# Aviation Neg – NUDI Seniors

## \*\*CPs\*\*

## Privatization CP

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#### The CP solves – the only barriers to private sector investment are long term leases, regulations on revenues equaling costs, and disclosure of airline charges

Barkowski 12 (Justin T., graduate from Pepperdine University School of Law, Economics degree from UC Berkeley, instrumented pilot, Pepperdine Law Review, Volume 37, Issue 1, Article 3, “Managing Air Traffic Congestion Through the NextGeneration Air Transportation System: Satellite Based Technology, Trajectories, and - Privatization?”, February 2nd, 2012, <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1039&context=plr>)

Several policies with respect to allocating ground facilities at highd ensity airports are necessary for the private party to eliminate airport congestion. First, eliminating the availability of long-term leases and majority in-interest clauses is a requisite for creating more fluid entry and thus, increased competition.¶ 3 1¶ ' Forcing airlines into short-term arrangements will¶ produce a more flexible air transportation system that can adjust to rapidly¶ changing demand.¶ 352 ¶ Second, Congress needs to loosen the regulations that require airport proprietors to equate revenues with their costs of providing¶ the airfield's resources.¶ 353 ¶ The current price controls prevent excessive monopoly profits by forcing airports into reasonable investment returns and¶ uniform cost allocation across all carriers.¶ 354 ¶ But while regulation seems to¶ ensure that the monopolists' profits are minimal, it allows for an "unknown¶ extent of productive inefficiency."¶ 355 ¶ Price controls create inefficiency¶ losses, which result when "economic resources are directed away from [airlines] where those resources have the largest benefit .. . and toward [airlines] which value those resources less."s¶ 6 ¶ Because prices are a necessary¶ mechanism to ensure "resources are used in the most economically efficient¶ fashion,"¶ 3¶ " ground facilities should be charged based upon willingness to¶ pay or expected profitability, commonly called "Ramsey pricing."" A private operator will be more capable of determining the carrier's risk of failure, a reflection of each carrier's willingness to pay.¶ 3 ¶ For instance, if an¶ airline pays the maximum it is willing to pay for a gate facility, it is forced¶ to extract all of the gate's potential value in order to recover its investment.¶ In essence Ramsey pricing forces the airline to use the gate more efficiently¶ than it had before. The loosening of limitations on discriminatory pricing¶ and prohibiting long-term lease arrangements for ground facilities will enhance a private operator's ability to perfectly price discriminate, which "may¶ be consistent with and even necessary to allocative efficiency" of airport resources.¶ 360 ¶ This pricing structure ensures there is limited deadweight loss¶ from the use of scarce airport facilities by forcing unprofitable and wasteful¶ air carriers out of the system.¶ 36¶ 1Critics against using a different rate structure argue that airlines will¶ raise their rates on passengers, effectively passing the costs of congestion¶ onto consumers.¶ 362 ¶ However, because airport costs are roughly five percent¶ of airlines' total costs it would not be disastrous to raise rates on them. One¶ study suggests that for every one percent increase in the price of airline tickets, more than one percent declines to buy tickets.¶ 6 ¶ As a result, airlines¶ will arguably internalize the rising costs and force reductions in other¶ areas. ¶ 3 ¶ Alternatively though, decreased fuel costs from the implementation of NextGen may offset increased facility prices as well. But if for some reason the airline cannot handle the increased costs, any potential increases on¶ passengers' rates would only be temporary because an entrant could come in¶ and undercut them, assuming the barriers to entry are more fluid from privatization and short-term leases.¶ 365 ¶ Nonetheless, there are several arguments¶ supporting the notion that consumers would be minimally affected under¶ Ramsey pricing.¶ Any concerns about potential collusion between the airport proprietor¶ and an air carrier will be regulated by antitrust legislation.1¶ 66 ¶ Through modest disclosure requirements, the FAA could require that the private airport¶ proprietors disclose their justifications for the charges upon airlines, creating¶ a more transparent environment that would prevent anticompetitive behavior. 36' Ramsey pricing allows the airport proprietor to get the most profitable airlines within the first barrier to entry-ground facilities-and maximizes the economic value of these resources. Subsequently though, the airport proprietor must prevent these air carriers from scheduling amounts of¶ flights exceeding the airport's practical capacity.

### Solvency

#### **Privatization solves – 1/3 of the most profitable airports are funded by investors**

Robert W. Poole 12, director of transportation policy and Searle Freedom Trust Transportation Fellow at Reason Foundation, MIT-trained engineer, has advised the Ronald Reagan, the George H.W. Bush, the Clinton, and the George W. Bush administrations, “Annual Privatization Report 2011: Air Transportation”, <http://reason.org/files/aviation_annual_privatization_report_2011.pdf>,

Since 1987, when Margaret Thatcher’s government privatized (via a 100% public share offering) ¶ the former British Airports Authority (now BAA), airport privatization has become a global phenomenon. Governments in Europe, Asia, Australia and New Zealand, Latin America and the Caribbean have privatized major airports. Some of these privatized entities have subsequently acquired full or partial ownership interests in other airports (in their own country and elsewhere), as have some government-owned airports. Today’s global airport industry is often characterized by airport groups, rather than just individual airports. Table 1 is excerpted from a table of the world’s 100 largest (by revenue) airport groups. Of these 100 largest airport entities, 32 are either fully or partially owned by investors (or are in the process of becoming so, as in Spain). In cases of partial privatization, either a minority or majority stake is held by the national, regional or local government entity in which the airport is located. A number of these global airport groups also manage overseas airports, on a contract basis, without actually obtaining an ownership share. Several smaller airport companies (e.g., Hochtief Airport, Infratil, Peel Airports) had 2009 revenues below the threshold for inclusion in the top 100, so are not included in the table.

#### Private sector solves NextGen funding – more efficient than the federal government, Canada and the United Kingdom prove that privatized ATC works

ENO Center for Transportation 12 (April 2012, “NextGen Aligning Costs, Benefits and Political Leadership”, <http://www.infrastructureusa.org/wp-content/uploads/2012/04/nextgen-paper.pdf>, )

The private sector could also potentially be a driving force behind funding NextGen. Private sector modernization efforts could be in the form of a full-fledged privatized ATC ¶ system to a public-private financing partnership. ¶ Privatization of ATC is a controversial topic. Proponents ¶ of privatization invoke free-market competitive efficiencies ¶ and optimal pricing that alleviates congestion and is self-sufficient in raising adequate operating revenues without need for bureaucratic delays and the appropriation process. Some ¶ have argued for privately funding NextGen by separating ¶ ATC from the FAA and funding its operations by charging ¶ private user fees to all aviation users.¶ 51¶ The idea is that the ¶ long-term trend of declining ticket prices due to increased ¶ market share for low-cost carriers means that the passenger ¶ ticket tax cannot be relied on as a source of funding for ¶ NextGen. Furthermore, political stagnancy is a hindrance to ¶ bringing about changes in a timely fashion. Finally, there are ¶ examples of successful privatized ATCs from countries such ¶ as Canada and the United Kingdom. Arguments against ¶ privatizing ATC make the general case that the private sector might not cater to an outcome that is in the interest of ¶ society. A privatized ATC would still require some form of ¶ government oversight to ensure safety standards are met and ¶ pricing practices are fair.

### AT: Efficiency

#### **Private funding is comparably more efficient than the government**

Barkowski 12 (Justin T., graduate from Pepperdine University School of Law, Economics degree from UC Berkeley, instrumented pilot, Pepperdine Law Review, Volume 37, Issue 1, Article 3, “Managing Air Traffic Congestion Through the NextGeneration Air Transportation System: Satellite Based Technology, Trajectories, and - Privatization?”, February 2nd, 2012, <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1039&context=plr>, )

Airport privatization has numerous potential benefits that cannot be understated. Those most commonly identified include diversified sources of¶ private capital for development, greater efficiency in airport operations, and increased customer satisfaction. However, private operators could also more effectively fight congestion than a government-run airport by conditioning the transfer on the elimination of congestion, measured by monthly¶ or quarterly performance results. This technique has been recognized for¶ various forms of privatization, predicated on the notion that "governments should shift their focus from specifying inputs to specifying some desired¶ outcome, leaving private sector providers with the opportunity of formulating means of realizing that outcome in the most cost-efficient way possible." The transfer of interests in airports from government operations to a¶ private regulated monopoly could provide a solution for demand management if three conditions are met: the operator is given the ability to price¶ discriminate against carriers for ground facilities; transparent, periodic slot¶ auctions are held; and efficient regulation of an airport's monopoly power exists.

### AT: Demand

#### The private sector WANTS to fill in now – Chicago and Puerto Rico prove

Robert W. Poole 12, director of transportation policy and Searle Freedom Trust Transportation Fellow at Reason Foundation, MIT-trained engineer, has advised the Ronald Reagan, the George H.W. Bush, the Clinton, and the George W. Bush administrations, “Annual Privatization Report 2011: Air Transportation”, <http://reason.org/files/aviation_annual_privatization_report_2011.pdf>,

Due to growing interest in airport privatization from local officials, Congress in 1996 created a ¶ limited set of exceptions to these regulations. Under the Airport Privatization Pilot Program up to five jurisdictions can apply to the Federal Aviation Administration (FAA) for permission to lease an airport on a long-term basis and transfer the lease proceeds to the general government budget. ¶ And the acquirer is allowed to seek profits by operating the airport efficiently. One “slot” in the ¶ program is reserved for a general aviation (non-airline) airport, and only one of the remaining four ¶ can be used for an airport meeting FAA’s definition of a “large hub.” In order for an airport to be ¶ privatized under the Pilot Program, the lease agreement must receive the approval of both (1) 65% ¶ of the airlines that provide scheduled service at the airport, and (2) airlines that account for 65% of ¶ the annual landed weight (on which landing fees are based) at that airport. Chicago’s failed attempt to lease Midway Airport in 2009 (because the winning bidder was unable ¶ to finance its deal, due to the credit crunch) still added value to the prospects for U.S. airport privatization. That’s because the pro-forma long-term lease agreement that Chicago negotiated ¶ with Midway’s airlines achieved the required two-part 65% support from the relevant airlines. As ¶ the anchor tenant at Midway, Southwest led the negotiations with the city, and Southwest’s Property Manager, Amy Weaver, has said that the terms of the deal “set the pace, process, and expectations for future U.S. privatization discussions.” That proved to be correct during 2011, when the Puerto Rico’s Public-Private Partnerships Authority went forward with its plan to privatize San Juan’s Luis Munoz Marin International Airport. After some months of discussion, the airport’s leading carrier, American, agreed to the ¶ terms of the draft lease agreement, and other airlines then followed American’s lead. On July 5, ¶ 2011 the Authority issued its Request for Qualifications, which led to a dozen responses. In ¶ September, the Authority announced its short-list of six potential bidders, including teams led by ¶ ASUR, Fraport, GMR and Zurich Airport. With a Request for Proposals due out in the fall and bids ¶ due around the end of the year, the Authority expects to award a 50-year lease by early 2012. The ¶ Authority’s advisors are Credit Suisse Securities (finance and procurement), Leigh Fisher ¶ (technical), Mayer Brown (U.S. legal counsel) and Pietroantoni Mendez & Alvarez (local legal ¶ counsel).

#### Airports looking to sell now and NextGen generates interest from private sector

Barkowski 12 (Justin T., graduate from Pepperdine University School of Law, Economics degree from UC Berkeley, instrumented pilot, Pepperdine Law Review, Volume 37, Issue 1, Article 3, “Managing Air Traffic Congestion Through the NextGeneration Air Transportation System: Satellite Based Technology, Trajectories, and - Privatization?”, February 2nd, 2012, <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1039&context=plr>, )

Even beyond the potential congestion savings, several other reasons¶ suggest privatization may be the appealing forecast for local governments.¶ First, dozens of local governments are increasingly considering the sale of¶ their airports in order to decrease growing budget deficits. Second, with the federal government about to make a multi-billion dollar investment in¶ NextGen, an airport's economic value to the private sector will rise significantly, making the sale even more lucrative for governments looking for¶ corrective budget solutions.¶ Finally, unlike the FAA's trembling slot debacle, Secretary of Transportation Ray LaHood has urged for "the private¶ sector [to have] a bigger role in rebuilding the nation's aging . . . infrastructure,"¶ which could provide help in reprising answers for congestion relief.¶ But without any reforms to the current pilot program, the optimistic outlook¶ could end hollow and ineffective.

#### Financial advantage means airports want privatization now

Robert W. Poole 12, director of transportation policy and Searle Freedom Trust Transportation Fellow at Reason Foundation, MIT-trained engineer, has advised the Ronald Reagan, the George H.W. Bush, the Clinton, and the George W. Bush administrations, “Annual Privatization Report 2011: Air Transportation”, <http://reason.org/files/aviation_annual_privatization_report_2011.pdf>,

Reflecting on the fiscal pressures facing U.S. local governments, the president of the Airports ¶ Council International-North America, Greg Principato, was quoted in Aviation Daily as predicting ¶ a new wave of airport privatization. “Once a mayor cashes a $2 billion check” from such a ¶ transaction, he said, political attitudes will shift to favor privatization. And airport managers are ¶ starting to realize that they could gain more freedom for entrepreneurial management under ¶ privatization. And former ACI-NA Executive Vice President Steve Van Beek told HNTB’s ¶ Aviation Insight magazine (spring 2010) that “As funding sources decline, airports will ¶ increasingly consider other options for financing capital improvements, including privatization.”

## States CP

### Solvency

#### **The states can solve the AFF – state to state airport issues mean that ONLY localization solves congestion**

Coogan et al 10 (Matthew A. Coogan, Mark Hansen, professor of Civil and Environmental Engineering @ UC Berkeley, Megan Smirti Ryerson, PhD. in Civil and Environmental Engineering @ UC Berkeley, Larry Kiernan, Joerg Last, Strata Consulting, Richar Marchi, Airports Council International – North America, “Innovative Approaches to Addressing Aviation Capacity Issues in Coastal Mega-regions”, <http://www.njtransit.com/pdf/acrp_rpt_031.pdf>, )

There are a number of reasons why the primary locus of demand management responsibility and action would ideally be at the local level. First, recent federal efforts to innovate policy in this area have been met by strong resistance. The FAA’s attempt in the fall of 2008 to institute slot auctions at a modest scale at the New York airports was temporarily blocked by a federal court after an appeal by the PANYNJ. Demand management at the local level would be immune to legal or political challenges. It is likely that slot auctions would be opposed by airlines regardless of the body implementing the auctions. Political hurdles would also exist. In 2007, the FAA proposed a pilot program to give select airport authorities ﬂexibility to impose market-based measures at the local level with guidance; this proposal did not gain traction and was not included in recent reauthorization bills that were introduced. Another challenge to demand management policy localization, airport monopoly power, is touched on in Section 5.7.2.2. There would likely be signiﬁcant challenges to innovation in airport demand management whether it occurs nationally or locally, subject to federal oversight. Nonetheless, the research team argues that the latter course would be the more promising one. Second, it would be very difﬁcult to craft a federal demand management program that would be effective across the wide variety of circumstances that exist at different airports. Important differences in this context include the following: • Airline/airport relations. Although in some cases airlines¶ and airports maintain a straightforward landlord–tenant relationship, in other cases the relationship more closely resembles co-ownership. In the latter case, certain airlines have invested in both the airport itself and in developing the markets that the airport serves. In the context of demand management, this affects the manner in which available capacity could be allocated: through a market¶ mechanism based on willingness to pay, or through a process that gives more consideration of established airportairline relationships. • Financing mechanism. Airports are ﬁnanced in one of two¶ ways. In the residual approach, airlines agree to make up an shortfall in revenues in return for having a strong role, often including a veto, in airport capital expenditure decisions as¶ well as the agreement that any airport’s non-airline revenue will go toward reducing the costs borne by airlines. In the compensatory approach, the airport assumes the risk, and in return can earn substantial surpluses that can ﬁnance future airport development, decisions about which it largely controls. Residual airports face unique constraints in employing market approaches to demand management because (a) any revenue from such charges is ultimately recaptured by the¶ airlines in the form of reduced fees and (b) they typically¶ have long-term usage agreements with airlines to which any¶ demand management program must conform. • Variability in capacity. Some airports have fairly similar¶ capacities under most weather conditions, whereas in others,¶ capacity is highly variable. In the latter cases, a decision must¶ be made about what capacity scenario to assume in formulating the demand management strategy. If the capacity is set¶ too low, the airport will be underused much of the time; if¶ set too high, there may be severe delays much of the time.¶ There may also be cases where it is appropriate to assume different capacities for different times of day or seasons of the¶ year. Such trade-offs are best understood at the local level.¶ • Expandability. The appropriate mix of demand management and demand accommodation depends on the cost¶ and political difﬁculty of expanding an airport. Some factors that determine expandability, such as the cost and¶ availability of land and the sensitivity of surrounding land¶ uses, can be assessed objectively, whereas others cannot.¶ This is one reason why airport planning and expansion¶ decisions have traditionally been made at the local level.¶ Given the close coupling between such decisions and those¶ related to demand management, it is appropriate for the¶ same entity to make both.¶ • Valuation of competing goals. Demand management¶ involves complex trade-offs between competing goals,¶ including delay reduction, schedule convenience, competitiveness, equity, and service stability. Different regions will¶ place different values on these goals. Localizing demand¶ management policy increases the opportunity to design¶ programs that reﬂect these differences.¶ • Competitiveness. Demand management policies can reduce¶ competition between airlines serving a given airport as well¶ as create entry barriers for airlines seeking to initiate service.¶ Although such outcomes are rarely desirable, the severity of¶ their consequences varies according to how competitive the¶ airport is to begin with, the availability of alternative airports¶ nearby, and, in some cases, the availability of competitive¶ modes. It follows that the weight given to preserving competition in formulating demand management programs¶ should vary from airport to airport.¶ A third rationale for demand management being determined at the local level is that, for the most part, delay is a local¶ problem. It is the local population and economy that experience the brunt of delay impacts. Although high delays at one¶ airport can propagate throughout the system, most of the delay¶ experienced in the United States is not propagated. Moreover,¶ the airlines that operate at a high-delay airport recognize the¶ system-wide impacts of the delays and will certainly express¶ these—both explicitly and behaviorally—to local policymakers. There is also anecdotal evidence from places such as¶ San Francisco, New York, and Boston that if demand management were made a local responsibility, it would be embraced¶ by many of the localities where it may be needed.¶ To ensure that a solution developed to solve a local delay¶ problem does not have the effect of making the situation worse¶ downstream at other airport(s), the delay modeling used to¶ develop the delay triggers at an airport would account for the¶ impact on other airports.¶ Fourth, local responsibility would result in a variety of¶ approaches being tried. Much can be learned from this process.¶ Just as states are the laboratories of democracy, airports could¶ become laboratories for demand management. Our limited¶ experience with airport demand management in this country,¶ as well as the limited success of attempts at it to date, suggests¶ that there is much to learn

## BEBS CP

### 1NC Solvency

#### A Best-Equipped/Best-Served model jumpstarts NextGen—breeds innovation, incentivizes investment, and allows early progress

Poole 12Robert, Searle Freedom Trust Transportation Fellow and Director of Transportation Policy @ Reason Foundation, ‘How to implement “Best-Equipped/Best Served”, Getting GPS backup onto the national agenda’, 5/21/12, <http://reason.org/news/show/air-traffic-control-reform-news-93>

The equipage conundrum looms over NextGen as an unresolved problem. Airlines and business jet operators don’t want to shell out for expensive equipment years before they will derive any tangible benefits from it (e.g., time and fuel savings). They also tend to hang back in hopes that if they are among the last to equip, they will benefit from both technology improvements and lower unit cost as vendors expand volume and exploit economies of scale. The recent FAA reauthorization bill allows the FAA to develop public-private partnerships that will permit entities such as Nexa Capital’s proposed Equipage Fund to buy, say, ADS-B boxes and lease them to aircraft operators, with payments to begin only once the FAA’s Air Traffic Organization (ATO) has in place the procedures and ground equipment to provide operator benefits. That will definitely help. But the other key incentive that’s been much talked about—but thus far ignored by FAA—is something called “Best-Equipped/Best-Served” (BEBS). The idea is for the ATO’s controllers to give priority to aircraft that are equipped with a specified level of NextGen equipment, thereby providing their operators with a competitive advantage. At last month’s Aviation Week NextGen conference, I talked with a number of people about how BEBS might be implemented. Gary Church, of Aviation Management Associates, followed up our conversation with a four-page concept paper outlining a possible way forward. There is a strong ethos among controllers to retain the traditional first-come/first-served modus operandi. And it’s not just a tradition: Church points out that it comes right out of the FAA Air Traffic Controller Handbook. But he also points out that the relevant section (7110.65, Paragraph 2-1-4) provides for 10 exceptions, including aircraft in distress and diverted flights. The FAA—without needing legislation or rulemaking—could add an 11th exception, such as “NextGen equipped aircraft.” That definition could change over time, but might start out, he suggests, as aircraft with RNP, ADS-B, and Data Comm. Qualified aircraft could be identified as such on their flight plans, so as to be easily recognized by controllers. All well and good, you might say, but there is still the problem of controllers having to deal with a mixed fleet. Re-sequencing airborne aircraft so that the equipped ones would have priority in the landing sequence poses a lot of practical difficulties at this early stage of NextGen. To deal with this, Church suggests beginning BEBS at departure airports, allowing NextGen-equipped aircraft to go to the head of the departure queue. Especially at routinely congested airports like those in New York, this could provide a very real competitive advantage to those that are equipped, exactly as BEBS is intended to do. And in fact, that is what Nav Canada has been doing as it introduces ADS-B into airspace that previously offered only “procedural” spacing of aircraft—first for the Hudson Bay polar routes and now across the North Atlantic past Greenland. Only aircraft with ADS-B and controller-pilot data link (Data Comm) are allowed to use the high-altitude routes over Hudson Bay that provide optimal fuel burn. Initially for the North Atlantic, Nav Canada’s BEBS will apply only during climb-out to cruising altitude, but will later be extended to provide much closer in-trail spacing than is permissible with non-precise procedural separation. Other people I spoke with at the conference proposed additional ideas for using BEBS to incentivize equipage. One suggestion was that once an airline has equipped a target percentage of its fleet (e.g., 60%), then its entire fleet would receive BEBS priority. Another suggestion was to offer closer spacing on arrivals to equipped planes from the same airline at places where many such planes are likely to be approaching in sequence—at large hubs with 60% or more traffic from a single airline (e.g., ATL, CLT, DEN, DFW). But those suggesting these ideas expected that FAA would not approve such proposals, fearing political opposition in Congress from advocates for non-equipped airlines. If that’s true, and I think it probably is, here is yet another example of how FAA’s current governance and funding model is an obstacle to timely achievement of NextGen’s benefits. BEBS is being implemented by de-politicized ANSPs in a growing number of other countries. Because they are no longer funded by annual appropriations or micro-managed by legislative bodies, these self-supporting ANSPs can make business decisions without fear of being second-guessed or overruled by politicians. If that were the case in this country, the ATO could make business decisions for sound business reasons, subject only to arm’s length safety regulation. And BEBS would be implemented here, as it is being implemented elsewhere.

### 2NC Solvency

#### BEBS means immediate NextGen solvency—allowing equipped planes to take flight creates incentives for faster development and cost-effective transition

Poole 10 Robert, Searle Freedom Trust Transportation Fellow and Director of Transportation Policy @ Reason Foundation, “Will "Best-Equipped, Best-Served" Fly?”, 2/28/10, <http://reason.org/news/show/air-traffic-control-feb-2010>

The chicken-or-egg problem of "equipage" for NextGen is very real, and I've written about it a number of times in this newsletter. The clever people at the Joint Planning & Development Office who have thought up the key concepts that comprise NextGen have a proposed solution. It's called Best-Equipped, Best-Served (BEBS). This concept of operations calls for giving priority to those aircraft equipped with various NextGen capabilities over those that are not so equipped. Hence, there would be tangible benefits, not 15 years from now when everyone is equipped, but right from day one. Mike Harrison devoted his editorial in the Fall 2009 issue of The Journal of Air Traffic Control to explaining how BEBS might work. For example, planes equipped for RNP 0.1 (able to maintain a desired flight track to within 0.1 n.mi.) would be given a continuous descent arrival whenever they requested one, and other traffic, if necessary, would be vectored out of the way. Aircraft equipped with a data link integrated with its flight management system (FMS) computer would be able to accept clearances and changed flight plans automatically, reducing controller workload and hence saving the system money. Again, they would get unconstrained flight track clearances, which other aircraft would be managed to accommodate. Datalink-equipped planes could also be released first from gate holds. Aircraft equipped with ADS-B could use both of a pair of closely spaced parallel runways in non-visual conditions, but others could not. And so forth. I think those incentives might well spur faster equipage. And as Harrison points out, there are precedents. When instrument landing systems (ILSs) were first installed, "aircraft that equipped were able to land in lower visibilities while others needed to go to their alternate airport." Likewise, heads-up displays and enhanced vision allow for departures and landings at lower minimums. Yet today's ATC system operates almost entirely on a first-come, first-served basis in which all aircraft are treated as interchangeable units, regardless of capabilities. It will require a significant cultural change, if you will, to shift from this to BEBS. Fundamentally, two different concepts of fairness are involved in this choice. The egalitarian version of fairness would insist that all planes be handled equally. We see this in surface transportation in the egalitarian opposition to HOT lanes and express toll lanes that let those who buy a transponder and are willing to pay get faster, uncongested trips. The alternative concept of fairness says we should reward those who, at their own expense, equip their planes to take advantage of the new system capacities, thereby speeding up the transition to a more cost-effective and higher-capacity system.

#### BEBS key to NextGen—equipment funding forestalls progress

Gibbons 11 Glen, editor and publisher, “Air Traffic Control Modernization: FAA, NextGen, GNSS, and Avionics Equipage” 4/31, <http://www.insidegnss.com/node/2582/>

The weak spots in this vision have been FAA’s capability to implement such a complex and ambitious project on schedule as well as a finding a method to expedite the purchase, installation, and certification of the necessary avionics equipment on board the nation’s air fleets. Much of the $1 billion–plus per year already spent has gone into supporting technology development and equipment standards, and deploying NextGen capabilities at airports and FAA ATC facilities. Airlines and aircraft operators will be expected to pay for the cost of mandated NextGen equipage of their own. As the FAA observed in the 2011 version of the NextGen Implementation Plan released last month, “Just as we rely on funding for our own work as a Department of Transportation agency, we must synchronize our investments with those of other government agencies, airport authorities and the private-sector aviation community. “If one of the major contributors falters in its commitment to NextGen, the effectiveness of the others’ commitments could be at risk. In particular, achieving NextGen’s promise requires that operators equip their aircraft to use the systems and procedures that NextGen delivers.” (emphasis added) A recent Government Accountability Office (GAO) analysis of NextGen reached a similar conclusion. In a November 22, 2010, letter to John Mica, chairman of the House Committee on Transportation and Infrastructure, and Thomas Petri, chairman of that committee’s Subcommittee on Aviation Committee, Gerald L. Dillingham, GAO director for physical infrastructure issues, wrote, “We recently reported that FAA has yet to make many key decisions required to shape and determine the future direction of NextGen. We identified key decisions, such as how to provide incentives for operators to install avionics equipment on their aircraft where a clear business case is not evident . . .” “Absent decisions in these key areas, it is unclear how or whether FAA can achieve its plans for implementing NextGen capabilities. For example, without a clear strategy and decisions about how bestequipped, best-served air traffic management policies will work in practice; or what financial incentives for equipage, if any, will be offered, it is not clear when or to what extent aircraft operating in the national airspace system will be equipped to take advantage of capabilities being implemented on the ground.”

## \*\*DA Links\*\*

## Politics Links

### Plan Popular

#### Innovative funding mechanism makes the plan popular in congress

Ronald Utt 12, Utt holds a doctorate in economics from Indiana University and a bachelor's degree in Business Administration from Penn State University, “Opportunities for Private Sector Participation in Surface Transportation Investment and Operations”, <http://www.heritage.org/research/reports/2012/01/can-public-private-partnerships-fill-the-transportation-funding-gap>, January 13th, 2012,

To date, all of these projects have been developed and initiated by states, private investors, or a combination of the two, often with federal support, such as TIFIA grants and permission to build on the interstate right-of-way. With federal transportation funding limited by macroeconomic budget concerns, many in Congress are looking to be more proactive. Both the House and Senate reauthorization draft proposals welcome and encourage greater private-sector involvement in transportation investment.

### **Plan Unpopular**

#### **FAA regulation changes controversial in congress – last extension proves**

Wollack 11 (Leslie, staff writer at the National League of Cities, August, 1st, 2011, “Congressional Impasse on Airport Legislation Continues”, <http://www.nlc.org/news-center/nations-cities-weekly/articles/2011/august/congressional-impasse-on-airport-legislation-continues>, )

As the Congressional impasse over an extension of federal airport legislation continues, funds for current and future municipal airport improvements cannot be distributed by the Federal Aviation Administration (FAA) and current revenues are going to the airlines rather than the Airport Trust Fund for the future. Construction funds for municipal airports across the country have been held up by the FAA, due to the shutdown of the government program for the first time in its history.¶ The House and Senate have been unable to reach agreement on another extension of federal aviation programs, which expired on July 22. Congress has passed 19 extensions since September 2009, when the initial legislation expired. ¶ The current disagreement between the House and Senate centers around whether or not to pass a straight extension of current programs or include several policy changes, which were contained in the House-passed extension. ¶ House Transportation Committee Chairman John Mica (R-Fla.) is insisting that the House will not adopt a clean extension of the programs. Some of these contested provisions, including labor issues, have held up agreement on the FAA bill since it expired in September 2009. New to the controversy is the House-passed phasing out of the Essential Air Services Program, which provides subsidies for small airports that would otherwise not receive commercial airline service. ¶ For local governments this means that airport taxes included in airline tickets are no longer authorized and funds collected by airlines are not going into the Airport Trust Fund and will not be available for future airport improvement projects. The FAA also cannot release funding for current projects promised to municipal airports. ¶ NLC supports a straight extension of the current program and opposes phasing out the Essential Air Services program. ¶ NLC joined with the National Association of Counties (NACo) in urging Congress to adopt a short-term extension of the FAA bill without policy amendments. ¶ “At a time when Congress is debating budget reductions, it is in no one’s interest to permit the Airport Trust Fund to lose $25-$30 million daily or to halt hundreds of capital projects at the airports our members own and operate,” said NLC Executive Director Donald J. Borut in a joint letter with NACo Executive Director Larry Naake to House and Senate leaders. ¶ “We understand that many of the issues in the House and Senate reauthorization legislation have been resolved with only four or five major issues that still need to be addressed,” the letter stated. “A clean extension that does not include any of these unresolved issues needs to be passed by both the House and Senate in order to stop the hemorrhaging of Airport Trust Fund tax receipts and restart airports projects that will put back to work thousands of American citizens. Conferees should immediately meet to work out a final agreement after a clean extension is adopted.”

#### More evidence – compromise over FAA policy nearly impossible

Barrett 12 (Ted, Senior Congressional Producer @ CNN, February 6th, 2011, “After much delay, Senate clears FAA bill”, <http://articles.cnn.com/2012-02-06/travel/travel_faa-funding_1_faa-funding-measure-senate-committee?_s=PM:TRAVEL>, )

After passing 23 temporary extensions, the Senate voted 75 to 20 Monday to approve a long-term funding bill for the FAA and sent it to the president for his expected signature.¶ The measure provides about $16 billion a year for FAA operations, airport construction and modernization. It includes safety measures, such as a new satellite-based system for air traffic control, as well as other aviation programs, like one that subsidizes air travel to rural areas.¶ Negotiations over the bill repeatedly stalled over contentious labor issues that congressional leaders finally compromised on in January. Last summer, airport construction projects were halted abruptly when funding temporarily lapsed after Congress couldn't agree on a new extension.¶ "Compromises in the current atmosphere are not easy," said Sen. Jay Rockefeller, D-West Virginia, who chairs the senate committee that handled the measure.¶ "This has been a long process," agreed Sen. Kay Bailey Hutchison of Texas, the top Republican on the committee. Hutchison said she was pleased to get a four-year funding measure finalized because it will provide stability to the industry.

## Spending Links

#### Implementing NextGen effectively costs even more than estimates

Gibbons 11 (Glen, editor and publisher of *Inside GNSS* and the managing partner of Gibbons Media & Research LLC, April 30th, 2011, “Air Traffic Control Modernization: FAA, NextGen, GNSS, and Avionics Equipage”, <http://www.insidegnss.com/node/2582/>, )

The original estimate for implementing NextGen by 2025 — ground infrastructure, airport equipment upgrades, aircraft avionics, and so forth — was $40 billion. The FAA projected that the agency’s total spending over the first 10 years would range from $8 billion to $10 billion, and from $15 to $22 billion through 2025.¶ A recent analysis, commissioned by the FAA’s Joint Planning and Development Office (JPDO) overseeing NextGen implementation, modeled a variety of scenarios that assumed different levels of ground capability and aircraft capability over the long term. According to this analysis, implementing the highest performance levels envisioned in the NextGen Integrated Work Plan for ground and aircraft capabilities by 2025 could increase NextGen’s costs significantly beyond $40 billion.

## \*\*CASE\*\*

## Solvency

### 1NC Solvency

#### FAA key to NextGen R&D – the plan isn’t sufficient

Appleby 3-12 (John, Program Manager, Borders & Maritime Security Division, Homeland Security Advanced Research Projects Agency, Science & Technology Directorate, “Next Generation Air Transportation System”, <http://www.jpdo.gov/library/20120315_UAS%20RDandD%20Roadmap.pdf> jh)

Once the R&D challenges have been fully vetted, the next phases of planning will tackle the highest priority challenges first. The NextGen UAS R&D Technical Committee will form ad hoc working groups composed of subject matter experts, including representatives of the partner agencies as well as non-agency experts as appropriate. These working groups will examine ongoing and planned R&D efforts and other relevant sources of information from stakeholders, including partner agencies and other government and nongovernment entities, in order to identify programs that may be leveraged together to more efficiently address each high priority challenge. A fully integrated plan of research programs will be developed based on this information and recommended to decision makers. This plan will leverage already funded work in the partner agency portfolios as well as outside efforts. When the planned work is performed in close coordination with maximum sharing of information, and planned demonstrations where appropriate, it will allow the R&D challenges to be addressed in the most timely and costeffective manner possible. The full participation of the FAA and other NextGen partner agencies in the formulation of these plans will ensure that the FAA receives the results in a form that is most useful to expedite decision making processes. The execution of this research management plan is an ongoing process that will be carried out over the coming years until fully integrated UAS operations are enabled in the NextGen NAS. The overall effort described in this Roadmap is intended to produce an actively managed process, rather than a static document. The present NextGen UAS RD&D Roadmap, version 1.0, serves as the baseline for future efforts. Version 2 of the NextGen UAS RD&D Roadmap, to be completed by September 30, 2012, will reflect the vetted and prioritized challenges and interdependencies identified among performing agency R&D plans and programs to address the highest priority R&D challenges. Future versions of the Roadmap will be published as needed to reflect the evolution of this effort as multiagency R&D plans are executed, challenges are successfully addressed, and new challenges emerge.

#### Too expensive: Over $40 billion

Gibbons 11, Glen. editor and publisher of Inside GNSS and the managing partner of Gibbons Media & Research LLC, internationally-known expert and commentator on the development, policies and programs of the global navigation satellite systems, Air Traffic Control Modernization: FAA, NextGen, GNSS, and Avionics Equipage. April 30, 2011. http://www.insidegnss.com/node/2582

A recent analysis, commissioned by the FAA’s Joint planning and Development office (JDPO) overseeing NextGen implementation, modeled a variety of scenarios that assumed different levels of ground capability and aircraft capability over the long term. According to this analysis, implementing the higest performance levels envisioned in the NextGen Integrated Work Plan for ground and aircraft capabilities by 2025 could increase NextGen’s costs significantly beyond $40 billion.

#### Tech Fails

Savain 10, Louis, April 24, 2010. <http://rebelscience.blogspot.com/search?q=nextgen>.

There is no question that the FAA's NextGen effort will fail because of their chosen software model. Current approaches to software construction are crap, primarily because deterministic timing is not an inherent and fundamental part of the programming model. As a result, complex software systems used for automation become unreliable as their complexity increases. Since NextGen falls into the category of extremely complex software systems, it's a guarantee that it will be riddled with bugs, including potentially dangerous and/or costly bugs.

#### NextGen Fails: ERAM, Training, and Organizational Barriers

Karp 10, Aaron. Senior Editor at Air Transport World, 2007 Aerospace Journalist of the Year. December 24, 2010. http://atwonline.com/international-aviation-regulation/news/dot-ig-faa-faces-serious-nextgen-challenges-1223

US Dept. of Transportation Inspector General Calvin Scovel left a lump of coal in FAA's Christmas stocking, asserting this week in a letter to Congress that the agency "faces several organizational, policy, logistical and training challenges" in implementing the NextGen satellite-based ATC system that tops FAA's agenda. In particular, he noted that implementation of Lockheed Martin's En Route Automation Modernization system, designed to replace the En Route Host computer system that manages air traffic in US airspace, "has experienced software problems and delays at key sites." FAA was scheduled to deploy ERAM to all en route facilities by the end of this year at a cost of $2.1 billion. "However, due to software problems at its initial operating site [Salt Lake City], ERAM is experiencing cost increases and schedule slips that could impact other transformational NextGen programs," the DOT IG stated. "Delays with ERAM will have a cascading effect on other fundamental NextGen programs now and well into the future." Scovel said examples of ERAM problems include "interface issues between the key sites and other air traffic facilities, radar processing failures, errors that tag flight data to the wrong aircraft, and hand-off problems between controllers." He added that a DOT IG review and a study on ERAM conducted by Mitre Corp. "suggest it will take between 3 to 6 years and as much as $500 million more to complete the [implementation] effort. A cost escalation of this magnitude will affect FAA's capital budget and could force the agency to reallocate funds from other modernization projects to pay for ERAM." In addition, he predicted that "delays in implementing ERAM will force FAA to sustain aging equipment longer than planned and retrain controllers so they are familiar with both the legacy and ERAM systems." But ERAM is not FAA's only problem regarding NextGen, according to Scovel. He noted that in order to successfully implement the high-tech ATC system, "FAA will have to effectively work across diverse agency lines of business—including its Aircraft Certification Service, Flight Standards Service and Air Traffic Organization—which it has not done effectively in the past. For example … organizational barriers and fragmented efforts [have] hindered FAA's process to approve new flight procedures." It also must conduct updated safety assessments "for new, complex runway configurations—such as closely spaced parallel runways and converging or intersecting runways—at several busy airports," the IG pointed out. "While such assessments are needed, they could take up to 4 years to complete." Scovel added that "FAA is challenged to develop effective training programs on new NextGen systems and procedures. Our work has shown that FAA's training often consists of briefings rather than comprehensive courses on RNAV/RNP. As FAA begins developing more advanced airspace routes in metropolitan areas, it will face difficulties with providing extensive training for controllers—many of whom are recent hires assigned to complex facilities, such as New York and Chicago."

#### FAA Fails: Scheduling and Management

James 11, Kevin. Executive Gov. FAA NextGen Upgrade Effort Full of Problems, Oct 6, 2011. http://www.executivegov.com/2011/10/faa-nextgen-upgrade-effort-full-of-problems/

Federal Aviation Administration executives had grim reports on the airline industry during Wednesday’s meeting with Congress. The FAA representatives cited serious problems with budgeting, deadlines and management of its billion dollar upgrade of the air traffic control system, all of which are affecting the agency’s multi-stage NextGen effort. NextGen was developed to modernize all of the Cold-War era flight systems by the year 2025. Inadequate performance and goal tracking of NextGen is causing panic around the industry and on Capitol Hill. Congress has already allotted $3 billion dollars to the upgrade. FAA Inspector General Calvin Scovel noted that the higher level executives haven’t even developed a master schedule to help plan and manage NextGen. “Programs are left with no clear end state,” added Scovel. Delays and costs are a problem. The FAA’s En Route Automatic Modernization (ERAM) system, designed to provide communications and generate display data for air traffic controllers, is about five years behind schedule and as much as $500 million over budget, according to a study by Mitre Corp.

### Solvency Extensions – Too Expensive

#### Too expensive: won’t be completed till 2025 and Bad Management

Hoover 11, J. Nicholas. Senior Editor InformationWeek Government, Problems Plague FAA's NextGen Air Traffic Control Upgrade Delays, cost overruns, and other problems threaten to push the multi-billion air traffic control upgrades off track. October 5, 2011. http://www.informationweek.com/authors/J-Nicholas-Hoover

The Federal Aviation Administration continues to struggle with budgets, deadlines, and management of its multi-billion dollar upgrades to the nation's air traffic control systems, government officials and industry executives told Congress on Wednesday.¶ The long-term, multi-stage NextGen effort, which has been underway for several years and isn't slated to be complete until approximately 2025, aims to improve American aviation by upgrading numerous Cold War-era flight systems. But the effort has long suffered problems. ¶ Within the last couple of years, the FAA has instituted a number of changes to improve NextGen's management, including working closely with an advisory group made up of users and other constituents, changing the NextGen program so that it directly reports to the FAA's deputy administrator, and centralized program management for the effort.¶ However, ongoing problems continue to threaten the program's costs and timeline and have kept private industry in the dark about the program's benefits and schedule, the officials and executives told the House Transportation and Infrastructure Committee.¶ As a result, according to Lee Moak, president of the Air Line Pilots Association, a group that represents the interests of 53,000 pilots, and Ed Bolen, president and CEO of the National Business Aviation Association, manufacturers are building and delivering future-proofed planes and carriers are putting new processes in place but can't take advantage of all their capabilities because of delays in or improper management of NextGen.¶ For example, numerous carriers are ready to adopt procedures that they co-developed with the FAA to provide "smooth, fuel efficient, low emission descents that reduce [the need for] communications and enhance safety during good weather conditions" and others that help out in poor weather conditions, Bolen said. But the FAA doesn't even have plans or approval processes to permit planes to follow these procedures even as jet fuel costs continue to rise.¶ In another case, the En Route Automatic Modernization (ERAM) system, a computer system to provide communications and generate display data for air traffic controllers, is about 5 years behind schedule and as much as $500 million over budget, according to a study by Mitre Corp.¶ According to FAA Inspector General Calvin Scovel, early testing of ERAM revealed problems with safety management, and controllers had to rely on cumbersome workarounds to overcome those issues. That problem snowballed. "ERAM's problems are the direct result of poor program management," Scovel said. "There was over-optimism that ERAM could be deployed in a year, and FAA didn't begin to mitigate some risks until three years after problems began surfacing. This was a program that was hobbled out of the gate." Even with all those problems, and despite the significant program risks, the FAA still hasn't conducted an assessment of ERAM's dependencies or impacts on other program costs.¶ At a higher level, Scovel noted, the FAA has yet to develop an integrated master schedule to help manage NextGen, meaning that "programs are left with no clear end state."¶ The officials and executives pointed to a number of causes for the delays and cost overruns, including unstable requirements, poor program and contract management, the inability of the FAA to bring all constituents into the decision-making process, training, and a lack of communication.¶ Now, added to that list might be the fiscal environment. Amidst all the turbulence, Congress is considering slashing spending at the Federal Aviation Administration between 5% and 10%, which could further delay implementation of some pieces of NextGen.¶ "There's no question that reduced funding will cause delays, and that the delays will cost us more in the end in terms of lost benefits as well as increased costs of deployment," FAA deputy administrator Michael Huerta told legislators, adding that Congress should fund the FAA to the levels suggested by President Obama. "In the end, to be able to meet the timeline set out, the President's funding level is really what we need to get us there."¶ The government has already spent nearly $3 billion on NextGen, and the effort will likely cost into the tens of billions of dollars.

### Solvency Extensions – FAA Fails

#### FAA Fails: Technology and Planning

CATO 10, Robert W. Poole and Chris Edwards. Airports and Air Traffic Control, June 2010. http://www.downsizinggovernment.org/transportation/airports-atc

While organized labor has created management challenges for the FAA, so has the implementation of new technologies. Delays and cost overruns on major technology projects have been common. For example, the Advanced Automation System project was launched in the early 1980s and was originally expected to cost $2.5 billion and be completed by 1996. But by 1994, estimated project costs had soared to $7.6 billion and the project was seven years behind schedule.7 The FAA terminated some parts of the AAS program and restructured others, but $1.5 billion of spending ended up being completely wasted.¶ More recently, a 2005 study by the Department of Transportation's Office of Inspector General looked at 16 major air traffic control upgrade projects and found that the combined costs had risen from $8.9 billion to $14.5 billion.8 The cost of the Standard Terminal Automation Replacement System project had jumped 194 percent to $2.7 billion and was seven years behind schedule. The OIG said that the STARS project was "facing obsolescence" even before it was completed.9 Meanwhile, the cost of the Wide Area Augmentation System project had jumped 274 percent to $3.3 billion and was 12 years behind schedule. A Government Accountability Office analysis in 2005 found similar cost overruns and delays in these projects.10¶ Delays and cost overruns have not been uncommon in federally subsidized airport projects either. For example, Denver's new international airport finally opened in 1995 after many delays and huge cost overruns. The project was originally supposed to cost $1.7 billion but ended up costing almost three times as much at $4.9 billion, with $685 million coming from federal taxpayers.11¶ In sum, federal funding of airports and the operation of the nation's ATC system have not been models of efficiency over the decades.

#### FAA Fails: Audits

Namowitz 12, Dan. Aircraft Owners and Pilots Association. GAO report focuses on NextGen costs, scheduling. http://www.aopa.org/advocacy/articles/2012/120218gao-report-focuses-on-nextgen.html

Partial FAA shutdown of 2011 seen as a cause

Costs that exceed estimates by $4.2 billion and widespread scheduling setbacks highlight a new Government Accountability Office report to Congress evaluating FAA acquisition programs to implement the transition to the Next Generation Air Transportation System. The GAO report faulted the FAA for its methods that developed cost estimates, and for failing to adopt “best practices” that the GAO had previously recommended for managing FAA programs. The GAO examined 30 acquisition programs associated with the transition to NextGen. The $4.2 billion in higher costs came primarily from 11 programs that account for 60 percent of total acquisition costs of $17.7 billion. Fifteen of 30 programs faced delays that average four years, the report said, adding that overall NextGen implementation could be impeded as a result. “The three programs with the largest cost increases—totaling more than $4 billion—are key to ATC modernization,” it said. To evaluate FAA cost estimating and scheduling practices, the GAO conducted in-depth reviews from August 2010 to February 2012 of the Automatic Dependent Surveillance-Broadcast (ADS-B) system, the Collaborative Air Traffic Management Technologies (CATMT) system, the System Wide Information Management (SWIM) system, and the Wide Area Augmentation System (WAAS)—all “baseline” NextGen programs. The audits came at the stage of NextGen development focused on implementing midterm improvements by 2018, and long-term improvements by 2025. NextGen planning began in 2003.

## Economy

### 1NC Economy Frontline

#### **No impact – airline industry resilient**

Rice 11 (Kate, staff writer at Travel Pulse, September 8th, 2011, “OAG Finds Airlines Resilient in Face of 30 Years of Crises”, [http://www.travelpulse.com/oag-finds-airlines-resilient-in-face-of-30-years-of-crises.html#](http://www.travelpulse.com/oag-finds-airlines-resilient-in-face-of-30-years-of-crises.html), )

OAG, which provides detailed data about the airline industry, is reporting in its OAG World Crisis Analysis that the airline industry has shown surprising resilience given the crises it has had to deal with over the past 30 years. These include terrorism, pandemics and natural disasters.¶ Despite that, according to the report, global airline capacity has grown on average 3.1 percent per year since 1979. OAG also finds that air travel is largely immune to regionalized events such as natural disasters, conflicts and fuel price spikes. In fact, in the vast majority of crises, there was a negligible impact in global airline capacity; regional level capacity dropped less than 4 percent and recovered within three months.¶ From 1979 to Sept. 11, 2001, world airline capacity was steadily increasing at an average of 5 percent, or 94 million seats, per year. Since the 9/11 terrorist attacks on New York and Washington, D.C., world capacity has grown an average of 2.6 percent, or 81 million seats, per year. The World Trade Center attacks in 2001 and the Global Banking crisis of 2008-2009 are the only two events since 1979 that caused significant decreases in global air capacity, averaging a 3 percent and 9 percent drop in capacity and recovering within 36 months and 24 months, respectively. Regionalized events such as the Gulf Wars, swine flu and volcanic eruptions caused on average less than a 4 percent drop in regional airline capacity that recovered within three months or less, with a negligible impact on global capacity. Brazil, Russia, India, Indonesia, Middle East and China, where growth of the middle class and personal wealth is contributing to increased air travel demand, are driving continued air capacity growth.

#### NextGen can’t solve for congestion or the biggest cause of delays: Weather

Spence 9, Charles, GAN Washington D.C. Correspondant. NextGen: Will it cause more problems for GA than it solves?, September 21, 2009. http://www.generalaviationnews.com/2009/09/21/nextgen-will-it-cause-more-problems-for-ga-than-it-solves/

One reason the airline industry is eager to get NextGen operating is because of the massive delays their carriers suffer at major terminals. While NextGen will give more direct descent routing and closer spacing, this is just part of the equation. More runways and more airports must be available to accept increased traffic.¶ Today, about 70% of all delays are weather related. ADS-B may help to some degree, but weather will still be a factor in flight operations. Rep. John Mica (R-Fla.), ranking Republican on the House Committee on Transportation and Infrastructure, has said “while NextGen will offer some efficiencies, it will not solve congestion.” He added that while NextGen is expected to increase capacity by 20%, airline traffic is excepted to increase 40% to 50% over the next 10 years.¶ This startling observation, coupled with concern over equipment availability and costs — and the FAA’s plan to eliminate first-come, first-served in air traffic control — raises many questions to which general aviation interests will be seeking answers in the coming months and years.

#### Aviation is Not Key to the Economy

Whitelegg 3, John, PhD, Professor of Sustainable Transport at Liverpool John Moores University and Professor of Sustainable Development at University of York's Stockholm Environment Institute. The Economics of Aviation: a North West England perspective. April 2003. http://www.areco.org/Economics%20of%20Aviation.pdf

The industry also claims that its own activities generate or support large numbers of jobs in other sectors of the economy. This claim is based on a flawed methodology (the multiplier effect) which routinely double counts jobs in other sectors and has no place in a rigorous evaluation of the economic benefits of aviation. Aviation has a number of well documented adverse environmental consequences. This report provides detailed evidence that, in addition to environmental disbenefits, aviation is very poor value for money. The debate about the future of aviation would be a much more open and transparent debate if economic realities were factored in and economic assertions factored out. There is a statistical correlation between increased traffic flows and economic growth, but this does not necessarily mean that there is a causal link whereby improved transport facilities necessarily lead to more economic activity. The increased levels of travel could be a consequence of economic growth rather than the other way round. The SACTRA report concludes that although there are theoretical reasons why improved transport infrastructure could lead to more economic activity, the empirical evidence for this is weak. In particular, they conclude that in a mature economy with well developed transport systems such as the UK, any contribution to economic growth from improved transport is likely to be modest. The aviation industry is heavily subsidized.

#### Turn: Economic Growth causes Consumerism

Ockenden 91, Sandy. Member of the Victoria International Development Education Association, http://www.eric.ed.gov/PDFS/ED360250.pdf

Recognize the implications of the lifestyles of citizens in developed countries, and the power that consumers have to create change for a better world, to be agents of positive development. Development is seen as a four faceted process. This model implies that development is an approach to change rather than a move to a certain standard of living. Positive development involves: (1) awareness of interconnectedness and interdependence in the global community, (2) awareness of cultural, social, and environmental costs of economic growth, (3) equitable distribution of global wealth and decision making, and (4) empowerment of individuals and communities to make socially just choices and to take responsibility for their choices. Economic growth and consumerism are interconnected in that social and economic systems are built on consumerism. The consumption of goods helps drive the economy. Consumerism and economic growth have an enormous impact on the world, yet seldom are questioned by society. By using power as consumers wisely people can take action for positive development both locally and globally. Environmental, economic, and human costs are explored, as are advertising, and waste management.

#### Alt Cause to Competitiveness: Education

Robinson 11, Dan. Voice of America News. Obama: Education Key to US Competitiveness. February 17, 2011. http://www.voanews.com/content/intel-chief-to-join-white-house-jobs-council-116475713/135250.html

President Obama used a visit to the U.S. West coast this week to highlight the importance of improving education standards to ensure future U.S. competitiveness. He met with leaders of American technology companies, and visited high-tech facilities at Intel Corporation in Oregon.¶ Obama's visit to Intel, and private talks the previous day with technology business leaders, were part of his drive to underscore the private sector role in driving economic recovery and highlight the role of education in American competitiveness.¶ After touring Intel's advanced semiconductor facility with CEO Paul Otellini, the president returned to a major theme of his State of the Union Address - that future economic strength depends on making America's education system competitive with other nations.¶ Even as Americans learn to "live within [their] means" in fiscal terms, Obama said, the nation has no choice but to invest in the future, and that means focusing "like a laser" on education.¶ "We can’t win the future if we lose the race to educate our children. Can’t do it. In today’s economy, the quality of a nation’s education is one of the biggest predictors of a nation’s success. It is what will determine whether the American Dream survives."¶ The president said education, and investment in research and development, are key to a future in which technological innovations begin in the United States rather than overseas.¶ "If we want the next technological breakthrough that leads to the next Intel, to happen here in the United States - not in China or not in Germany, but here in the United States - then we have to invest in America’s research and technology; in the work of our scientists and our engineers."¶ The president has named Otellini to serve on a newly-created Council on Jobs and Competitiveness, which is headed by another business executive, Jeffrey Immelt of General Electric. ¶ Otellini has been among critics of Obama administration policies, saying they have failed to create enough business and consumer confidence. In a recent speech to the U.S. Chamber of Commerce, Obama urged companies to "get off the sidelines" and do more to help create jobs.¶ Introducing the president, Otellini referred to what he called a need to "re-ignite" innovation as a means to create jobs and wealth, and pointed to Intel investments in education, particularly in science and math.¶ "Building such a future requires more than just investments in technology and manufacturing," said Otellini. "We also need to invest in educating and training the workers that will invent and manage the industries of the future."¶ In his remarks in Oregon, President Obama once again touted his "Race to the Top" initiative, which challenges school systems across the country to raise standards in return for federal aid. ¶ He also pointed to his STEM (Science, Technology, Engineering, Math) initiative, an effort to train 100,000 new teachers over the next decade, along with steps designed to make college more affordable and efforts re-vitalize community colleges across the nation.¶ At a private dinner Thursday in San Francisco, Obama met with a dozen technology executives and innovators, including Steve Jobs of Apple, Mark Zuckerberg of Facebook, and the CEOs of Twitter, Google and Yahoo.¶ Back in Washington, the president has a fight on his hands with opposition Republicans over his "Win the Future" innovation drive. They have labeled many of his investment initiatives as "big spending" that can't be supported in difficult economic times.¶ Even as he proposes spending cuts in his 2012 budget aimed at bringing down the $1.3 trillion federal deficit, and more than $14 trillion national debt, Mr. Obama has vowed to fight to preserve investments in what he calls core areas vital to securing U.S. competitiveness.

#### No impact to hegemony: regional powers can fill in

Friedman 10, Benjamin, Research Fellow in Defense and Homeland Security Studies, Cato Institute. Military Restraint and Defense Spendings. July 20, 2010. http://www.cato.org/testimony/ct-bf-07202010.html

Another argument for high military spending is that U.S. military hegemony underlies global stability. Our forces and alliance commitments dampen conflict between potential rivals like China and Japan, we are told, preventing them from fighting wars that would disrupt trade and cost us more than the military spending that would have prevented war. The theoretical and empirical foundation for this claim is weak. It overestimates both the American military's contribution to international stability and the danger that instability abroad poses to Americans. In Western Europe, U.S. forces now contribute little to peace, at best making the tiny odds of war among states there slightly more so.7 Even in Asia, where there is more tension, the history of international relations suggests that without U.S. military deployments potential rivals, especially those separated by sea like Japan and China, will generally achieve a stable balance of power rather than fight. In other cases, as with our bases in Saudi Arabia between the Iraq wars, U.S. forces probably create more unrest than they prevent. Our force deployments can also generate instability by prompting states to develop nuclear weapons. Even when wars occur, their economic impact is likely to be limited here.8 By linking markets, globalization provides supply alternatives for the goods we consume, including oil. If political upheaval disrupts supply in one location, suppliers elsewhere will take our orders. Prices may increase, but markets adjust. That makes American consumers less dependent on any particular supply source, undermining the claim that we need to use force to prevent unrest in supplier nations or secure trade routes.9 Part of the confusion about the value of hegemony comes from misunderstanding the Cold War. People tend to assume, falsely, that our activist foreign policy, with troops forward supporting allies, not only caused the Soviet Union's collapse but is obviously a good thing even without such a rival. Forgotten is the sensible notion that alliances are a necessary evil occasionally tolerated to balance a particularly threatening enemy. The main justification for creating our Cold War alliances was the fear that Communist nations could conquer or capture by insurrection the industrial centers in Western Europe and Japan and then harness enough of that wealth to threaten us — either directly or by forcing us to become a garrison state at ruinous cost. We kept troops in South Korea after 1953 for fear that the North would otherwise overrun it. But these alliances outlasted the conditions that caused them. During the Cold War, Japan, Western Europe and South Korea grew wealthy enough to defend themselves. We should let them. These alliances heighten our force requirements and threaten to drag us into wars, while providing no obvious benefit.

#### Transition from Heg is Inevitable: Sustaining causes Violence, Instability, and Conflict

Pape 9, Robert A., Professor of Political Science at University of Chicago. The National Interest, Empire Falls. January 22, 2009. http://nationalinterest.org/article/empire-falls-2952

Clearly, major shifts in the balance of power in the international system often lead to instability and conflict. And America’s current predicament is far more severe. This time, our relative decline of 32 percent is accompanied, not by an even-steeper decline of our near-peer competitor, but rather by a 144 percent increase in China’s relative position. Further, the rapid spread of technology and technological breakthroughs means that one great discovery does not buoy an already-strong state to decades-long predominance. And with a rising China—with raw resources of population, landmass and increasing adoption of leading technology— a true peer competitor is looming. America’s current, rapid domestic economic decline is merely accelerating our own downfall. The distinct quality of a system with only one superpower is that no other single state is powerful enough to balance against it. A true global hegemon is more powerful still—stronger than all second-ranked powers acting as members of a counterbalancing coalition seeking to contain the unipolar leader. By these standards, America’s relative decline is fundamentally changing international politics, and is fundamentally different from Russia circa 1850 and Great Britain circa 1910. In current-U.S.-dollar terms—the preferred measure of the unipolar-dominance school—the United States has already fallen far from being a global hegemon and unipolarity itself is waning, since China will soon have as much economic potential to balance the United States as did the Soviet Union during the cold war. At the beginning of the 1990s, the United States was indeed not only stronger than any other state individually, but its power relative to even the collective power of all other major states combined grew from 1990 to 2000. Although the growth was small, America almost reached the crucial threshold of 50 percent of major-power product necessary to become a true global hegemon. So it is understandable that we were lulled into a sense of security, believing we could do as we wished, whenever and wherever we wished. The instability and danger of the cold war quickly became a distant memory. Near the time of the Iraq War, it would have required virtually every major power to actively oppose the United States in order to assemble a counterbalancing coalition that could approximate America’s potential power. Under the circumstances, hard, military balancing against the United States was not a serious possibility. So, it is not surprising that major powers opted for soft-balancing measures—relying on institutional, economic and diplomatic tools to oppose American military power. And yet we are beginning to see “the conflict of history” repeat itself. Even with less relative power, in the run-up to the Iraq War, people grossly underrated the ability of Germany, France, Russia and China, along with important regional powers like Turkey, to soft balance against the United States; for instance, to use the United Nations to delay, complicate and ultimately deny the use of one-third of U.S. combat power (the Fourth Infantry Division) in the opening months of the Iraq War. This is not yet great-power war of the kind seen in centuries past, but it harkens the instability that future unilateral efforts may trigger. The balance of world power circa 2008 and 2013 shows a disturbing trend. True, the United States remains stronger than any other state individually, but its power to stand up to the collective opposition of other major powers is falling precipitously. Though these worlds depict potential power, not active counterbalancing coalitions, and this type of alliance may never form, nonetheless, American relative power is declining to the point where even subsets of major powers acting in concert could produce sufficient military power to stand a reasonable chance of successfully opposing American military policies. Indeed, if present trends continue to 2013 and beyond, China and Russia, along with any one of the other major powers, would have sufficient economic capacity to mount military opposition at least as serious as did the Soviet Union during the cold war. And it is worth remembering that the Soviet Union never had more than about half the world product of the United States, which China alone is likely to reach in the coming decade. The faults in the arguments of the unipolar-dominance school are being brought into sharp relief. The world is slowly coming into balance. Whether or not this will be another period of great-power transition coupled with an increasing risk of war will largely depend on how America can navigate its decline. Policy makers must act responsibly in this new era or risk international opposition that poses far greater costs and far greater dangers. A COHERENT grand strategy seeks to balance a state’s economic resources and its foreign-policy commitments and to sustain that balance over time. For America, a coherent grand strategy also calls for rectifying the current imbalance between our means and our ends, adopting policies that enhance the former and modify the latter. Clearly, the United States is not the first great power to suffer long-term decline—we should learn from history. Great powers in decline seem to almost instinctively spend more on military forces in order to shore up their disintegrating strategic positions, and some like Germany go even further, shoring up their security by adopting preventive military strategies, beyond defensive alliances, to actively stop a rising competitor from becoming dominant. For declining great powers, the allure of preventive war—or lesser measures to “merely” firmly contain a rising power—has a more compelling logic than many might assume. Since Thucydides, scholars of international politics have famously argued that a declining hegemon and rising challenger must necessarily face such intense security competition that hegemonic war to retain dominance over the international system is almost a foregone conclusion. Robert Gilpin, one of the deans of realism who taught for decades at Princeton, believed that “the first and most attractive response to a society’s decline is to eliminate the source of the problem . . . [by] what we shall call a hegemonic war.” Yet, waging war just to keep another state down has turned out to be one of the great losing strategies in history. The Napoleonic Wars, the Austro-Prussian War, the Franco-Prussian War, German aggression in World War I, and German and Japanese aggression in World War II were all driven by declining powers seeking to use war to improve their future security. All lost control of events they thought they could control. All suffered ugly defeats. All were worse-off than had they not attacked. As China rises, America must avoid this great-power trap. It would be easy to think that greater American military efforts could offset the consequences of China’s increasing power and possibly even lead to the formation of a multilateral strategy to contain China in the future. Indeed, when China’s economic star began to rise in the 1990s, numerous voices called for precisely this, noting that on current trajectories China would overtake the United States as the world’s leading economic power by 2050.8 Now, as that date draws nearer—indeed, current-dollar calculations put the crossover point closer to 2040—and with Beijing evermore dependent on imported oil for continued economic growth, one might think the case for actively containing China is all the stronger. Absent provocative military adventures by Beijing, however, U.S. military efforts to contain the rising power are most likely doomed to failure. China’s growth turns mainly on domestic issues—such as shifting the workforce from rural to urban areas—that are beyond the ability of outside powers to significantly influence. Although China’s growth also depends on external sources of oil, there is no way to exploit this vulnerability short of obviously hostile alliances (with India, Indonesia, Taiwan and Japan) and clearly aggressive military measures (controlling the sea-lanes from the Persian Gulf to Asia) that together could deny oil to China. Any efforts along these lines would likely backfire—and only exacerbate America’s problems, increasing the risk of counterbalancing. Even more insidious is the risk of overstretch. This self-reinforcing spiral escalates current spending to maintain increasingly costly military commitments, crowding out productive investment for future growth. Today, the cold-war framework of significant troop deployments to Europe, Asia and the Persian Gulf is coming unglued. We cannot afford to keep our previous promises. With American forces bogged down in Iraq and Afghanistan and mounting troubles in Iran and Pakistan, the United States has all but gutted its military commitments to Europe, reducing our troop levels far below the one hundred thousand of the 1990s. Nearly half have been shifted to Iraq and elsewhere. Little wonder that Russia found an opportunity to demonstrate the hollowness of the Bush administration’s plan for expanding NATO to Russia’s borders by scoring a quick and decisive military victory over Georgia that America was helpless to prevent. If a large-scale conventional war between China and Taiwan broke out in the near future, one must wonder whether America would significantly shift air and naval power away from its ongoing wars in the Middle East in order to live up to its global commitments. If the United States could not readily manage wars in Iraq and Afghanistan at the same time, could it really wage a protracted struggle in Asia as well? And as the gap between America’s productive resources and global commitments grows, why will others pass up opportunities to take advantage of America’s overstretched grand strategy? Since the end of the cold war, American leaders have consistently claimed the ability to maintain a significant forward-leaning military presence in the three major regions of the globe and, if necessary, to wage two major regional wars at the same time. The harsh reality is that the United States no longer has the economic capacity for such an ambitious grand strategy. With 30 percent of the world’s product, the United States could imagine maintaining this hope. Nearing 20 percent, it cannot. Yet, just withdrawing American troops from Iraq is not enough to put America’s grand strategy into balance. Even assuming a fairly quick and problem-free drawdown, the risks of instability in Iraq, Afghanistan and elsewhere in the region are likely to remain for many years to come. Further, even under the most optimistic scenarios, America is likely to remain dependent on imported oil for decades. Together, these factors point toward the Persian Gulf remaining the most important region in American grand strategy. So, as Europe and Asia continue to be low-order priorities, Washington must think creatively and look for opportunities to make strategic trades. America needs to share the burden of regional security with its allies and continue to draw down our troop levels in Europe and Asia, even considering the attendant risks. The days when the United States could effectively solve the security problems of its allies in these regions almost on its own are coming to an end. True, spreading defense burdens more equally will not be easy and will be fraught with its own costs and risks. However, this is simply part of the price of America’s declining relative power. The key principle is for America to gain international support among regional powers like Russia and China for its vital national-security objectives by adjusting less important U.S. policies. For instance, Russia may well do more to discourage Iran’s nuclear program in return for less U.S. pressure to expand NATO to its borders. And of course America needs to develop a plan to reinvigorate the competitiveness of its economy. Recently, Harvard’s Michael Porter issued an economic blueprint to renew America’s environment for innovation. The heart of his plan is to remove the obstacles to increasing investment in science and technology. A combination of targeted tax, fiscal and education policies to stimulate more productive investment over the long haul is a sensible domestic component to America’s new grand strategy. But it would be misguided to assume that the United States could easily regain its previously dominant economic position, since the world will likely remain globally competitive. To justify postponing this restructuring of its grand strategy, America would need a firm expectation of high rates of economic growth over the next several years. There is no sign of such a burst on the horizon. Misguided efforts to extract more security from a declining economic base only divert potential resources from investment in the economy, trapping the state in an ever-worsening strategic dilemma. This approach has done little for great powers in the past, and America will likely be no exception when it comes to the inevitable costs of desperate policy making. The United States is not just declining. Unipolarity is becoming obsolete, other states are rising to counter American power and the United States is losing much of its strategic freedom. Washington must adopt more realistic foreign commitments.

## Environment

### 1NC Environment Frontline

#### Climate Change is not Anthropogenic

Taylor 9, James M. Senior Fellow of Environment Policy, Heartland Institute, Chicago. January 3, 2009. http://www.naplesnews.com/news/2009/jan/03/guest-commentary-global-warming/

In a pair of recent columns claiming humans are causing a global-warming crisis, Ben Bova disparages mere “assertions” while saying people need to rely on “observable, measurable facts.” While Bova’s concern about Earth’s climate is admirable, he should follow his own advice regarding assertions versus facts.¶ Bova asserts Earth has a “rising fever.” Yet the fact is that global temperatures are unusually cool. For most of the past 10,000 years temperatures have been 1.0 to 3.0 degrees Celsius warmer than they are today. The 0.6 degree rise in temperatures during the 20th century occurred from the baseline of the little ice age, which saw the coldest global temperatures during the past 10,000 years. Earth has a “rising fever” only if we pretend the little ice age was “normal” and ignore Earth’s long-term temperature facts.¶ Bova asserts “the loss of sea ice in the Arctic is threatening the survival of polar bears.” Yet the fact is that polar bear numbers have doubled since the 1980s. Moreover, Antarctic sea ice is growing and has been setting records for much of the past year. If “global” warming is causing receding polar ice, then why is Antarctic sea ice setting growth records?¶ Bova asserts “measurements ... show that the rise in global temperatures matches quite closely the increase in carbon dioxide.” Yet the fact is that solar scientists at Harvard and other leading universities have published research in the world’s leading scientific journals showing that temperatures match solar output much more closely than carbon dioxide, even in the 20th century.¶ Bova asserts that as a result of global warming “much of our crop land turns to desert.” Yet, the fact is that global precipitation and global soil moisture have increased during the 20th century, and the Sahara Desert and other deserts around the world are in retreat.¶ Bova asserts we run the risk of a breaching a “tipping point” or a “greenhouse cliff where the global climate shifts too rapidly for us to protect ourselves from its drastic effects.” Yet, the fact is that in a recent survey of more than 500 climate scientists from around the world, less than half agreed that “assuming climate change will occur, it will occur so suddenly that a lack of preparation could result in devastation of some areas of the world.”¶ Bova asserts that in California’s Yosemite National Park warmer temperatures are allowing mice and pine trees to live at higher altitudes than a century ago. Yet, the fact is that fossilized trees exist at altitudes above the current California tree line, showing that temperatures were significantly warmer 1,000 years ago than today. Plant and animal species are migrating to higher elevations only in comparison to the abnormally cold temperatures of the little ice age that ended just over a century ago. For most of the past 10,000 years, warmer temperatures enabled mice and trees to live at altitudes significantly higher than is possible today.¶ Global-warming activism is long on unsubstantiated assertions and short on objective facts. Only by comparing today’s temperatures to the abnormal cold of the little ice are — and by completely ignoring the warmer temperatures that predominated during most of the past 10,000 years — can global-warming activists paint a picture of a planet suffering a global warming crisis. Moreover, sound science has thrown cold water on each and every one of the alleged global-warming crises, such as endangered polar bears, melting ice caps, etc., alleged to result from global warming¶

#### IPCC is wrong

Kemm 11, Kelvin, Nuclear physicist CEO of Stratek Business Strategy Consultants. July 1, 2011. http://www.engineeringnews.co.za/article/ipcc-far-from-an-authority-on-climate-change-2011-07-01

The Intergovernmental Panel on Climate Change (IPCC), a body of the United Nations, is often projected as the world authority on climate change. This is far from the truth. The IPCC has always projected a very scary image of the world being plunged into disaster as a result of the actions of mankind.¶ The IPCC supports the theory that man-made carbon dioxide (CO2) is the cause of global warming. Despite significant evidence that any global warming observed is probably due to the incidence of cosmic rays from the stars, the IPCC refuses to be scientifically honest and to take this scientific evidence into account.¶ In one of its reports, the IPCC relied heavily on the now infamous Hockey Stick graph, which purported to show a great increase in temperature rise during the twentieth century. This graph has now been totally discredited, and the IPCC has withdrawn it.¶ In 2009, the Climategate affair was made public. In Climategate, a group of scientists led by Phil Jones, of the Climate Research Unit of the University of East Anglia, in the UK, manipulated results to falsely show that the earth was warming more than was the truth. This affair gave rise to the phrase ‘Hide the decline’, when many emails were discovered that had been passed between this group of people in which they plotted their deception. They were writers of a chapter of the IPCC report known as AR4.¶ Last year, the IPCC was forced to apologise that it had grossly overstated the threat to the melting of the Himalayan glaciers. Well, the IPCC is in hot water again. It has just been revealed that an IPCC report released in May, stating that the whole world could be running on 77% renewable energy by 2050, was largely written by a prominent member of Greenpeace. The man who led the campaign to expose Climategate was Steve McIntyre, a Canadian engineer. McIntyre is playing a role in exposing the latest scandal.¶ On 17 June, Mark Lynas, a journalist, refer- ring to the Greenpeace person’s major role in the current IPCC report, wrote on his blog, http://www.marklynas.org/2011/06/questions-the-ipcc-must-now-urgently-answer/: “Here’s the scenario. An Exxon-Mobil employee – admittedly an energy specialist with an engineering background – serves as a lead author on an important IPCC report looking into the future of fossil fuels. The Exxon guy and his fellow lead authors assess a whole variety of literature, but select for special treatment four particular papers – one produced by Exxon-Mobil. This paper heralds great things for the future of fossil fuels, suggesting they can supply 80% of the world’s energy in 2050, and this headline is the first sentence of the ensuing IPCC press release, which is picked up and repeated uncritically by the world’s media.¶ “Pleased, the Exxon employee issues a self-congratulatory press release, boasting that his paper had been central to the IPCC effort and urging the world’s governments to get on with opening up new areas to oil drilling for the benefit of us all.¶ “Well, you can imagine the furore this would cause at Greenpeace. The IPCC would be discredited forever as an independent voice. There would be pious banner-drops by Greenpeace activists abseiling down Exxon HQ and harshly criticising the terrible stranglehold that fossil fuel interests had achieved over supposedly independent science. Campaigners everywhere would be up in arms. Greenpeace would feel doubly justified in taking direct action against new oil wells being opened up in the Arctic, and its activists could demonstrate new feats of gallantry and bravery as they took on the might of the world’s oil industry with some ropes and a rubber dinghy somewhere near Greenland.¶ “How is the Exxon scenario different from what has just happened with the IPCC’s renew- ables report? And why – when confronted with this egregious conflict of interest and abuse of scientific independence – has the response of the world’s green campaigners been to circle the wagons and cry foul against the whistle-blowers themselves? That this was spotted at all is a tribute to the eagle eyes of McIntyre. Yet I am told that he is a ‘denier’, that all his deeds are evil, and that I have been naively led astray by him. Well, if the ‘deniers’ are the only ones standing up for the integrity of the scientific process, and the independence of the IPCC, then I too am a ‘denier’. Indeed, McIntyre and I have formed an unlikely double act, posing a series of questions – together with the New York Times’ Andy Revkin – to the IPCC report’s lead author, Professor Ottmar Edenhofer, to which he has yet to respond.¶ “Here’s some classic closing of ranks by Stefan Singer, of the WWF, riding to the rescue of his embattled Green-peace colleagues in a comment on my original blog post: ‘Yes, I am biased as well, I am director for energy policy at the WWF – we scandalously dared to publish a global energy scenario a few months ago, showing how the world can go to even 95% renewables by 2050 and, even more shocking, we also showed in that scenario how global energy consumption can indeed be reduced globally with substantive energy conservation and efficiency policies without curtailing growth and economic activities. Moreover, if we want to combat climate change effectively (which, I rea- lise, not everyone supports on this exchange), what is wrong with showing that renewables can contribute 80% or even more to global energy supply? Mark Lynas, in case you take that serious (sic), you should thank Greenpeace and the NGOs to drive that debate.’”¶ What the IPCC always does, and did in this case, is that it issues a ‘summary’ of the report a month before the actual report is made public. So the press get the summary and report on it. It is then a whole month later when the actual substance of the report can be examined. The current report, in its depths, assumes that there will be huge world reduction in electricity consumption. They are talking of real consumption, not efficiency improvements, or reduction in growth rates. This effectively means that, in the whole of Africa, no substantive extra electricity can be used.

#### Tech Fails, No Fuel Savings

AP 11, Associated Press, FAA's new air traffic system hits turbulence, October 5, 2011. http://www.nypost.com/p/news/national/faa\_new\_air\_traffic\_system\_hits\_dSqxDYBe0uYFp3Ho82dmGN

WASHINGTON — The government's program to modernize the nation's air traffic control system has run into serious problems that threaten to increase its cost and delay its completion, a government watchdog said.¶ The Federal Aviation Administration's program to replace the current air traffic control system with a system based on satellite technology is being held back by software problems that have delayed full deployment of a critical flight tracking system, Transportation Department inspector general Calvin Scovel said in prepared testimony to be delivered at House hearing Wednesday.¶ The agency also hasn't set deadlines for when key aspects of the new air traffic control system will be in place, Scovel said. Nor has FAA made clear to airlines and other air traffic system users exactly what benefits they can expect and when they'll be achieved, he said.¶ As a result, airlines and others are being discouraged from spending money on cockpit equipment necessary to take advantage of the new air traffic system, Scovel said. Many of the new system's benefits hinge on airlines equipping their planes with expensive new equipment to communicate with air traffic controllers and broadcast their location to other planes and controllers.¶ The Associated Press was provided with a copy of Scovel's testimony to the House Transportation and Infrastructure Committee. FAA officials had no immediate comment when contacted late Tuesday.¶ FAA officials have predicted the agency's NextGen modernization program will be as revolutionary for civil aviation as was the advent of radar six decades ago. It's actually a collection of new programs aimed at moving planes faster and more efficiently that will markedly change almost every major aspect of today's air traffic system. Those changes are considered critical to enabling the system to absorb substantial predicted increases in air traffic without becoming paralyzed by congestion.¶ The troubled $2.1 billion software program is the main tool air traffic controllers will use to identify and track aircraft, except when planes are immediately approaching and departing airports. It was supposed to have been completed by the end of last year, but the FAA now doesn't expect to be finished until 2014, at a cost overrun of $330 million, Scovel said.¶ Those estimates may be optimistic. A Mitre Corp. study and an analysis by the inspector general's office estimate the added cost of the computer system, called ERAM, could be as much as $500 million, with potential delays stretching to 2016, Scovel said.¶ David Grizzle, the head of the FAA's Air Traffic Organization, described ERAM to an air traffic control conference earlier this week as "the chassis on which all the NextGen functionality will be bolted." He said the system is expected to increase the number of planes controllers can handle by nearly two-thirds.¶ "We've got to get it right, and we've encountered some significant challenges in delivery," Grizzle said.¶ Some of ERAM's problems have previously been made public, including glitches that incorrectly identify planes and interfere with the ability of controllers to pass along responsibility for tracking a plane from one control center to another.¶ But the problem may be more extensive than the FAA has previously acknowledged. Scovel said his office has found similar problems in another critical FAA computer system that shares the same aircraft tracking software. That system is used by controllers to track planes as they approach and depart airports.¶ "ERAM's persistent problems have raised concerns about the overall design of the system," he said in his testimony.¶ Cost overruns in ERAM will affect the FAA's budget for other major elements of NextGen and could "crowd out other critical programs," Scovel said.¶ The FAA has focused much of its initial NextGen efforts on improving the flow of air traffic at congested airports in 21 major metropolitan areas. However, the agency has been slow in developing the flight procedures that will allow airlines to save fuel and time by flying shorter, more direct routes, Scovel said. The FAA did a study that identified ways to streamline the process for deploying new procedures, but agency officials estimate it would take five years just to put the streamlining initiatives in place, he said.¶ In the meantime, many of the new flight procedures the FAA has approved are merely "overlays of existing routes" rather than the fuel-saving procedures that require the more advanced navigation capabilities airlines had expected, he said. Airlines are anxious to reduce their jet fuel cost, which vies with labor as their No. 1 expense.

#### Global CO2 Emissions are 31.6 billion tonnes, China is the Primary Contributor. NextGen can’t solve by 2020

Reuters 12, 5/24/12 http://www.huffingtonpost.com/2012/05/24/2011-global-co2-emissions-china\_n\_1542785.html

China spurred a jump in global carbon dioxide (CO2) emissions to their highest ever recorded level in 2011, offsetting falls in the United States and Europe, the International Energy Agency (IEA) said on Thursday.¶ CO2 emissions rose by 3.2 percent last year to 31.6 billion tonnes, preliminary estimates from the Paris-based IEA showed.¶ China, the world's biggest emitter of CO2, made the largest contribution to the global rise, its emissions increasing by 9.3 percent, the body said, driven mainly by higher coal use.¶ "When I look at this data, the trend is perfectly in line with a temperature increase of 6 degrees Celsius (by 2050), which would have devastating consequences for the planet," Fatih Birol, IEA's chief economist told Reuters.¶ Scientists say ensuring global average temperatures this century do not rise more than 2 degrees Celsius above pre-industrial levels is needed to limit devastating climate effects like crop failure and melting glaciers.¶ They believe that is only possible if emission levels are kept to around 44 billion tonnes of CO2 equivalent in 2020.¶ Negotiators from over 180 nations are meeting in Bonn, Germany, until Friday to work towards getting a new global climate pact signed by 2015.¶ The aim is to ensure ambitious emissions cuts are made after the Kyoto Protocol expires at the end of this year.¶ Procedural wrangling and a reluctance to raise ambitions to cut emissions due to economic constraints is threatening progress, however. (ID:nL5E8GLCRU]¶ "I think it would be unrealistic to think that there will be major breakthroughs very soon," Birol said.¶ "Climate change is sliding down in the international policy agenda, which is definitely a worrying trend."¶ SHALE GAS HELPED U.S.¶ Birol cited cutting fossil fuel subsidies, boosting energy efficiency and moving away from coal as "buttons to push" for world governments to help meet emission targets.¶ He also warned about the impact of phasing out nuclear power output after the Fukushima accident in Japan, which helped push Japanese carbon emissions 2.4 percent higher in 2011.¶ "In Japan, the rise is almost exclusively due to higher fossil fuel use. This is a very important indication of what could happen if there was a move away from nuclear energy in other countries," he said.¶ In China, CO2 emissions per unit of GDP - or its carbon intensity - fell by 15 percent between 2005 and 2011, the IEA said, suggesting the world's second-largest economy was finding less carbon-consuming ways to fuel growth.¶ In the United States, the world's second-biggest CO2 emitter, a switch to natural gas from coal in power plants, a slower economy and a mild winter helped cut emissions by 1.7 percent.¶ "The replacement of coal by shale gas is a key factor and what happened in the U.S. could very well happen in China and other countries and could definitely help in reducing CO2 emissions," the IEA economist said.¶ In Europe, a relatively warm winter combined with sluggish growth helped cut emissions by 1.9 percent.¶ Asked about prospects for global carbon emissions in 2012, Birol said:¶ "It would come as a very, very big surprise to me if we saw a significant decline in CO2 emissions." (Additional reporting by Gus Trompiz and Muriel Boselli; editing by Jason Neely)

#### Nextgen only saves 14 million tons of CO2 emissions, that’s only .044% of the world’s emissions

FAA 11, Federal Aviation Administration, FAA’s NextGen Implementation Plan, March 2011, http://www.faa.gov/nextgen/media/ng2011\_implementation\_plan.pdf

As airports and operators reap the benefits of the investments and deployments we are making today, the FAA continues to sharpen its projections of the benefits we expect NextGen to provide during the mid-term. Our latest estimates, which are sensitive to traffic and fuel price forecasts, indicate that by 2018, NextGen will reduce total delays (in flight and on the ground) by about 35 percent compared with what would happen if we did nothing. That delay reduction will provide, through 2018, $23 billion in cumulative benefits to aircraft operators, the traveling public and the FAA. In the process, we will save about 1.4 billion gallons of aviation fuel during this period, reducing carbon dioxide emissions by 14 million tons.

#### That’s Only .2% of the US’s emissions

EPA 12, Environmental Protection Agency, April 2012. http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html

EPA develops the national greenhouse gas inventory each year to track the national trend in emissions and removals since 1990. The national greenhouse gas inventory is submitted to the United Nations in accordance with the Framework Convention on Climate Change. Link to EPA's External Link Disclaimer In preparing the annual emissions inventory report, EPA collaborates with hundreds of experts representing more than a dozen U.S. government agencies, academic institutions, industry associations, consultants and environmental organizations.¶ INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2010¶ (April 2012)¶ The Inventory of U.S. greenhouse gas emissions and sinks tracks the national trend in greenhouse gas emissions and removals back to 1990. The report contains total U.S. emissions by source, economic sector and greenhouse gas. EPA uses national energy data, data on national agricultural activities, and other national statistics to provide a comprehensive accounting of total GHG emissions for all man-made sources in the United States. EPA also collects greenhouse gas emissions data from individual facilities and suppliers of certain fossil fuels and industrial gases through the Greenhouse Gas Reporting Program. The key findings of the 1990-2010 US Inventory include:¶ In 2010, U.S. greenhouse gas emissions totaled 6,821.8 million metric tons CO2 Eq.¶ U.S. emissions rose by 3.2% from 2009 to 2010. This increase was primarily due to an increase in economic output resulting in an increase in energy consumption across all sectors and much warmer summer conditions resulting in an increase in electricity demand for air conditioning.¶ Since 1990, U.S. greenhouse gas emissions have increased by 10.5%.¶

#### Too many alt causes to solve for air pollution

Brook et al 4, (Robert D., MD, Associate Professor at the Department of Internal Medicine, University of Michigan \*AND Barry A. Franklin, PhD, Director of the Cardiac Rehabilitation Program and Exercise Laboratories, William Beaumont Hospital, Professor of Physiology, Wayne State University, School of Medicine, \*AND Wayne Cascio, MD, Former Director of Cardiovascular Research at the Center for Environmental Medicine, Asthma and Lung Biology at UNC Chapel Hill, Former Medical Director of the Clinical Electrocardiography Laboratory at the University of North Carolina Hospitals, \*AND Yuling Hong, MD, PhD, Associate Director for Science, Division for Heart Disease and Stroke Prevention, National Institutes of Health, \*AND George Howard, PhD, Department of Biostatistics, School of Public Health, University of Alabama–Birmingham, \*AND Michael Lipsett, MD, Chief of the Environmental Health Investigations Branch, California Department of Public Health, \*AND Russell Luepker, MD, Mayo Professor of Public Health, Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, \*AND Murray Mittleman, MD, ScD, Associate Professor in the Department of Epidemiology, School of Public Health, Harvard University, \*AND Jonathan Samet, MD, founding director of the USC Institute for Global Health, Flora L. Thornton Chair of the Department of Preventive Medicine of the Keck School of Medicine, University of Southern California, \*AND Sidney C. Smith Jr, MD, professor of medicine and director of the Academic Center for Cardiovascular Disease, University of North Carolina, \*AND Ira Tager, MD, Professor of Epidemiology, School of Public Health, Division of Epidemiology, University of California Berkeley, June 1, 2004, “Air Pollution and Cardiovascular Disease,” American Heart Association, http://circ.ahajournals.org/content/109/21/2655.full, Hensel)

The numerous natural and anthropogenic sources of PM include motor vehicle emissions, tire fragmentation and resuspension of road dust, power generation and other industrial combustion, smelting and other metal processing industries, agriculture, construction and demolition activities, residential wood burning, windblown soil, pollens and molds, forest fires and combustion of agricultural debris, volcanic emissions, and sea spray. Although there are numerous chemical that have been detected in PM in different locations, some of the more common components include nitrates, sulfates, elemental and organic carbon, organic and biological compounds, and a variety of metals (eg, iron, copper, nickel, zinc, and vanadium).