

# THE COSTS OF PRIVATIZING AIR TRAFFIC CONTROL AND HOW IT WILL IMPACT AIRLINE TRAVELERS



FEBRUARY 1, 2016



# EXECUTIVE SUMMARY

For decades, the United States Federal Aviation Administration (FAA) has operated the nation's air traffic control (ATC) and remained an international leader in safety and cost-effectiveness. Even as the US maintains far more airports than any other country, flying here remains second to none in safety and American consumers overwhelmingly believe the FAA is succeeding in its mission to provide the safest and most efficient airspace in the world.<sup>1</sup>

The FAA's strong track record has led some of the largest airlines to praise the agency as the "safest ATC system in the world."<sup>2</sup> At the same time, however, those airlines argue that the ATC system should no longer be operated by the FAA, but rather be removed from the FAA and placed under the control of a corporate entity outside the Federal government. These critics of the current system cite the Canadian model, a non-profit entity run by a board of directors, as the structure they seek to replicate. However, in Canada airline stakeholders appoint one-third of board members, while the government only appoints three of the fifteen seats. Simply put, Air Traffic Control under this model is ceded to airlines and corporate entities that would then have a larger say in priorities.

Lawmakers and consumers should understand that a move to privatize ATC would likely formalize silos between divisions within the FAA, add unforeseen transition costs and increase operational costs within the industry. It could also result in additional taxes on airline fuel and other air travel necessities, as has been seen in some other countries.

Privatizing ATC would also likely lead to a rise in the cost of airline tickets in the US. Consumers in Canada faced a 59 percent increase in ATC fees on airline tickets. In the United Kingdom air traffic control fees rose 30 percent,<sup>3</sup> while fees remained relatively constant in the United States with six percent growth. These increases prompted Canadians to cross the border in search of cheaper airline tickets.<sup>4</sup>

Effects of privatizing ATC could also place a greater financial strain on smaller airports that serve rural communities and other populations located outside major urban centers. If those smaller airports were forced to limit flights or close due to high costs, many would be forced to drive much further to large urban airports in order to access the same service they are currently accustomed to receiving around their communities.

From 1996 to 2012, Canada saw an additional 59 percent increase in ATC fees. In the United Kingdom, ATC fees rose 30 percent. Applying those rates of growth to US costs, operational costs for ATC in the United States could increase by 20 to 29 percent after ten years.

The current FAA system helps support equal service at both large urban airports and smaller rural ones, but privatization could cause smaller airports to limit service or shut down. As a result, rural residents could be forced to drive to urban areas to access the same airline service they currently enjoy close to home.

<sup>1</sup> <https://www.faa.gov/about/mission/>

<sup>2</sup> <http://airlines.org/news/faa-reauthorization-hearing/>

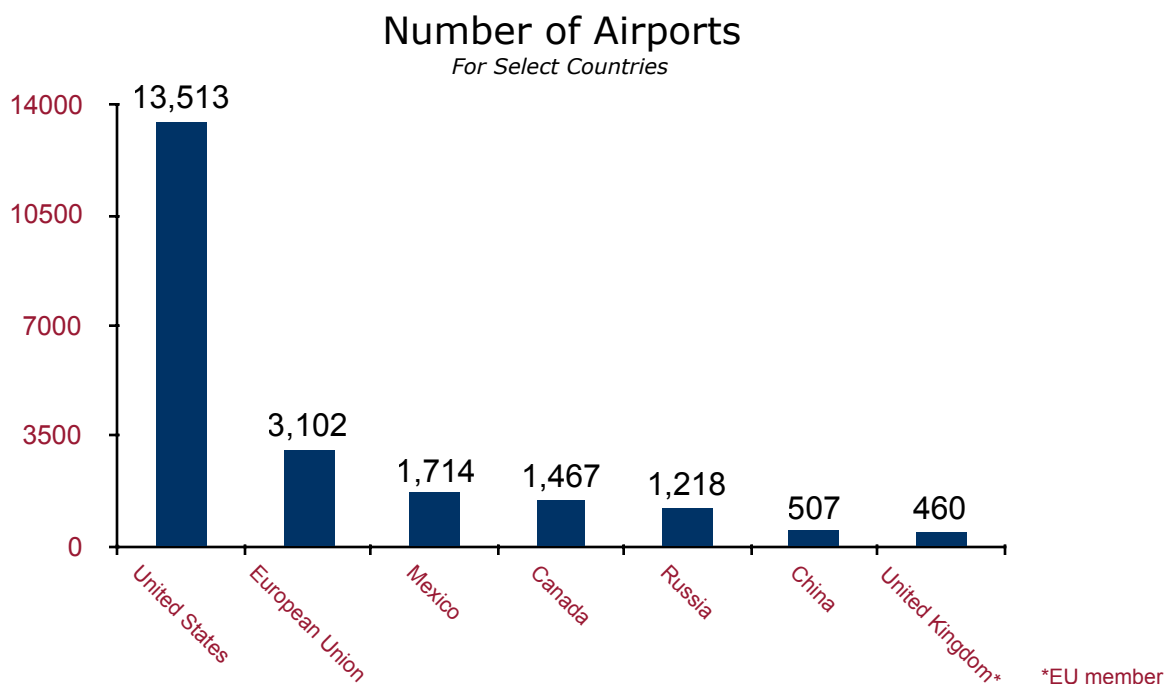
<sup>3</sup> CANSO, Country Aviation and Airport Authorities Canada: Nav Canada Financials 1996 and 2012 revenue per flight, UK NATS Financials 2004 and 2012 revenue per flight

<sup>4</sup> <http://www.pri.org/stories/2012-06-14/small-us-airports-attracting-bargain-hunting-canadians>

# THE FAA'S STRONG TRACK RECORD

The FAA's ATC oversight includes approximately 30 million square miles of airspace<sup>5</sup> — a total of 17 percent of the Earth's airspace and more than any other agency in the world. That airspace includes all of the US, large portions of the Atlantic and Pacific Oceans and the Gulf of Mexico. In comparison, equivalent agencies in Canada and the United Kingdom oversee approximately seven million square miles<sup>6</sup> and 200,000 square miles,<sup>7</sup> respectively.

Additionally, the FAA's jurisdiction in the US contains more airports and serves more passengers than any other nation in the world. There are over 13,000 airports in the US, or more than four times as many as are located throughout the entire European Union.



Source: CIA – <https://www.cia.gov/library/publications/the-world-factbook/fields/2053.html>

Out of more than 36 million total worldwide flights in 2014, more than 9.5 million — over 25 percent of all flights — took off in the US, which far outpaced any other nation. Takeoffs in the US nearly tripled the total in China, which ranked second worldwide, and were nearly eight times higher than the total in Canada, which ranked third.<sup>8</sup> Further, New York City Metro Area passengers equate to nearly 90 percent of all passengers transported by the entire country of Canada's air transportation system.

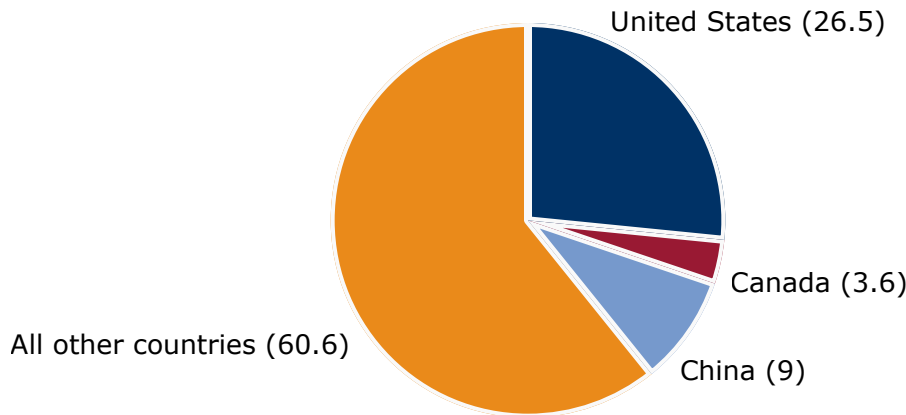
<sup>5</sup> [http://www.faa.gov/about/office\\_org/headquarters\\_offices/ato](http://www.faa.gov/about/office_org/headquarters_offices/ato)

<sup>6</sup> <http://www.navcanada.ca/en/about-us/pages/who-we-are.aspx>

<sup>7</sup> <http://www.bbc.com/news/technology-21195765>

<sup>8</sup> <http://data.worldbank.org/indicator/IS.AIR.DPRT/countries>

## Percentage of Global Takeoffs, 2014



Source: The World Bank – [http://data.worldbank.org/indicator/IS.AIR.DPRT/countries?order=wbapi\\_data\\_value\\_2014+wbapi\\_data\\_value+wbapi\\_data\\_value-last&sort=desc](http://data.worldbank.org/indicator/IS.AIR.DPRT/countries?order=wbapi_data_value_2014+wbapi_data_value+wbapi_data_value-last&sort=desc)

Even as it covers more airspace and handles more volume than any other equivalent agency, the FAA and its ATC operations have continually been referred to as the safest in the world by both sides of the privatization debate.<sup>9,10</sup>

Americans have recognized the effectiveness of the FAA and its success in overseeing ATC throughout its airspace. A nationwide poll of American consumers conducted in August 2015 showed that 80 percent of respondents believe the FAA does an excellent or good job operating the nation's ATC system.<sup>11</sup>

That level of success has not stopped the FAA from continuing to improve its ATC service by adopting NextGen technologies. In March 2015, the FAA introduced the En Route Automation Modernization (ERAM) system, referred to as the backbone of NextGen technology. This new system nearly doubles the amount of flights a controller can track and has various other upgrades that modernize the way the United States manages its skies.<sup>12</sup> These upgrades include the streamlined DataComm system, which replaces radio communication with a system akin to text messaging and is scheduled for implementation at more than 50 ATC towers in 2016.

New pilot programs throughout the nation have already been implemented to test further additions to the ERAM system. In Seattle, the Greener Skies initiative has demonstrated the benefit of performance-based navigation, which so far allows 73 flights per day to use a more efficient, steady descent, instead of the current stair-step model. This allows planes to begin idling about 100 miles from an airport, saving 1,900 pounds of carbon emissions and nine minutes of flight time.<sup>13</sup> Overall, NextGen improvements have already yielded \$1.6 billion in benefits to system users, with another \$11.4 billion expected over the next 15 years.<sup>14</sup>

<sup>9</sup> <http://airlines.org/news/faa-reauthorization-hearing/>

<sup>10</sup> <http://www.indivisible.us/i-love-my-air-traffic-control/>

<sup>11</sup> <http://www.pri.org/stories/2012-06-14/small-us-airports-attracting-bargain-hunting-canadians>

<sup>12</sup> <http://www.engadget.com/2015/05/02/eram-air-traffic-system-in-place/>

<sup>13</sup> <http://www.usatoday.com/story/news/2015/12/01/airline-executives-urge-privatization-air-traffic-control/76604766/>

<sup>14</sup> <http://psflight.org/352/speech-rtca-an-indispensable-partner/>

# WHAT COULD PRIVATIZATION LOOK LIKE?

The FAA currently operates all aspects of ATC and oversees all air safety regulations. That would change if the US were to privatize ATC. Canada and the United Kingdom are two of the largest nations that have already chosen to privatize ATC, and are models supporters of privatization hold up as examples of what it could look like in the US.

Canada began its privatized ATC system in 1996 with the creation of the fully private non-profit entity Nav Canada.<sup>15</sup> In that case, Nav Canada operates ATC while the Canadian government (Transport Canada) retains oversight of air safety regulations. The UK took its own route to privatization in 2001, when it established a public-private partnership now known as the National Air Traffic Services (NATS).<sup>16</sup> In both examples, the new entity paid the national government to acquire the existing air traffic control assets.<sup>17</sup>

Some proponents of ATC privatization in the US have argued for a scheme most similar to the one chosen by Canada.<sup>18</sup> This would establish a private, non-profit entity — similar to Nav Canada — that would operate ATC in the US, while the FAA would retain oversight of air safety. Upon taking a closer look, corporate interests in Canada outweigh the government's interest in maintaining the public good. Of the fifteen members of the NavCanada board, airline stakeholders appoint five — one third of all seats — while the Canadian government appoints only three.<sup>19</sup>

The UK model has also been discussed in the context of ATC privatization efforts in the US, and it is worth noting the complications that have been reported regarding the implementation of the UK's public-private system. In particular, senior NATS air traffic controllers raised concerns several years ago regarding health and safety standards and faulty radio communications.<sup>20</sup>

While their paths have been different, both Canada and the UK have faced similar challenges in ATC privatization.

<sup>15</sup> <http://www.navcanada.ca/en/about-us/pages/who-we-are.aspx>

<sup>16</sup> <http://www.nats.aero/about-us/our-history/>

<sup>17</sup> NavCanada paid the Canadian government \$1.5B CAD in 1996; NATS paid £758 million to the British government. [https://www.enotrans.org/wp-content/uploads/NextGen-Final-Report.FINAL\\_.pdf](https://www.enotrans.org/wp-content/uploads/NextGen-Final-Report.FINAL_.pdf)

<sup>18</sup> <http://www.bloomberg.com/news/articles/2015-09-11/should-the-u-s-privatize-air-traffic-control->

<sup>19</sup> <http://www.navcanada.ca/EN/about-us/Pages/governance.aspx>

<sup>20</sup> <http://www.bbc.com/news/uk-30454240>

# PRIVATIZATION COULD INCREASE COSTS

Proponents have claimed that privatization would lead to cost savings for consumers. But no evidence has yet been produced to show that privatization would reduce costs. In fact, nations that have privatized ATC have seen operational costs increase at a much higher rate than has been seen in the US under the FAA.

According to historical data, ATC costs in Canada and the United Kingdom have grown at larger rates under a private system than in the United States under a public system. From 1996 to 2012, Canada saw ATC operation fees increase by 59 percent. In the United Kingdom, ATC operational costs increased 30 percent while the United States remained relatively constant with only a six percent increase in costs. Compounded annually, the US has grown .4 percent annually<sup>21</sup> while the UK and Canada have approximately grown by 2.2 percent and 2.9 percent respectively.<sup>22</sup>

Due to the much larger overall volume of American airspace, airports and aircraft, the Canadian and UK growth rates lead to much higher cost projections when applied to ATC operations in the US, and show that if the US were to privatize ATC, operational costs could increase by 20 to 29 percent after ten years.

It is possible that an ATC privatization scheme in the US could lead to higher fee increases for American consumers.

Notably, revenue for NavCanada has increased by approximately 21 percent since 1998,<sup>23</sup> even while its annual flight volume has decreased by 16 percent during that time.<sup>24</sup> That growing revenue and shrinking revenue base could be a result of increased traveling costs for consumers. Media reports have already highlighted a phenomenon known as “passenger leakage,” in which some Canadians chose to drive across the border to American airports in search of cheaper airline tickets.<sup>25</sup>

<sup>21</sup> Used a 9% ticket tax plus \$1 segment fee in 1996 changing to 7.5% ticket tax plus \$3.80 segment fee in 2014; fuel tax in both years of \$0.043 per gallon and cargo tax assumed to total \$75 in both years with both components included in AATF; total AATF revenue is apportioned to ATO based on percent of AATF expenditures going to ATO

<sup>22</sup> CANSO, Country Aviation and Airport Authorities Canada: Nav Canada Financials 1996 and 2012 revenue per flight, UK NATS Financials 2004 and 2012 revenue per flight

<sup>23</sup> Revenues from Nav Canada Financials 1998 and 2013 [http://www.sedar.com/search/search\\_form\\_pc\\_en.htm](http://www.sedar.com/search/search_form_pc_en.htm)

<sup>24</sup> Cansim Aircraft movements, by civil and military movements, airports with NAV CANADA flight service stations 1998 and 2013

<sup>25</sup> <http://www.pri.org/stories/2012-06-14/small-us-airports-attracting-bargain-hunting-canadians>

# TAXES WILL INCREASE UNDER PRIVATIZATION

The FAA is currently funded through a combination of taxes and appropriations as determined by the US Congress.<sup>26</sup> Under the privatized systems in Canada and the UK, ATC operations are primarily funded through “user fees,” which are paid by aircraft owners or operators based on the weight of the aircraft and the distance traveled.

US supporters of privatization have argued for a shift to user fees as the primary source of revenue for ATC, claiming it will eliminate federal fuel and ticket taxes.<sup>27</sup> However, industry developments in Canada have shown that ATC privatization does not prevent airline tax increases at both a federal and local level.

An example is the aviation fuel tax in Ontario, Canada. In 2014, the Ontario government approved a plan to increase the tax from its previous rate of 2.7 cents per liter to a new rate of 6.7 cents by 2017 — a total increase of approximately 148 percent.<sup>28</sup> The private ATC funding source of user fees apparently did not dissuade the Ontario government from hiking a tax that would have supported ATC under a publicly funded system.

A user fee system would operate similarly to a flat tax on airplane seats. Rather than taxes appropriate to the price of the ticket purchased, the user fee would be a standard figure for all seats on a plane. This regressive model would put a heavier burden on working and middle class passengers by charging the same user fee to all, regardless of the cost of the ticket.

<sup>26</sup> <https://www.fas.org/sgp/crs/misc/R42781.pdf>

<sup>27</sup> <http://www.crainsnewyork.com/article/20151223/OPINION/151229975/letter-mischaracterized-reform-of-air-traffic-control>

<sup>28</sup> <http://www.fin.gov.on.ca/en/tax/gt/>

# PRIVATIZATION COULD CREATE FINANCIAL BURDENS FOR SMALLER AIRPORTS

While commercial flights may be more noticeable to consumers, many small airports located outside urban areas in the US primarily serve business and general aviation (private flights or any other flights besides commercial aircrafts). As of 2012, general aviation makes up approximately three out of four takeoffs and landings at US airports.<sup>29</sup>

However, general aviation flights typically use more monetary resources than they give back. While these flights use approximately 20 percent of en route ATC services, they only pay approximately three percent of the taxes that are used to support ATC through the current taxes on airplane fuel.<sup>30</sup>

This imbalance means that the current FAA system effectively supports many small, rural airports that rely on general aviation but also provide commercial airline services to local residents who need them. The current government-run system ensures equal access to ATC services for all, regardless of the amount of overall revenue generated by each airport.

Additionally, recent NextGen modernization efforts have amplified the amount of flights controllers can manage and increased the effectiveness of smaller and rural control towers. Because of the implementation of ERAM in 2015, controllers can view 1,900 flights simultaneously, up from 1,100 flights prior to ERAM.<sup>31</sup> By allowing controllers to view more flights, ERAM increased productivity per controller while keeping costs constant. These increases have increased the effectiveness of smaller control towers and will allow for increased efficiency in flight management.

A privatized revenue-based system could result in ATC resources being prioritized at larger airports that raise greater revenue, rather than being spread equally across the country. Additionally, a reliance on user fees could cause general aviation costs to increase. These increased costs could lead general aviation operators to make fewer overall landings and takeoffs, which could in turn cause a decrease in activity for the small airports that rely on their business.

<sup>29</sup> General Aviation Airports: A National Asset, FAA 2012

<sup>30</sup> REINVENTING AIR TRAFFIC CONTROL, A New Blueprint for a Better System, May 1996 Robert W. Poole, Jr. and Viggo Butler

<sup>31</sup> <http://www.usatoday.com/story/news/2015/04/30/faa-air-traffic-control-eram-foxx-huerta-natca-lockheed-martin/26636141/>



Such a decrease in overall business could result in additional financial strains for small airports, and could also require those airports to limit overall service for both general aviation and commercial flights. These effects have already been reported in the UK under its privatization scheme. A 2015 report by the UK's Airports Commission found there has been a decline in services from airports outside London, particularly in the more rural areas in the North of England and Scotland.<sup>32</sup>

Diminished service at small airports in rural and suburban areas could have negative impacts on residents traveling on commercial flights out of those areas. Residents could be forced to drive to larger airports in urban areas — potentially hundreds of miles away — in order to access the same airline service that they currently enjoy close to home. The UK Airports Commission report also noted that the decline in service at smaller airports has begun to impact local economies outside urban centers.

With less traffic at small and rural airports, grants supporting improvement projects stand to shrink. Currently, the FAA operates the Airport Improvement Program, a grant program for airports to update infrastructure based on volume of passengers and total air traffic. If service levels decrease at small and rural airports, the FAA would decrease funding to these airports, resulting in less funding for crucial infrastructure projects. As small and rural airports fall into disrepair, passengers will have an even greater incentive to use larger urban-based hubs.

## WEIGHING THE COSTS OF PRIVATIZATION

As discussions continue regarding the possibility of ATC privatization in the US, consumers should consider the potential costs.

As noted above, ATC privatization in other large countries like Canada and the UK have led to an increase in operational costs, and studies show that those costs are typically passed down to the consumer.

Additionally, ATC privatization has not necessarily led to a reduction in taxes, and in fact, areas such as Ontario, Canada have seen a quite significant increase in airline fuel taxes.

<sup>32</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/440316/airports-commission-final-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/440316/airports-commission-final-report.pdf)

Meanwhile, the FAA's current ATC system continues to maintain an extremely strong safety record in a nation with the greatest volume of airspace, airports and passengers. Our collective focus should be on continuing to implement technological and performance improvements, instead of wholesale organizational change. NextGen technologies have already yielded \$1.6 billion in benefits to users, with another \$11.4 billion expected over the next 15 years.

In order to convince Americans that privatization would be beneficial, proponents of scheme should have to prove to consumers that a privatized ATC would maintain the same track record without increasing costs. Proponents must also show that privatization would keep the US on track to achieve the same benefits currently being realized under NextGen technology improvements. Such an argument has yet to be put forth.

