost for five years and another \$2,146,588 in operating costs over five years.

For more infrequent flyers who don't spend the 50 hours per year in the air needed to justify fractional ownership, there are fractional and charter "debit card" products that can be bought in increments as small as 20 hours. The card gives the buyer the right to a certain number of hours flying time on a certain plane, in the case of fractional cards, or on a certain class of jet, in the case of charter cards. According to one card issuer, Blue Star Jets, after making an initial deposit of \$50,000 to \$1,000,000 on a "Sky Card," flight time is charged against the card at a rate of \$1,800 to \$8,500 per hour depending on the size of the aircraft flown.

C. The Private Jet Industry: Who's Who?

Currently the private jet industry is dominated by the "Big 5" manufacturers, three American, one Canadian, and one French. Together, these five firms account for more than 95 percent of the private jet market.

Bombardier Aerospace

A subsidiary of Canadian plane- and train-maker Bombardier Inc., Bombardier Aerospace is known for its Learjet, Challenger, and Global models and leads the private jet industry in terms of dollar value of sales. Between 2004 and 2007, annual shipments of Bombardier business jets increased 75 percent, from 129 to 226. Over the same period, Bombardier business jet billings doubled, rising from \$2.6 billion to \$5.2 billion. Combined with the fact that business jets now account for 26 percent of Bombardier Inc. Stotal revenue, up from 11 percent in 2004, this increase in business jet sales helped swing Bombardier Inc. from an \$85 million loss in 2004 to a \$268 million profit in 2007.

Cessna Aircraft

Cessna Aircraft, a Wichita, Kansas-based firm owned by corporate conglomerate Textron, sells more private jets than any other company. Over the last four years, Cessna's total shipments of its Citation business jets have more than doubled, from 181 in 2004 to 366 in 2007. Over that same time span, Cessna's total billings (which include sales of its turboprop and piston aircraft) have also more than doubled, from \$1.7 billion in 2004 to \$3.9 billion in 2007. Cessna Aircraft accounted for 38 percent of Textron's total revenues of \$13.2 billion, and 53 percent of its parent's profits of \$1.6 billion. ¹⁷

Gulfstream Aerospace

Gulfstream Aerospace, a subsidiary of defense contractor General Dynamics since 1999, sells some of the most expensive jets on the market – such as the 550, which goes for \$47.7 million. Based in Savannah, Georgia, Gulfstream shipped 138 business jets in 2007, up 77 percent from the 78 jets shipped in 2004. Over that same period, Gulfstream's billings rose 60 percent, from \$3 billion to \$4.8 billion, while operating earnings more than doubled, from \$393 million to \$810 million. In its 2007 annual report, General Dynamics credits these successive years of record new-aircraft order activity at Gulfstream as a "primary driver" of the corporate parent's overall cash flow.

Dassault

French aircraft manufacturer Dassault offers six models in its popular line of Falcon business jets, four of which feature three jet engines rather than the standard two. In 2007, Dassault shipped 70 jets, up 11 percent from the 63 it shipped in 2004. Falcon sales also rose 11 percent over the same period, from €2.1 billion in 2004 to €2.3 billion in 2007. In 2007, Falcons accounted for 57 percent of Dassault Aviation's total sales of €4.1 billion, with military aircraft rounding out the total.

Hawker Beechcraft

Previously a division of defense contractor Raytheon, Hawker Beechcraft was sold in a private equity deal to Goldman Sachs and Onex Corp. in 2007. Based in Wichita, Kansas, Hawker Beechcraft makes several versions of the Hawker business jet along with the Beech-

craft Premier IA light jet. The company shipped 162 jets in 2007, up 41 percent from the 115 it shipped in 2004. Over the same period, Hawker Beechcraft's total billings (which include sales of its turboprop and piston aircraft) rose from \$1.4 billion to \$2.3 billion. Considered the weakest of the "Big 5" private jet manufacturers, operating earnings at Hawker Beechcraft declined 17 percent from 2006 to 2007.

2. The Burdens on the Rest of Us

Not so long ago, commercial jet travel was itself mainly the province of the wealthy – the so-called "jet set" who could afford to pay exorbitant fares in exchange for the ability to travel from coast to coast in a few hours rather than a few days. Since that time, of course, air travel has turned into a mass-market product, affordable for the majority of Americans and now as routine (and often as uncomfortable) as a bus trip. As air travel has become more delay-prone, inconvenient, and shabby, more and more people of means have abandoned the crowded concourses and endless security lines for the private jet world.

An hour of flying in a private jet burns as much fuel as an *entire* year of driving.

For the rest of us, does it matter? What impact does the booming private jet industry have on the rest of society? What are the costs to the environment, to taxpayers, to other travelers, to shareholders, and to social cohesion and public safety?

A. The Cost to the Environment

Small planes are by far the most polluting method of transportation, in terms of the amount of carbon dioxide (CO₂) released per person-mile. Analysts at the Helium Report, an online guide to luxury vacations, calculated that an hour of flying in a private jet burns as much fuel as an *entire year* of driving. The Gulfstream IV, for example, emits between 83,000 to 90,000 pounds of CO₂ on just one cross-country round trip. The average American emits just 50,000 pounds of CO₂ total per year. ²¹ Although commercial airliners use more fuel than private jets, they also seat dozens more people, causing their percapita fuel usage to be less than that of private jets.

Speaking about presidential candidates jetting to all corners of the country, veteran corporate pilot Jeff Beck says that flying on planes such as Gulfstreams is "the least environmental thing that politicians can do ... it's like they're throwing dinosaur bones out of the tailpipe."²²

And much of the time, private planes are empty. Scott Duffy, CEO of Virgin Charter told Forbes.com that "40 percent of all private jet flights in the U.S. annually have no passengers aboard, as planes turn 'empty legs' rather than sit idle on the tarmac waiting for return trips." In his book, *Who's Your Caddy? Looping for the Great, Near Great and Reprobates of Golf*, sports writer Rick Reilly gave a memorable example of empty-jet excess as told by Donald Trump. Trump relates the story of an unnamed CEO who refused to play golf against Trump without his own set of clubs. So this CEO sent his personal Gulfstream V jet from West Palm Beach, Florida, back to San Francisco – empty – to retrieve his golf bag. Trump offered to *give* him a set of clubs out of his Trump International Golf Course clubhouse, but the guy insisted on having his own. "I think the bet was like, \$5,000," Trump told Reilly. "But he spends \$50,000 to send his jet." For that money, Trump could have ordered 25 new sets of the exact same clubs.

Private Jet Environmental Impacts Compared

To put the environmental impact of private jet travel into perspective, here's a look at four ways to travel from Los Angeles to New York: by private jet, commercial airliner, Amtrak train, Hummer H3, and Toyota Prius.

First, the private jet. Consider an 8-passenger Cessna Citation X. According to the NetJets Aircraft Selection Guide, the trip from Los Angeles to New York is approximately 2,500 miles, which should take the Citation X four hours and 22 minutes to complete. A Citation X burns 386 gallons of jet fuel per hour, which results in emissions of 8,145 pounds of CO₂ per hour, according to an analysis by Halogen Guides. Based on these figures, the Citation X will consume 1,686 gallons of jet fuel and create 35,569 pounds of atmospheric CO₂. Fully loaded with eight passengers, that works out to 4,446 pounds of CO₂ per passenger. With four passengers aboard, it's 8,892 pounds of CO₂ per passenger.

Now consider the same trip on a commercial airliner. According to the Travel Matters online calculator maintained by the Center for Neighborhood Technology (available at travelmatters.org/calculator), a commercial air passenger would emit, on average, 1,546 pounds, of CO₂.

That figure actually compares well to the emissions created by a much slower means of transportation: a Hummer H3. According to Google Maps, the trip from Los Angeles International Airport to New York's JFK Airport is 2,829 miles long (the auto route is longer because planes travel as the crow flies) and requires 42 hours of continuous driving to complete. According to the Travel Matters calculator, a solo driver making that cross-country Hummer trip will release 3,499 pounds of CO₂. At the other end of the auto spectrum, the 40-mpg Toyota Prius will emit 1,338 pounds of CO₂.

The cross-country rail route, on the Southwest Chief and the Lake Shore Limited, is slightly less direct than the auto route, with a distance of 3,164 miles from L.A. to New York via Chicago, according to Amtrak Unlimited's Mile-Trak distance calculator. Travel Matters calculates that the 73-hour Amtrak trip will emit 1,455 pounds of CO_2 per passenger.

Environmental Impacts of a Trip from Los Angeles to New York			
Mode of Transportation	CO ₂ Emitted per Passenger (pounds)	Time	
Cessna Citation X			
w/ I passenger	35,569	4:22	
w/ 2 passengers	17,785		
wl 4 passengers	8,892		
w/ 8 passengers	4,416		
Commercial Airliner	1,546	5:20	
Hummer H3			
w/ I passenger	3,499	42:00	
w/ 2 passengers	1,750		
wl 4 passengers	875		
Toyota Prius			
w/ I passenger	1,338	42:00	
w/ 2 passengers	669		
w/ 4 passengers	335		
Amtrak Train	1,455	73:00	

Not only do private jets emit tons of carbon dioxide, they also release smog-forming chemicals such as nitrogen oxides and volatile organic compounds. On the runway, these compounds contribute to the formation of ground-level ozone, or smog, which causes breathing and lung problems. When the plane is in the air, this exhaust is even more damaging to the environment. The compounds released in the upper troposphere – from water vapor to carbon dioxide to particulates to unburned hydrocarbons – form contrails, the white lines you see in the sky after a plane has passed. These contrails play a key role in forming cirrus clouds that trap heat rays radiating towards space while blocking incoming sunshine. This causes the weather to become both cloudier and warmer, scientists believe. Finally, the toxic chemicals used to de-ice airplanes during cold weather often end up in waterways.

The entry of Very Light Jets (VLJs) into the private jet market could compound the problem. Because these types of planes are fairly cheap to fly – operating costs per mile are about half that of traditional private jets – it's possible that an "air taxi" industry will develop that would shuttle people among the more than 4,000 local airports in the United States, many of which are under-utilized. By one standard, VLJs may democratize the skies somewhat, by allowing the rich to gain access to a service previously available only to the super-rich. But although VLJs use less fuel than other private jets, more miles could easily offset efficiency benefits. If the planes are bought and flown in large numbers, they could have a significant negative impact on carbon dioxide emissions.

NetJets, the number-one operator of private jets, has tacitly acknowledged the outsized environmental impact of personalized jet travel. In September 2007, it launched the "NetJets Climate Initiative," which features a way for NetJets customers to purchase carbon offsets that purport to counteract the environmental impact of private jet travel.

B. The Cost to Taxpayers

Ownership of a private jet, including a fractional-jet share, is tax-deductible for businesses. The IRS requires only that an aircraft owner prove that the plane is a necessary revenue generator for the business and not exclusively for the owner's personal use.²⁷

1. Tax Breaks for Personal Use of Corporate Aircraft

Until 2004, American taxpayers also subsidized a key CEO perk: personal travel by executives on corporate-owned jets. Before Congress closed this loophole, a corporation could write off the full cost of an executive's vacation trip on the corporate jet, while the executive only had to report as income and pay taxes on a much smaller figure based on an IRS formula called the Standard Industry Fare Level (SIFL), roughly equivalent to the cost of a commercial ticket. Under the new rules, which went into effect in 2005 and are expected to save taxpayers \$2.2 billion through 2014, the company can write off only the amount that it reports as additional executive income. For example, a CEO's vacation trip from New York to Florida on the corporate Gulfstream might cost the company \$23,000, but the company can only write off the \$440 it adds to the CEO's income based on SIFL. The shareholders pick up the balance.²⁸

Of course, this new rule still means a big tax break for the CEO himself, since he gets a private-jet-charter level of service but pays personal income taxes based on the much lower SIFL. In the case of that corporate-jet flight to Florida, the CEO would pay about \$175 in taxes on \$440 in imputed income, assuming a 40 percent total effective tax rate that includes federal and state taxes. But that same trip on a Gulfstream V would cost at least \$12,000 to charter, which would imply a \$4,800 personal income tax bill. Under share-holder scrutiny, some companies have begun to use the much higher charter rate to calculate the value of additional CEO income, a practice that brings the corporate write-off more in line with the actual cost to operate the flight. Such a policy raises the CEO's tax bill, but companies that require their executives to travel on corporate jets will sometimes pay them an additional amount to cover the added tax, a practice aptly known as "grossing-up." ²⁹

2. Tax Breaks Through "Bonus Depreciation" on Jets

In the same year that corporations lost their nearly tax-free CEO jet trips, the private jet lobby scored a victory on an even bigger tax break priority: bonus depreciation. Thanks to intense lobbying by the General Aviation Manufacturers Association (GAMA) and the National Business Aviation Association (NBAA), Congress extended by one year a hefty tax break on the purchase of new capital equipment, including corporate- and fractionally-owned jets (jets used by charter companies weren't eligible). The industry credited the bonus depreciation tax break with helping private jet manufacturers recover from a downturn in business following the bursting of the tech bubble in 2000, terrorist attacks in 2001, and more stock market woes in 2002.

How does bonus depreciation work? Normally, when a business purchases a piece of durable capital equipment such as a printing press, a backhoe, or a corporate jet, that business is allowed to deduct the cost of the equipment from its taxable income, thereby reducing its tax burden. However, the business can't deduct the full amount all at once. Instead, it has to divide up the purchase price and spread it out over several years (the number varies depending on the type of equipment purchased). The idea is that as the equipment wears out

Comparison of Standard Depreciation with Bonus Depreciation

Under standard depreciation rules (known as the "Modified Accelerated Cost Recovery System," or MACRS), the full purchase price of a corporate aircraft is depreciated over six years; 20 percent the first year and varying percentages after that. With a 50 percent bonus depreciation, the purchaser gets to take a 50 percent depreciation right off the top. This effectively cuts the basis for depreciation in half, after which the normal 6-year depreciation schedule is applied. This means the buyer gets to write off 60 percent of the purchase price in the first year of ownership, as opposed to 20 percent under MACRS. With 60 percent of the deduction taken in the first year, the deductions in years 2-6 are smaller than they would be under MACRS, so at the end of the six-year period, the total deductions in each case sum to \$50,000,000.

Depreciation Examples for a \$50,000,000 Corporate Jet					
	%	Standard Depreciation, or "MACRS"		Bonus Depreci	ation
Year	% Deduction	Depreciable Basis	Deduction	Depreciable Basis	Deduction
I (bonus)	50.00	NA	\$0	\$50,000,000	\$25,000,000
1	20.00	\$50,000,000	\$10,000,000	\$25,000,000	\$5,000,000
2	32.00	\$50,000,000	\$16,000,000	\$25,000,000	\$8,000,000
3	19.20	\$50,000,000	\$9,600,000	\$25,000,000	\$4,800,000
4	11.52	\$50,000,000	\$5,760,000	\$25,000,000	\$2,880,000
5	11.52	\$50,000,000	\$5,760,000	\$25,000,000	\$2,880,000
6	5.76	\$50,000,000	\$2,880,000	\$25,000,000	\$1,440,000
Total	100.00		\$50,000,000		\$50,000,000

Deduction schedule: Internal Revenue Service Form 4562 Instructions, Table A, p. 13.

or becomes obsolete, its value to the business declines, and the business is allowed to recognize this loss in value – the depreciation – as a deductible business expense.

"Bonus" depreciation allows the business to deduct from its taxable income a larger percentage of the purchase price in the year of purchase than would be allowed under the standard depreciation rules. For example, if a business could normally deduct 20 percent of the purchase price of an aircraft in year 1, under 50 percent bonus depreciation, that business would end up deducting, for tax purposes, 60 percent in Year 1 (see the table on page 17 to see how this works). In real economic terms, while the company "consumed" only 20 percent of the value of the aircraft in year 1, it reported taxable income as if it had consumed 60 percent of the aircraft in that year. That 40 percent difference between actual and taxable income represents the bonus depreciation tax break.

The 2001-03 edition of bonus depreciation expired at the end of 2004, but fears of recession prompted Congress to pass a new version in the February 2008 Economic Stimulus Act. New corporate aircraft purchased in 2008 and placed into service by the end of 2009 will be eligible for a tax break that allows the purchaser to boost the first-year deduction from 20 percent to 60 percent.³⁰ This means that a corporation purchasing a \$50 million Gulfstream jet in 2008 will get to take a \$30 million tax deduction, as compared with a \$10 million deduction under standard depreciation rules. Assuming a 35 percent corporate tax rate, this means that the corporation can reduce its 2008 tax bill by \$10.5 million, as compared with \$3.5 million under standard depreciation rules.³¹ As the table on page 17 shows, deductions in years 2-6 of the Gulfstream's life will be smaller under bonus depreciation than they would be under standard depreciation. However, by front-loading the deduction, the corporation can invest the proceeds of a larger first-year tax break over a longer period of time, which reduces the real after-tax cost of the aircraft.

More importantly, there are serious questions as to whether or not bonus depreciation delivers the macroeconomic benefits. The tax break is touted as a way to stimulate the economy by encouraging businesses to purchase capital equipment such as machinery, vehicles, and aircraft. In practice, however, it is more likely that bonus depreciation simply accelerates, rather than encourages, such purchases. Capital equipment budgets are generally planned well in advance. Bonus depreciation is not going to create a vast new market of private jet purchasers out of thin air. In such a market, bonus depreciation may boost demand a little bit at the margin, encouraging some buyers who were thinking about buying a plane anyway to go ahead and do so now, before the tax break expires.

During their 2004 lobbying effort to get bonus depreciation extended for another year, GAMA claimed that private plane orders increased 43 percent in the three months following enactment of 50 percent bonus depreciation in 2003. It's unknown how many of those orders were actually due to the tax break, and how many were part of a general market upswing or would have been placed later on anyway. According to GAMA's own figures, only 35 percent of buyers reported in a survey that bonus depreciation was a "decisive factor" in their decision to purchase a plane. Among those buyers, most simply accelerated an already-planned purchase, or opted for a more expensive model. In both cases, the tax break put more money in the purchaser's pocket but did absolutely nothing to add to the aggregate

number of new planes sold. Only five percent of those surveyed said that bonus depreciation convinced them to buy a new rather than a used plane.³²

The poor payoff to the rest of the economy from this handout to corporate jet buyers was not limited to the corporate jet industry. A fiscal stimulus primer issued by the centrist Hamilton Project in January 2008 reviewed the available evidence and found that the bonus depreciation rules in effect from 2001 through 2004 "did not seem to be very effective in spurring economic activity." Studies repeatedly found that only about 10 percent of businesses surveyed said that bonus depreciation affected their investment decisions. The primer's authors concluded that stimulus efforts that were focused on putting more money in consumers' pockets – such as an individual tax rebate or holiday, extended unemployment compensation, or additional food stamps – were all more effective than bonus depreciation and other tax cuts on capital.³³ In addition, public finance expert Gene Steuerle of the Urban-Brookings Tax Policy Center notes that since bonus depreciation is a deduction against taxes owed, it can be anti-competitive, favoring the largest, most profitable firms at a time when struggling or new firms could use the most help.³⁴

Only five percent of private plane buyers said that the bonus depreciation tax break convinced them to buy a new rather than a used plane.

C. The Cost to Other Travelers

1. Subsidized Use of the Air Traffic Control System

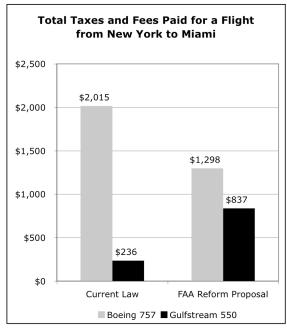
Currently, users of the National Airspace System – everyone from the rumpled passenger in coach to the corporate honcho in a Gulfstream to the student pilot in a single-engine Cessna – pay to run the system via an array of 10 different excise taxes on airfares, fuel, and cargo. Due to this fragmented funding system, wildly different amounts of money are collected from airspace users, depending mostly on whether a plane is being flown as a scheduled commercial flight, or as a charter, or as a non-commercial private flight (such as a flight of a corporate-owned plane). This funding formula fails to accurately assess fees to users based on the costs they actually impose on the system.

For example, corporate and private jets are exempt from the array of taxes levied on every commercial plane ticket: the 7.5 percent ticket tax, the \$3.40 segment fee, the \$3.00 passenger facility charge, and the \$2.50 TSA security fee (users of charter and fractional jets do pay the 7.5 percent ticket tax and the segment fee). Instead, corporate and private jets pay only a 21.9-cent-per-gallon fuel tax. The result, according to the FAA, is that commercial aviation foots 95 percent of the bill, even though they use only 73 percent of the FAA's services. Meanwhile, general aviation – the segment of the industry that includes corporate jets, charters, air taxis, and recreational pilots – uses 16 percent of the services, but pays just three percent of the cost. In dollar terms, a 2007 Associated Press investigation found that while it cost \$2.4 billion to provide air traffic control for private and corporate planes in 2005, those users paid only \$516 million in fuel taxes that year. ³⁶

While it cost \$2.4 billion to provide air traffic control for private and corporate planes in 2005, those users paid only \$516 million in taxes that year.

What does this disparity mean for an individual flight? According to the FAA, a Boeing 757 airliner flying from New York City's LaGuardia airport to Miami pays about \$2,015 in taxes. In contrast, a corporate-owned Gulfstream jet flying from Teterboro airport outside New York to Miami would incur the same air traffic control costs but pay only \$236.³⁷ According to former FAA administrator Marion Blakey, this means that "passengers flying on commercial airlines [are] subsidizing the flights of corporate executives and others who fly private jets." ³⁸

To resolve the tax and fee disparity and to pay for a new satellite-based air traffic control system, in February 2007 the FAA proposed a new funding formula that would do away with ticket taxes and replace them with higher fuel taxes and user fees. Such a plan, says the FAA, would bring the amount that users pay more closely in line with the actual costs they impose on the aviation system. In the New York to Miami example, the new formula would reduce the Boeing 757's bill from \$2,015 to \$1,298, while the Gulfstream's owners would see their charges rise from \$236 to \$837.



Source: Federal Aviation Administration.

Not surprisingly, the FAA's proposal encountered stiff opposition from corporate jet owners and the rest of the general aviation lobby. The proposal went nowhere in the House of Representatives, which passed an FAA reauthorization bill in September 2007 that raises general aviation fuel taxes to help pay for air traffic control upgrades but otherwise maintains what the FAA calls an "extremely inequitable tax system." 40

In the Senate, the FAA plan was also largely ignored. Sen. Jay Rockefeller (D-WV), chairman of the Commerce Committee's Aviation Subcommittee, did propose a \$25-per-flight user fee that partially addressed the inequity issue, but the tax-writing Finance Committee nixed the idea.

In late April 2008, amid a political firestorm caused by the FAA's handling of maintenance issues at Southwest and American Airlines that caused thousands of cancelled flights, Rockefeller dropped his insistence on user fees, agreeing to a scaled-back plan to raise general aviation fuel taxes that was compatible with the version the House had passed the previous autumn. Despite Rockefeller's capitulation on user fees, the FAA reauthorization bill remains stalled in the Senate due to procedural disputes. Hopes for a bill that President Bush would be willing to sign are growing dimmer by the day. The FAA is now operating under the old funding formula on a temporary budget that expires on June 30, 2008, but if Congress fails to pass legislation that Bush will sign, the FAA could get another one-year extension under the existing funding rules.

2. Commercial Passengers Pay for Improvements to Small "Executive" Airports

According to an Associated Press investigation, between 2005 and 2007, the Federal Airport Improvement Program distributed \$7 billion in funds to airports around the country, most of it collected via taxes and fees levied on commercial passengers. A substantial portion of that funding – \$2.2 billion – went to small, remote airports with little or no scheduled passenger service. In some cases, the upgrades opened these airports up to private jets for the first time. ⁴¹ Critics charge that this funding primarily benefits the private jet community by making it possible to land planes at small airports close to tony recreational areas, golf courses, and corporate headquarters.

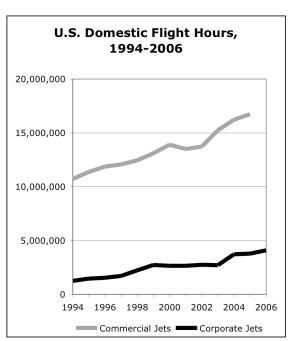
Examples of airports that have seen upgrades funded mostly by commercial passengers include:⁴²

- California's Napa Valley Airport, which primarily serves private planes.
- Aspen, Colorado's Sardy Field, where the majority of traffic is private planes bringing skiers to Aspen's exclusive slopes. Despite the upgrade, Sardy remains overcrowded; on one day in January 2006, the airport had to divert 150 planes to nearby airports due to lack of space.⁴³
- Austin, Minnesota's Municipal Airport, where two of the three jets based there are owned by Austin-based Hormel Foods.
- North Bend, Oregon's Southwest Oregon Regional Airport, where 5,000 private jets per year bring golfers to the world-class golf links at Bandon Dunes.⁴⁴
- Pittsfield, Massachusetts' Regional Airport, where private jets ferrying well-to-do passengers attending orchestra performances at the nearby Tanglewood amphitheater line up wingtip to wingtip during the summer.⁴⁵

3. Increased Flight Delays: Corporate Jets Not Primary Cause

Every summer travel season seems to set a new record for delays and airline passenger horror stories. In 2007, more than a quarter of all scheduled flights were delayed or cancelled, the secondworst showing since comparable records began being kept in 1995. ⁴⁶ Growing frustration has made airway congestion a potent political issue, with powerful lobbies for the airlines and the corporate jet community blaming each other for the delays and arguing that the other side should pay for the air traffic control upgrade that's supposed to fix the problem. Given the finger-pointing between corporate jets and the airlines, it is difficult to find an unbiased evaluation of the problem of increased flight delays that is not sponsored by one side or the other.

For example, the airlines like to mention that for every commercial airliner operating in the U.S. there are now two corporate aircraft – that's 18,000 planes – up from 1,800 in 1970. ⁴⁷ But the airlines leave out the fact that only 10,000 of those planes are jets (the others are turboprops and piston-powered aircraft that don't normally compete for runway and air space with



Source: U.S. Bureau of Transportation Statistics, National Transportation Statistics, Appendix A, Air Carrier Profile.

commercial jets). Also, at any given moment, there are far more commercial aircraft than corporate jets aloft: in 2005, commercial jets as a group logged more than four times as many flight hours as did corporate jets.⁴⁸

The relatively neutral analyses that do exist are less than conclusive. In December 2007, the Congressional Research Service reported that it was unlikely that corporate jets significantly contributed to congestion for commercial airline passengers, noting that "general aviation aircraft [including corporate jets] and fractionally-owned aircraft accounted for less than four percent of all aircraft operations at large hub airports in 2005."⁴⁹ A report issued by the Department of Transportation Inspector General in March 2008 concluded that private jets do "contribute to FAA's costs and congestion in general," but the report was silent on whether or not private jets actually contributed to delays for commercial airline passengers.⁵⁰

In response, the airlines point to the congestion in the New York metropolitan area, where airline delays are endemic and frequently disrupt air travel nationwide. At a 2007 Senate Aviation Subcommittee hearing on congestion, Delta vice president Joe Kolshak cited FAA figures showing that commercial aviation accounts for only 53 percent of the travel through New York's airspace, with 46 percent represented by general aviation, including corporate jets. (The remaining one percent is military.)⁵¹ Here again however, as late as December 2007 the Congressional Research Service could cite no conclusive evidence that general aviation usage of the New York airspace had any negative impact on airline operations.⁵²

For the most part, even in the crowded skies around New York City, the best evidence is that delays for commercial airline passengers are due to increased traffic at the large hub airports, which is in turn primarily caused by the airlines' increased use of smaller regional jets along with their related practice of at times scheduling more flights than a given airport can handle. In spite of the commercial airline industry's populist appeals, there is insufficient evidence that corporate jet traffic in and out of major commercial airports is a major factor in delays for commercial airline passengers.

As private jet travel increases in the coming years, it will be important to monitor its impact on general airline congestion.

D. The Cost to Corporate Stakeholders

Corporate executives form the backbone of the private jet industry's clientele. In addition to legitimate business trips, many executives and their families have access to private jets for personal use at the expense of other stakeholders like shareowners, workers, and consumers. One institutional investor critical of the practice compared the increase in personal use of corporate jets to "crack cocaine," explaining that "once they get used to having the plane there waiting for them, they don't want to go back." ⁵³

Corporate stakeholders – including shareholders, workers, consumers, and communities – are now getting a better look at corporate jet usage among corporate titans, as new rules require proxy disclosures of all perks valued at more than \$10,000. Personal use of corporate jets was the most common perk found in a 2007 Associated Press review of proxy state-

ments filed by 386 companies in the Standard & Poor's 500.⁵⁴ For the 2006 fiscal year, 73 of the Fortune 100 corporations reported personal travel on the corporate jet, up from 65 in 2005 and 57 in 2004, according to executive-compensation firm Equilar. Median cost to shareholders: \$121,676.⁵⁵ A separate study released in September 2007 by the Corporate Library found similar results: over half of the 215 companies surveyed allowed or required executives to use company aircraft on personal trips, with a median cost to shareholders of \$182,929.⁵⁶

Personal use of corporate jets is the most common perk for CEOs of large American corporations.

Some of the companies with the highest flyers include Starwood Hotels, which spent \$866,178 in 2006 flying CEO Steven Heyer back and forth between his Atlanta home and corporate headquarters in New York, and Abercrombie & Fitch, which gave CEO Michael Jeffries \$776,723 worth of corporate jet time.⁵⁷

As far as the 2007 corporate high fliers go, none of the large-company CEOs tracked by the *Wall Street Journal* in their continuously-updated online compensation table⁵⁸ have so far approached Heyer and Jeffries for personal jet time on the shareholders' dime. The current leader, Lewis B. Campbell of Textron, clocks in at \$494,700 worth of personal jet trips, presumably all of it coming on planes built by Textron's Cessna subsidiary (see table for the top 10 as of June 16, 2008 below).

Some CEOs, like Michael McGrath of i2 Technologies, use the corporate jet to commute between a home in one state and the headquarters in another. McGrath's trips between the house in Maine and the office in Texas cost shareholders over \$1 million in 2006. As corporate governance expert Paul Hodgson told the financial website MSN Money, "It's the use of the company jet for long-distance commuting that seems the most ridiculous. These are personal lifestyle choices. I am not convinced this provides such an enormous benefit to shareholders that they would want to pay for it." ⁵⁹

Top 10 Corporate Jet Perks, 2007				
Company	CEO	Value of Personal Aircraft Use		
Textron	Lewis B. Campbell	\$494,700		
IBM	Samuel J. Palmisano	\$406,200		
Shaw Group	James M. Bernhard, Jr.	\$405,600		
United Technologies	George David	\$380,700		
Morgan Stanley	John J. Mack	\$355,900		
Coca-Cola Co.	E. Neville Isdell	\$341,800		
Tyson Foods	Richard L. Bond	\$341,200		
Deere & Co.	Robert W. Lane	\$324,800		
American Express	Kenneth I. Chenault	\$323,900		
Coca-Cola Enterprises	John F. Brock	\$319,100		

Source: The Hay Group for the Wall Street Journal. Ranking covers "the largest public U.S. companies" and is current as of June 16, 2008.

Sometimes it's the CEO's relatives who benefit. Tyson Foods chairman John Tyson is allotted 120 hours per year of corporate jet time which he can parcel out to friends and family whether or not he accompanies them on the trip. ⁶⁰ In an August 2007 SEC filing, Qwest Communications disclosed that it would allow new CEO Edward Mueller's wife and step-daughter to use the corporate jet to commute unaccompanied between Denver, where Qwest is based, and the family's former home in California so that the stepdaughter can finish high school there. ⁶¹ The total cost to shareholders hasn't yet been disclosed.

Daniel Gross, writing for the online magazine *Slate* in 2004, noted that "private aircraft have played a role in virtually every recent story of corporate entitlement and corruption." Stakeholders at Adelphia, the cable-TV firm that went bankrupt in 2002 in a self-dealing scandal, paid \$6,000 per year for a jet to deliver a Christmas tree to the home of company founder John Rigas' daughter. In 2001, a second tree was delivered, also by jet, when the first one was deemed to be too short. Rigas also took the company plane to Kenya on a safari. Gross also refers to *The Smartest Guys in the Room*, a book by Bethany McLean and Peter Elkind about the Enron scandal that recounts the story of how, as Enron's stock was beginning to crash and questions had arisen as to the putative value of Enron, Ken Lay was sitting in his office, intently examining fabric swatches for the company's new plane. ⁶²

The subprime mortgage meltdown of 2007 has produced its own set of corporate excess poster boys, perhaps none more notorious than Angelo Mozilo, founder and CEO of Countrywide Financial. An investigation into CEO pay and the mortgage crisis by Rep. Henry Waxman (D-CA), chairman of the House Oversight and Government Reform Committee, found that Mozilo demanded that Countrywide pay the income taxes due when his wife accompanied him on business trips in the company jet. Mozilo, who was paid a total of \$185 million between 2002 and 2006, complained in a memo to his compensation consultant that "in order to avoid extraordinary travel expenses to be incurred by [the President and Chief Operating Officer] and me the spouses would have to travel commercial or not at all, which is not right nor wise," and went on to hint that he might even retire over the issue. At a hearing of Waxman's committee in March 2008, Mozilo reiterated his complaint. He said that he had "to pay an enormous amount, a substantial amount of money, to have her on the plane," but later admitted that "in today's world, I would never write that memo."

E. The Cost to Public Security and Social Cohesion

As the upper echelons of American society insulate themselves further from the traveling public via private jet travel, we run the risk of a dangerous loss of social cohesion. As the super-rich and wealthy "opt-out" of the public commercial air travel system, they withdraw their considerable political clout from making sure that the system works well for everyone.

Citing security concerns, companies such as GE, Motorola, Time Warner, and News Corp. actually *require* their executives to fly on the corporate jet, as opposed to charter planes or commercial airlines. This safety argument extends even to smaller companies such as Rollins, a pest-control business, which paid its chief executive's taxes for his \$116,988 of travel expenses on the corporate jet. New York University School of Business professor

David Yermack says that this arrangement "is like telling the CEO: 'We insist that you eat at a five-star restaurant for your own nutrition, and we insist that you drink \$800 champagne for your health.'"⁶⁵

If CEOs find security in private jet travel, where does that leave the rest of us? As security lines in airports grow longer and more invasive, private jet passengers face comparatively little scrutiny. As the Department of Homeland Security recently noted, compared with commercial airline passengers "little or no screening or vetting of crew, passengers or aircraft on international GA [General Aviation] and private aircraft is required" at U.S. airports. "In addition," says DHS, "thousands of GA operators conduct operations in large aircraft but are not subject to have security programs under current TSA regulations.⁶⁶

Currently, DHS and the Transportation Security Agency are planning new regulations to enhance security requirements for private jet travelers, including measures that would identify and vet all general aviation passengers and crew and screen aircraft entering from overseas for illicit materials or weapons. Not surprisingly, the general aviation community is chafing at the increased scrutiny. Jim Coyne, head of the National Air Transportation Association, the leading general aviation trade association, complained to the trade publication Aviation International News that DHS didn't understand the difference between typical airline passengers and the people who fly on private planes. "It could be anybody on an airliner," Coyne said. "On a charter or business airplane it's a much smaller group of people. It's much easier to know who they are and to know that they're safe."

That may be, but DHS remains concerned about "the vulnerability of GA [General Aviation] and private aircraft flights being used to deliver illicit materials, transport dangerous individuals or employ the aircraft as a weapon." In DHS Secretary Michael Chertoff's words, when it comes to general aviation, "the nightmare scenario that we talk about is the possibility of a weapon of mass destruction, in particular a nuclear bomb or a radiological bomb, being detonated in a city."

3. Possible Remedies

Private jet travel imposes greater burdens on the ecological commons and the general public. Private jet travelers should pay the real costs associated with their choice of travel. These include the real environmental impact costs as well as their fair share of fees for maintaining the air traffic control systems.

Congress must also eliminate the various subsidies and incentives that shift the financial costs of private jet travel onto the general public, taxpayers, shareholders and other travelers. Funds should be invested in transportation infrastructure that is environmentally sustainable, creates good jobs, reduces the need for air travel, relieves air traffic congestion, and serves all types of travelers.

1. Impose an excise or "luxury" tax on private aircraft.

Rather than providing various tax incentives for private jet travel, the government could discourage this often wasteful activity by instituting tax penalties. One straightforward approach would be to impose an excise tax on the sale of private aircraft. Such a tax would raise the price of private jets, pricing some buyers out of the market and reducing the overall number of private jets in operation in the U.S. Additionally, the revenue raised by such an excise tax could be used to fund improvements to infrastructure supporting the commercial airline sector, high-speed rail, or other priorities.

2. Institute a progressive consumption tax.

At one time, the famously frugal billionaire investor Warren Buffett sharply criticized corporate jets. But then he flew in one, got hooked on the privacy and convenience, bought one of his own in 1986 (which he sheepishly dubbed *The Indefensible*) and then eventually bought fractional jet leader NetJets in 1998. Still, Buffett is realistic. "When I fly my private jet I use hundreds of gallons of jet fuel but I'm not taxed at a higher rate," he told a class of business school students in 2004 when asked what could be done about economic inequality. He went on: "Flying in a private jet is usually unnecessary, excessive consumption and I should be taxed appropriately via a higher consumption tax."

While a flat consumption tax – such as a sales tax – is regressive, a progressive consumption tax, as proposed by Cornell economist Robert H. Frank, would charge progressively higher rates as an individual taxpayer's consumption rises. To figure the tax, a taxpayer would report his income and his savings for the year. The difference is his consumption. After applying a standard exemption designed to render a basic standard of living tax-free, the taxpayer's remaining consumption would be taxed with a system of graduated brackets, as our current federal income tax system is designed. The higher a person's consumption, the higher marginal tax rate that person pays.

Frank has written about the wasted resources spent on purely "positional" goods that confer no added utility to the buyer except as an advertisement of social status. In the case of pri-

vate aircraft, some consumption is driven by business imperatives but there is also a strong element of status-seeking as well. To the extent that progressive consumption taxes charge a premium for status-seeking, the revenue raised can be directed to improving America's commercial air infrastructure, or to other transit priorities.

3. Congress should institute a price on carbon to accurately charge private jet users for the environmental damage they cause. This could take the form of a carbon tax, a cap and auction/dividend system, or a cap-and-lease system.

Voluntary carbon offset programs are good public relations, but they are virtually unregulated and in recent investigations have turned up mostly hot air. A universal price on carbon is the only way to force those who pollute the atmosphere to pay for the damage they cause. By sending a clear price signal and forcing private jet travelers to "internalize the externality" of atmospheric pollution, the most frivolous private jet trips can be avoided or at least obliged to pay a greater measure of the environmental cost they impose on the rest of us.

Currently, the two leading proposals to price carbon are a carbon tax and a cap-and-trade system of tradable carbon emissions credits. ⁷² Each proposal has its own set of advantages and disadvantages. A carbon tax is more straightforward and the price it assigns to emissions is more predictable, which helps businesses make decisions about how much to invest in abatement strategies. For example, a carbon tax would raise the price of jet fuel and thereby the price of flying in a private jet – by a relatively predictable amount, making it possible for private jet users to recalculate the costs and benefits of flying private. On the other hand, a given carbon tax rate may or may not result in the intended reduction in greenhouse gas emissions; only after it is implemented can policymakers be certain how it will affect emissions. And, an economy-wide carbon tax would be regressive and could require offsets to avoid overburdening low-income families, such as a concomitant reduction in the payroll tax. Or, the carbon tax could be applied to jet fuel only, thereby placing most of the tax burden on the least efficient form of transportation.

Under a cap-and-trade system, the government would specify a maximum carbon emissions level for the entire nation, and then distribute emissions credits equaling that total to polluters, either by giving the credits away for free or by auctioning them off. Polluters could then buy and sell those credits among themselves. Such a system allows the market to set the price of carbon, and has the political advantage of not being named a "tax." However, uncertainty regarding the future price of permits could inhibit businesses' willingness to invest in abatement strategies. The greatest disadvantage of carbon trading is that without consistent, deep cuts in the cap, emissions do not actually decrease. And if the "trade" is tied to an international carbon market, polluters effectively "outsource" their responsibility for cutting greenhouse gases to the world's poor – or, in domestic trading, marginalized communities. Ultimately, slipshod regulation of the carbon market has cast doubt on whether emissions reductions claimed by carbon consultants materializing as claimed, and begs a deeper look into the social and environmental impacts of carbon deals. ⁷³

Economist John Irons of the Economic Policy Institute has proposed a "cap-and-lease" system that would distribute tradable emissions credits like a cap-and-trade system but also

require per-emission payments like a carbon tax. Such a system would combine the aggregate cap on emissions found in cap-and-trade with the predictability of lease payments that is characteristic of a carbon tax.

Finally, Peter Barnes, the founder of Working Assets Long Distance, has proposed a "cap-and-dividend" plan that would force fossil fuel companies to buy federal permits for the right to sell carbon-emitting fuel. Revenue from the permits would be distributed to U.S. citizens as equal dividends that could range from \$1,200 to \$6,000 a year. Consumers will pay higher prices for transportation, but users of the least efficient modes, such as private jets, will pay proportionately more than those who buy fuel efficient cars or take public transportation. Since the dividend is equally divided among all citizens, there is a built-in incentive for consumers to choose more efficient modes of transportation.⁷⁴

4. Fix the FAA's funding structure to charge users of the National Airspace System based on costs imposed.

The most straightforward way to do this is probably to revive the FAA's original February 2007 proposal for a combination of higher general aviation fuel taxes and user fees. Another approach, advocated by the International Civil Aviation Organization, would be to tie fees to a combination of a plane's weight and the distance traveled. In return for a fairer tax and fee structure, the airlines should agree to more aggressive regulation to curtail the industry's pervasive over-scheduling at major hub airports, which is the primary cause of congestion.

5. Create and enforce shareholder limits on corporate jet use.

With shareholders now on the hook for the cost of flying executives around on corporate jets, it is up to them and their representatives on the board of directors to place prudent limits on corporate jet use. Shareholders could submit resolutions requesting that corporations issue more complete reports on corporate jet usage.

6. Invest in high-speed rail as an alternative to short-haul air travel

A key driver of the exploding use of private jets is the hassle of commercial air travel. A typical business traveler traveling by air from downtown Chicago to downtown Cincinnati, for example, could easily spend more time on the ground than in the air, once airport transfers and time at the airport are factored in. Orbitz.com gives an air travel time of one hour five minutes between O'Hare and Cincinnati's airport in Covington, KY. Add in taxi rides between each of the suburban airports and their respective downtowns, plus ticketing and security lines and baggage claim, and the trip could easily take more than three hours doorto-door, none of it particularly pleasant or conducive to getting work done.

A high-speed passenger train traveling 110 miles per hour, meanwhile, could make the trip between Chicago's Loop and Cincinnati's train station in four hours, including stops in Gary, Lafayette, and Indianapolis, Indiana. Such a rail link could compete successfully with the airlines while offering an enticing alternative to the private-jet traveler whose main reason for flying private is convenience, not status. And of course, high-speed rail is more environmentally friendly than either air or auto travel.

This Chicago-Cincinnati high-speed rail link is just one part of a proposed 3,000 mile Midwest Regional Rail System (MRRS) that has been on the drawing board for years but which has so far failed to attract a political constituency powerful enough to move it toward fruition. The MRRS, meanwhile, is itself just one of ten proposed high-speed rail corridors currently languishing in the proposal stage around the United States. Each one has the potential, as Amtrak's Acela service in the Northeast Corridor has shown, to compete successfully against private and commercial jets.



Source: U.S. Department of Transportation, 2001.

The subsidies provided to private jet travelers would be better directed at supporting the expansion of a high-speed rail network. This would benefit both executives and the rest of us, as well as move the U.S. in the right direction on energy conservation in the climate change age.

7. Close Security Loopholes for Private Jets

The Department of Homeland Security has identified the proliferation of private jets and lax controls over these aircraft as a security risk. And although new regulations are reportedly in the works, they have not yet been initiated – seven years after 9/11. Private jet travelers should be subject to many of the same reasonable security screening provisions as commercial travelers.

Conclusion

Attempts to make the users of private jets shoulder their share of the transportation burden will no doubt be fought by the organized wealthy and the private jet lobby.

The proposal to reform the FAA's funding mechanism has been thwarted so far by the private jet lobby. The National Business Aviation Association, a group representing over 8,000 companies including GM, Exxon Mobil, and NetJets, a plane-chartering company, is staunchly opposed to the FAA's proposal. Its chief executive, Ed Bolen, argues that "a significant portion" of the users of small airplanes would cut back on their flights or even stop flying on small planes altogether.⁷⁵

With the continued polarization of wealth and power – and the continuing degradation of the commercial travel experience – we will likely see continued growth in private jet travel. It is incumbent, therefore, that this sector of the travel market pay the full costs of its damage to the environment and its wear and tear on the overall air traffic system. Congress must act to shift the burdens off of ordinary people and onto the high flyers themselves.

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