Gulf carrier subsidies go against the fundamental principles of Open Skies: America benefits from its connections to the globe as a result of its world-leading air transportation network. Frequent flights to all corners of the globe mean that business links can form, trade and tourism can flourish, and, perhaps most importantly, Americans are closer to their friends and family overseas. America’s network carriers and their alliance partners provide nonstop service from dozens of American cities to points abroad, and frequent connecting service allows residents of smaller communities the same access to the world.

Open Skies agreements are designed specifically to foster these types of connections. By liberalizing air transportation markets, governments can remove barriers to entry and allow foreign airlines to compete with their U.S. counterparts, while at the same time opening up new markets for U.S. carriers and the customers and businesses they serve. This type of competition is healthy and strengthens our nation’s air transportation system. Consumers can benefit as well, through more choice and competition.

However, Open Skies agreements must operate under a number of terms and conditions that ensure competition is balanced. Particularly, the U.S. Department of State’s model text for Open Skies agreements includes this clause:

\[ \text{Article 11} \]
\[ \text{Fair Competition} \]
\[ 1. \text{Each Party shall allow a fair and equal opportunity for the airlines of both Parties to compete in providing the international air transportation governed by this Agreement.} \]

“Fair and equal” opportunities for competition is therefore a key tenet of Open Skies. This means that governments must allow airlines to compete evenly for international traffic, without providing advantages or favoritism to their national carriers. In most of the United States’ 100+ Open Skies partnerships, the spirit of “fair and equal” competition is upheld, and U.S. airlines can compete on a level playing field with their foreign counterparts. However, in the United Arab Emirates and Qatar, this principle is not upheld.

The United States’ respective Open Skies agreements with the governments of the

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http://www.state.gov/e/eb/rls/othr/ata/114866.htm
United Arab Emirates\textsuperscript{2} and Qatar\textsuperscript{3} both contain Article 11.1 verbatim. Therefore, these agreements are bound by the very same principles of “fair and equal” competition that governs the United States’ other 100+ Open Skies agreements.

However, a recent investigation and white paper has uncovered over $40 billion in subsidies and economic benefits\textsuperscript{4} given by the governments of the United Arab Emirates and Qatar to their national carriers—Emirates, Etihad Airways, and Qatar Airways. Government subsidies distort the “fair and equal” competitive market by making it easier for these Gulf carriers to add new service, purchase new aircraft, invest in amenities and facilities, and offer lower fares than the market would otherwise dictate.

\textbf{Economic theory shows clear signs that subsidies are in play in Gulf markets:}
Economic theory tells us what we should expect to observe in unbalanced markets with subsidized actors.\textsuperscript{5} Specifically, as a result of subsidies paid by the UAE and Qatar governments to their national carriers, we should expect to see:

- A rampant increase in subsidized Gulf carrier capacity above and beyond what underlying demand for the region would dictate;
- Reduction in U.S. network carrier/alliance passengers in key local and connecting markets (e.g., the Middle East and the Indian subcontinent);
- A shift of these connecting passengers to subsidized Gulf carriers (i.e., diversion); and
- Reduction in U.S./alliance carrier capacity as a result of this reduction in local and connecting passengers.

\textsuperscript{5} For example, Brander, J.A. and B.J. Spencer. 1985. “Export Subsidies and International Market Share Rivalry.” \textit{Journal of International Economics} 18 83–100. This paper has been cited over 2,000 times and presents a well-known model of the results of subsidized international trade.
These features are clearly visible in the U.S.-international markets served by the Gulf carriers, particularly in the last few years. From 2011 to 2014, available seats from the U.S. to the Middle East increased by 31%: greater than any other world region from the U.S., including Asia/Pacific, Europe, South America, and Africa.\(^6\) To Dubai, Abu Dhabi, and Doha alone, available seats increased by 65%.\(^7\) Yet demand to these three destinations is extremely limited.

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\(^6\) According to Innovata SRS schedule data via Diio Mi.

\(^7\) Ibid.
From the United States, 74% of Emirates passengers, 86% of Etihad Airways passengers, and 91% of Qatar Airways passengers are destined to other places in the Middle East (besides the Gulf carrier hubs), the Indian subcontinent, Africa, or Southeast Asia.\(^8\)

By carrying this connecting traffic at subsidized levels of service, quality and prices, these Gulf carriers have restricted the ability for U.S. carriers to serve these destinations with their own aircraft. Indeed, since 2007, U.S. carriers have discontinued three daily services to the fast-growing Indian subcontinent as a direct result of subsidized Gulf carrier competition.\(^9\) And, as passengers start to drive from smaller cities like Austin, TX and Richmond, VA directly to large airports to use new nonstop Gulf carrier services, domestic connecting flights from these cities that rely on this international feed to remain profitable are threatened as well.

### Indian Subcontinent Routes Exited by U.S. Carriers since 2005

<table>
<thead>
<tr>
<th>Airline</th>
<th>Origin</th>
<th>Destination</th>
<th>Year Exitd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delta</td>
<td>New York</td>
<td>Mumbai</td>
<td>2008</td>
</tr>
<tr>
<td>Delta</td>
<td>Atlanta</td>
<td>Mumbai</td>
<td>2009</td>
</tr>
<tr>
<td>American</td>
<td>Chicago</td>
<td>Delhi</td>
<td>2012</td>
</tr>
</tbody>
</table>

Source: Innovata SRS schedule data via Diiio Mi

Hence, the U.S–Gulf air transportation market shows clear signs that subsidies are at play. And the issue keeps getting worse; the subsidized Gulf carriers are increasing the pace of their service expansion. In the last four months alone, Emirates has announced a second daily flight to Boston\(^10\), a second daily frequency to Seattle\(^11\), and a new service to Orlando.\(^12\) Meanwhile, Qatar announced in a single day three new U.S. destinations—Boston, Atlanta, and Los Angeles—as well as a second daily flight to New York.\(^13\) The demand for air transportation to the Gulf and beyond has clearly not grown enough in the last four months to justify all of these new services, which amounts to a further 23% increase in Gulf carrier seats from the United States over the next year. Put differently, the recently announced Gulf carrier services to the United States cannot be justified by growth in underlying demand, only by a further diversion of passengers from U.S. and other carriers.

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\(^8\) According to ARC-adjusted PAXis passenger booking data via Diiio Mi.

\(^9\) The three services are New York – Mumbai (Delta), Atlanta – Mumbai (Delta), and Chicago O’Hare – Delhi (American).


\(^12\) Mutzabaugh, B. 2015. Emirates to make Orlando its 10\(^{th}\) U.S. Destination. USA Today 24 March 2015.

Fueled by subsidies, these new services do not represent a “fair and equal” market. And the growth will keep coming. As Emirates chairman and CEO Sheikh Ahmed bin Saeed Al Maktoum said in a recent interview:

“We always learn we cannot stop, this is really the direction of the UAE government and the Dubai government. The minute you stop, somebody will pass you. In terms of expansion, we will continue.”

— Sheikh Ahmed bin Saeed Al Maktoum, Emirates CEO

When considering this issue, we must always ask ourselves whether subsidized Gulf carrier service reflects the spirit of “fair and equal” Open Skies markets. Unlike the other 100+ countries with which the United States has an agreement, and with which the U.S. carriers compete under an equal playing field where profitability and underlying demand drive airline capacity decisions, the UAE and Qatar operate under an unbalanced, unfair, and unequal playing field where subsidies give their carriers the opportunity to expand unilaterally without regard to demand or cost.

Subsidized Gulf carriers do not uphold the “fair and equal” provision of Open Skies. This affects not only the U.S. airline industry, but also U.S. communities large and small, as the following sections demonstrate.

**For large U.S. communities, Gulf carriers are not the path to economic impact:**

Conventional analysis used by most communities when evaluating new service only considers the number of passengers that utilize that new service. Yet this methodology does not provide the full picture when it comes to the subsidized Gulf carriers. Specifically, just because there is traffic on a new Gulf carrier flight does not mean that it is new demand. A careful look at the demand/supply relationship demonstrates clearly that the onboard traffic of the Gulf carriers’ flights is largely made up of traffic that is diverted away from U.S. carrier flights and those of their alliance partners, as well as other non-Gulf foreign carriers. The economic impacts of this diversion of passengers are compounded by the fact that the subsidized Gulf carriers do not have local markets of any meaningful size.

The economic opportunity associated with a new flight is closely linked to the number of passengers traveling between the two nonstop points. This is often called the "local market." Airlines conduct considerable research when starting new services to find the routes where the local market demand is highest. The greater the local market, the more opportunities for economic linkages and therefore the greater economic impact to both communities.

There are numerous ways that economic benefits to communities are enhanced through nonstop service to strong local markets. Peer-reviewed academic literature has found that the presence of nonstop air transport service plays a key role in firms’ location of

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their headquarters in a community.\textsuperscript{15} Nonstop service is also positively correlated with increases in inbound tourism and trade. Routes with strong local markets need to rely less on connecting passengers to reach route profitability, enhancing the economic benefits of such service to both communities. This also helps explain why many of the world’s most successful hubs—be they in London, Paris, Tokyo, Los Angeles, or New York—have strong and significant local market demand in many of the worldwide cities they help connect.

Yet Dubai, Abu Dhabi, and Doha are not among the destinations with largest local markets from the United States. In fact, in a ranking of nonstop international destinations by passengers flown in 2014, Dubai ranked 51\textsuperscript{st}, Abu Dhabi ranked 144\textsuperscript{th}, and Doha ranked just 151\textsuperscript{st}.\textsuperscript{16} For most airlines, these types of destinations would not be worthy of nonstop service, not to mention nonstop service using an enormous widebody aircraft of the types used by the subsidized Gulf carriers. However, as we’ve seen, these Gulf carriers do not operate like most airlines.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
Rank & Airport & PDEW (2014) \\
\hline
1 & LHR & 12,344 \\
2 & NRT & 6,996 \\
3 & CDG & 5,316 \\
4 & ICN & 4,711 \\
5 & GRU & 3,634 \\
6 & MBJ & 3,186 \\
7 & PUJ & 3,149 \\
8 & FRA & 3,120 \\
9 & PVG & 3,039 \\
10 & PEK & 2,915 \\
\hline
151 & DOH & 228 \\
\hline
\end{tabular}
\caption{Passengers per day each way (PDEW) from the U.S. to Int’l Destinations, 2014}
\end{table}

Source: ARC-adjusted PAXis (FMg) passenger data via Diio Mi

Note: Excluding destinations in Canada and Mexico

Thanks to over $40 billion in government subsidies, Emirates, Etihad, and Qatar do not have to worry about providing profitable operations. These carriers’ subsidies allow them to start service on routes with very weak or limited local markets. On average, only 17\% of Emirates passengers, 11\% of Etihad passengers, and just 6\% of Qatar passengers from the United States are actually going to Dubai, Abu Dhabi, or Doha, respectively.\textsuperscript{17} Because their local markets are so small, these Gulf carriers need to rely


\textsuperscript{16} According to a ranking of top origin-destination markets from the United States; North American destinations excluded, from ARC-adjusted PAXis passenger data via Diio Mi.

\textsuperscript{17} According to ARC-adjusted PAXis passenger booking data via Diio Mi.
on many more connecting passengers to other countries to support their flights. These passengers are mostly traveling to or from the Indian subcontinent or destinations in the Middle East.

It is not as if the connecting destinations served by the subsidized Gulf carriers are unreachable using other airlines. In fact, of the 178 destinations served by the three Gulf carriers, 175 of them (or over 98%) are served by one or more of the three airline alliances—one world, SkyTeam, and the Star Alliance. So if a passenger is trying to reach Al Maktoum (Dubai’s alternate airport), Salalah, Oman, or Sialkot, Pakistan—by all means, a Gulf carrier may surely provide the better option. But each of the other 175 destinations served by these Gulf carriers as well as over 1,000 additional points around the globe can be accessed via the U.S. network carriers and their alliance partners.¹⁸

¹⁸ Emirates has claimed that they “carry travelers from the US to 56 destinations...which are not served by any American carrier.” (http://www.emirates.com/us/english/about/int-and-gov-affairs/government-affairs/emirates-us/press-release.aspx). Yet each of these destinations is also served by an alliance partner of at least one U.S. carrier, allowing for connecting service from hundreds of American communities to these fast-growing economies.
Past research has shown that Gulf carrier service does not meaningfully stimulate passenger traffic above and beyond what would have otherwise been expected given economic and demographic growth. That is, Gulf carriers shift traffic from U.S. carriers and their alliance partners (as well as other foreign carriers) to fill their planes without generating new demand. Since Gulf carriers’ local markets are so small, a large majority of their U.S. passengers are connecting to or from other destinations served by the three alliances. These passengers could have connected on flights with a greater local market—and a greater economic impact to U.S. communities.

Think of it this way—say there are 200 passengers each day that want to fly from a U.S. city to India. These passengers could travel on a Gulf carrier via Dubai, Abu Dhabi, or Doha—these carriers’ limited local markets means there is plenty of room for connecting passengers. However, they could also travel on a U.S. carrier or alliance partner via Frankfurt or Paris—a route on which up to 50% of passengers are traveling locally. Since the local market is greater, the flight to Frankfurt or Paris has a greater economic impact to U.S. communities by strengthening business and economic ties. And, since the Frankfurt or Paris local market is so strong, those 200 passengers could likely support two nonstop flights to Frankfurt or Paris, assuming a 50% local/beyond mix and a 250-passenger plane, as opposed to just one Gulf carrier flight, assuming a 10% local/beyond mix with the same sized aircraft.

Simply put, when Gulf carriers approach large U.S. airports to commence service, caution is necessary to consider the effects on existing and potential new service. Connecting traffic carried on a single Gulf carrier flight could support up to two nonstop flights with greater local markets and greater economic potential to the U.S. gateway city. The math is clear. Subsidized Gulf carrier service threatens the viability of nonstop

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19 Assuming a break-even load factor of 80%.
20 Considering the large size of Gulf carrier widebody aircraft, the ratio may be even higher than two-to-one.
flights with greater economic impact than the Gulf carriers themselves could ever hope to provide.

**For smaller U.S. communities, Gulf carriers threaten the air transportation grid:** There are nearly 500 airports in the United States with commercial air transportation service. While the airports serving large cities are well-known, the hundreds of small- and medium-sized airports serving America’s cities and towns are equally important to the strength of the national economy. Through connections to airline hubs, these airports serve to keep their residents and businesses connected to the rest of the country and the world.

Even with their enormous orderbooks and subsidies, it is unlikely that Gulf carriers will directly serve many of America’s small- and medium-sized airports. This does not mean, however, that the effect of subsidized Gulf carrier service on these small communities is nil. There are several key reasons why Gulf carrier entry into nearby hubs can negatively affect smaller communities.

Entry of Gulf carriers into nearby gateways means that people living in smaller cities are more likely to drive directly to a large airport to take that new nonstop flight, particularly when Gulf carriers use their subsidies to price at levels that would be uneconomic for un-subsidized U.S. carriers. This is already starting to happen in some states. Virginia, Texas, and Pennsylvania were the three U.S. states that saw the greatest loss in passenger traffic from the state’s smaller airports to the Indian subcontinent and Middle East carried by U.S. carriers and their alliance partners. 21 What do each of these states have in common? Each saw growth in Gulf carrier flights over the last five years.

Take a city like Richmond, VA. In September of 2012, Emirates entered nearby Washington Dulles International Airport, and Etihad Airways also entered Washington Dulles in April of 2013. 22 As a result, passenger traffic from Richmond to the Indian Subcontinent and the Middle East has fallen by 33% since 2012, even though average daily seats on the three large U.S. network carriers serving Richmond have increased by nearly 5% over the same period. 23 The same trend is apparent in Austin, TX, where traffic to the Indian Subcontinent and the Middle East has fallen 20% 24 since Emirates entered Dallas/Fort Worth International Airport in 2012 notwithstanding an increase in capacity by the U.S. large network carriers. To the contrary, Richmond and Austin have each experienced growth in international traffic to China and Europe over the same period.

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21 According to the U.S. Department of Transportation Bureau of Transportation Statistics DB1B International Passenger Ticket Sample, accessed via Diio Mi.
22 According to Innovata SRS schedule data accessed via Diio Mi.
23 According to the U.S. Department of Transportation Bureau of Transportation Statistics DB1B International Passenger Ticket Sample, accessed via Diio Mi.
If their residents are still reaching their destinations, why should a small community care if a person takes Emirates or Delta? Because passengers driving to a nearby airport threatens the viability of existing domestic flights. Domestic flights to smaller airports rely on international traffic to justify their profitability and their existence. Passengers traveling from a smaller airport to Tokyo, Beijing, Stockholm, or Hyderabad on a U.S. carrier or an alliance partner bolsters the network revenues on the domestic flight they take to the nearest hub. That is, the more international traffic, the more likely a domestic flight to a hub will succeed.

If passengers start moving away from taking U.S. carriers or their alliance partners to overseas destinations, domestic connecting flights are threatened. And if these flights become unprofitable and are discontinued, the negative externalities are significant: passengers to hundreds of other destinations will also be affected, and the community will be less connected to the nation and the world.

As the subsidized Gulf carriers continue to expand to dozens of U.S. gateways, the number of small communities that will be within driving distance of this service will only continue to increase. That means the number of communities where domestic service could be at risk will only multiply. Small communities are inexorably linked to the performance of the network carriers—expanded subsidized Gulf carrier service is yet another threat to the sustainability of these critical links to the air transportation network.

**The danger of Fifth Freedom routes like New York - Milan:**
Another way in which subsidized Gulf carrier service flies in the face of “fair and equal” competition is perhaps even more worrisome. In 2013, Emirates announced service from New York to Milan, continuing on to Dubai. This service is operated under “Fifth Freedom” rules, which allow carriers to carry passengers between two foreign countries, so long as the flight starts in or continues on to the carrier’s home country.
Fifth Freedom flights are a legacy of an era when long-haul flights were limited by the operational performance of large aircraft. A flight halfway across the world may have had to make several stops for operational reasons in different countries, and these flights would not have been economically viable unless airlines were allowed to carry passengers between these countries. These days, modern aircraft can easily take journeys of 8,000 miles or more without a stop.⁵

Emirates’ New York – Milan service is an anachronism; a relic of a time when carriers would need to make a technical stop on the way from New York to Dubai. This is clearly not an issue today—in fact, Emirates currently serves New York – Dubai three times a day with nonstop service. Instead, Emirates’ New York – Milan service serves a different purpose: to compete directly with U.S. carriers and their alliance partners in a market that is irrelevant to the Gulf.

<table>
<thead>
<tr>
<th>Airport</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milan</td>
<td>79.6%</td>
</tr>
<tr>
<td>Dakar</td>
<td>2.6%</td>
</tr>
<tr>
<td>Dubai</td>
<td>2.1%</td>
</tr>
<tr>
<td>Prague</td>
<td>2.0%</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>1.1%</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>0.9%</td>
</tr>
<tr>
<td>Madras</td>
<td>0.8%</td>
</tr>
<tr>
<td>Cochin</td>
<td>0.6%</td>
</tr>
<tr>
<td>Cape Town</td>
<td>0.6%</td>
</tr>
<tr>
<td>Mumbai</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Source: MIDT

In fact, Dubai is almost entirely irrelevant to Emirates’ New York – Milan service. Data from MIDT shows that nearly 80% of passengers on board this flight are destined directly to Milan; only 2.1% of passengers continue on to Dubai. After all, why would a passenger fly via Milan to Dubai when there are three nonstop flights available? That means that subsidized Gulf carriers are competing on routes that have nothing to do with the Gulf States’ economic agendas.

Fifth Freedom routes like New York – Milan are particularly dangerous to U.S. carriers and their alliance partners when the Gulf carriers are not playing fairly. In this case, a subsidized carrier on this route may cause one or more of the U.S. carriers or their alliance partners that operate this route to discontinue service. If these flights are cut, this limits the connections available from other communities to Milan, and further

⁵ In fact, several of the world’s longest international routes are operated non-stop by a Gulf carrier from the U.S.
weakens the strength of the domestic flights that would have fed those Milan connections on a U.S. or alliance carrier.

By offering New York – Milan with subsidized service, Emirates is throwing out the rulebook for "fair and equal" competition. There are dozens of Fifth Freedom routes throughout the world, including several in the United States. Singapore Airlines flies from New York to Frankfurt; Cathay Pacific flies from New York to Vancouver, and Ethiopian Airlines has recently announced service from Los Angeles to Dublin. The difference is that these other carriers that operate Fifth Freedom flights compete with U.S. carriers using fair and equal principles that are within the spirit of Open Skies. Subsidized Gulf carrier service to Milan does not.

**The Gulf Carriers’ abuse of “Fair and Equal” competition will only grow worse in the years to come:**

New York to Milan is only the beginning. Imagine a world in which subsidized Gulf carriers provide service on a dozen or more Fifth Freedom routes with a limited genuine link to their home countries. Such a scenario would substantially damage the ability of U.S. carriers and their alliance partners to compete on a “fair and equal” level with the Gulf carriers, and would all but certainly lead to exit from multiple existing international and domestic markets, harming both large and small U.S. communities.

As the Gulf carriers continue to receive more aircraft, an increase in service to the United States is inevitable. A 2014 study from the Massachusetts Institute of Technology forecasted based on existing orderbooks and an analysis of retirement dates that Emirates’ fleet will increase from 199 widebody aircraft in 2013 to 355 aircraft in 2020; that Qatar Airways will double their fleet from 124 aircraft in 2013 to 248 aircraft in 2020; and that Etihad Airways’ fleet will increase to 165 aircraft by 2020.26 This means that by 2020, the Gulf carriers together will have nearly 650 aircraft—most of which will be widebodies. This will lead to a nearly 100% increase in Gulf carrier revenue passenger-miles system-wide.27

The subsidized Gulf carriers will likely target for service expansion airports that have a significant amount of existing traffic to their key connecting markets—the Indian subcontinent and the Middle East. As the table below shows, the ten U.S. airports with the largest markets to these destinations that Gulf carriers did not serve in 2014 represent nearly two million passengers each year between the U.S., the Indian subcontinent, and the Middle East. Several of these destinations—including Atlanta and Orlando—have already seen new Gulf carrier service announced.

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With each new U.S. gateway that the subsidized Gulf carriers enter, there will be more and more smaller communities that will see their traffic numbers dwindle and their domestic services threatened as international passengers drive directly to these gateways to access subsidized Gulf carrier flights. Each new Gulf carrier flight will also be a missed opportunity to capture additional economic impact for the gateway community by instead serving those connecting passengers with nonstop services to destinations with more robust local markets. And, Gulf carriers will divert passengers from existing flights operated by U.S. carriers and their alliance partners, which could lead to service discontinuation on both domestic and international routes.

The U.S. carriers are not asking for an end to Gulf carrier service, or an end to competition with foreign carriers. Competition is necessary to a healthy market and brings value to consumers and businesses. More importantly, the U.S. carriers are not asking to undo the Open Skies policy that has benefitted U.S. consumers and communities in the overwhelming majority of cases. They simply insist that competition with Gulf carriers is conducted in a way that meets the Open Skies agreement of “fair and equal.” As we have shown, the markets served by the Gulf carriers exhibit the characteristics that are consistent with subsidized markets. Without fair and equal competition, communities large and small, as well as the U.S. air carrier industry that keeps America connected to the global air transportation grid, will suffer harm.