



Background

As of Friday, January 31, 2020, the coronavirus that originated in Wuhan China has been diagnosed in nearly 10,000 cases and has led to more than 200 deaths. The majority of cases are in China, but the virus has also spread on a limited basis to at least 20 other countries.

Officials have taken strong action to contain the outbreak with travel restrictions in and out of the Wuhan province. In addition, the following actions have been taken that will both limit travel and reflect already flagging travel activity:

- The China Association of Travel Services issued a memo to the hospitality industry requesting an abatement on all cancelation and change fees.
- The Chinese Ministry of Culture and Tourism issued a moratorium on all business group travel and package (hotel and flight) travel.
- Most airlines are canceling routes due to significant declines in demand. United Airlines alone has cancelled 24 round trip routes between the US and China.
- Trip.com, China's largest travel services company, is allowing cancellations for bookings at 30,000 global hotels.
- A growing number of countries are shutting down all travel from China.

This brief report lays out a potential scenario of impacts on the US travel industry based on a comparison with the SARS outbreak of 2003. The report covers the following topics:

- 1. The importance of the Chinese travel market
- 2. SARS as a case study for possible losses
- 3. Scenario of coronavirus impacts on:
 - Visits to the US
 - Spending in the US economy
 - US hotel room demand
- 4. Exposure to the Chinese travel market by state and city

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Importance of the Chinese travel market

Visits from China to the US have grown 1,270% (nearly 13X) since 2002, tallying an estimated 2.8 million in 2019. As a result, the potential impact of coronavirus is much larger than SARS in 2003.

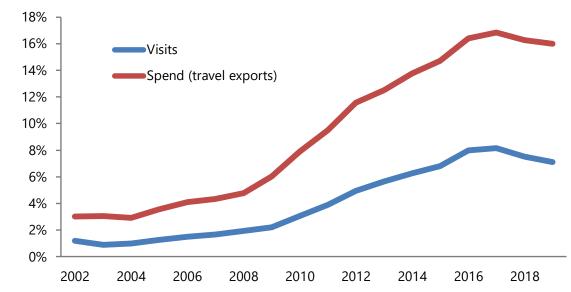
Chinese visitors to the US spent approximately \$34 billion on travel and transportation services in 2019.

In the early 2000s, the Chinese market represented 1% (about 200,000) of all overseas visitors and 3% of overseas visitor spending.

In 2019, we estimate China to represent 7% of all overseas visits and 16% of associated travel spending in the US economy.

While growth has cooled over the past few years, China is currently the single largest source of US travel-related exports (measured as Chinese traveler spending while visiting the US and spending on US airlines.)

China Share of US Overseas Travel



Source: Tourism Economics, NTTO, BEA

Impact of SARS

In the wake of SARS, the US experienced a 30% decline in visitors from China and a 10% decline from the rest of Asia.

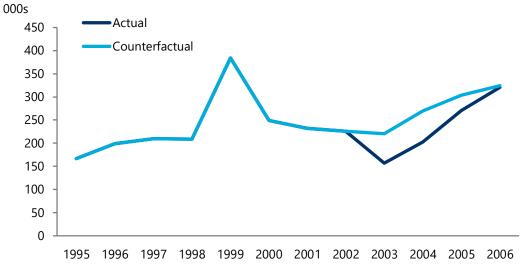
SARS is a relevant benchmark as it originated in China, where the majority of the 8,000 infections were documented. Early indications are that the mortality rate of SARS is much higher at nearly 10%. (Coronavirus appears to be less than 5%.)

As SARS curtailed travel, especially in Asia, the US experienced a 30% decline in visits from China and a 10% loss from other Asian markets. This coincided with tighter visa restrictions and entry procedures when the Asian market was already suppressed at the time.

The Chinese travel market largely recovered to the "counterfactual" scenario in 2006—three years after the crisis.

Tourism Economics modeled a counterfactual scenario of expected visits with no SARS crisis and compared this with actual visits from China to determine the losses by year and the time to full recovery.

US Arrivals from China, SARS Impact



Source: Tourism Economics, NTTO

Impact of SARS

The US lost more than 170,000 visitors from China over a five-year period as a result of SARS.

The SARS health crisis lasted for approximately four months, from March to July 2003.

The recovery from SARS was robust in 2004 with a 29% increase in visits to the US from China. However losses, measured as the difference between the actual and counterfactual (no crisis) scenarios, extended another three years before the market fully recovered to expected volumes of 400,000 overnight visitors.

-	2002	2003	2004	2005	2006	2007	Cumulative
Visits from China (actual)	225,565	157,326	202,544	270,272	320,450	397,405	1,347,997
% change	-3%	-30%	29%	33%	19%	24%	
Visits from China (counterfactual)	225,565	220,258	269,595	303,798	324,171	402,020	1,519,843
% change	-3%	-2%	22%	13%	7%	24%	
Visitor loss	-	(62,932)	(67,051)	(33,526)	(3,721)	(4,615)	(171,846)

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Coronavirus scenario

Based on historical precedent, a 28% drop in visits to the US from China is expected in 2020.

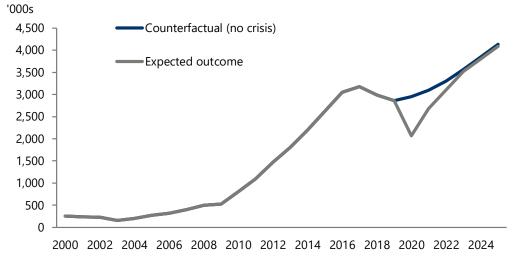
We expect the most significant declines will be experienced in 2020 with recovery beginning in the latter part of this year.

While growth will accelerate in 2021, the entire recovery will span four years, like the SARS experience.

A total of 1.6 million visits from China will be lost, with 56% of the loss occuring in 2020.

Tourism Economics modeled a decline in expected visits based on SARS and compared this with our pre-crisis forecast for visits from China to determine the potential losses by year and the time to full recovery.

US Arrivals from China, Coronavirus Impact



Source: Tourism Economics, NTTO

Coronavirus impacts

Based on historical precedent, a 28% drop in visits to the US from China is expected in 2020.

While significant uncertainty remains regarding efforts to contain the virus and shorten its impact, with SARS impacts as a guide we have modeled the following scenario of coronavirus impacts.

The scenario assumes a 28% decline in visits from China compared to our pre-crisis (counterfactual) forecast of 3% growth for 2020.

	2019	2020	2021	2022	2023	2024	Cumulative
Visits from China (actual)	2,865,257	2,064,959	2,683,441	3,101,694	3,519,767	3,798,154	15,168,016
% change	-4%	-28%	30%	16%	13%	8%	
Visits from China (counterfactual)	2,865,257	2,949,942	3,093,042	3,302,899	3,560,642	3,842,262	16,748,787
% change	-4%	3%	5%	7%	8%	8%	
Visitor loss	-	(884,983)	(409,601)	(201,205)	(40,875)	(44,108)	(1,580,771)
Visitor spending loss (\$ millions)		(5,774)	(2,672)	(1,313)	(267)	(288)	(10,314
Destination (\$ millions)		(5,032)	(2,329)	(1,144)	(232)	(251)	(8,989
Air (\$ millions)		(742)	(343)	(169)	(34)	(37)	(1,325)
Hotel room demand loss		(4,576,292)	(2,118,067)	(1,040,439)	(211,368)	(228,085)	(8,174,251
Impact on US room demand growth		-0.35%	-0.16%	-0.08%	-0.02%	-0.02%	

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Coronavirus impacts

Given the massive increase in the Chinese travel market, the impact in absolute terms will be much larger than from the SARS crisis.

The largest share of visitor losses are expected in the current year. However, even with a strong rebound, losses will extend through 2024.

The US will experience a loss of 1.6 million visitors from mainland China alone as a result of the coronavirus. This does not include potential losses from other markets in Asia, where effects will also be felt.

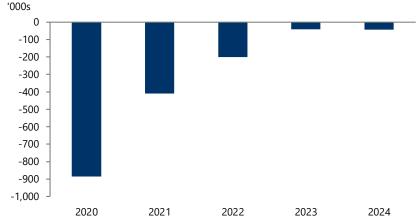
The US will experience a loss of 1.6 million visitors from mainland China alone.

China is the single largest travel export market for the US (including spending in the US and on US international air carriers).

Excluding education-related spending, Chinese visitors spent nearly \$6,000 per visit while in the US in 2018. Including spending on US airlines, this figure rises to \$6,500 per visitor.

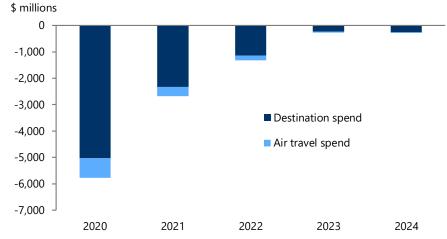
Cumulative, a \$10.3 billion loss in Chinese visitor spending as a result of the coronavirus. More than half of these losses will be experienced in 2020.

US Arrivals from China, Coronavirus Impact



Source: Tourism Economics

Chinese Visitor Spending in US, Coronavirus Impacts



Source: Tourism Economics

Hotel industry impacts

Approximately 65% of Chinese visitors to the US stay in a hotel with an average length of stay of 15 nights.

A comparison of the actual and counterfactual scenarios indicates that 4.6 million hotel room nights will be lost in 2020 alone. The cumulative loss in room nights will be 8.1 million through 2024.

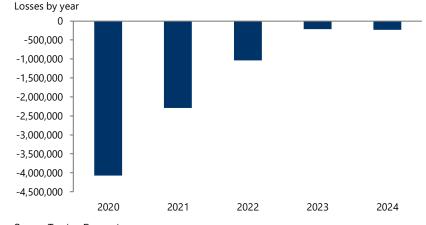
Reductions in Chinese visitors means that 4 million hotel room nights will be lost in 2020 alone.

In 2020, 0.35% of US hotel room demand will be forfeited as a result of lost visitors from China.

About 0.2% of room demand will be lost in 2021 compared to the counterfactual (no crisis) scenario.

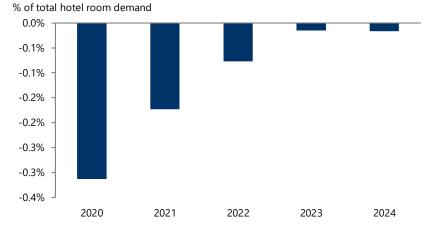
This impact represents a gross loss from China, which may be partly offset as hotels replaced lost business. It also does not include potential declines from other inbound markets.

US Hotel Room Nights from Chinese Visitors, Coronavirus Impact



Source: Tourism Economics

US Hotel Room Nights from Chinese Visitors, Coronavirus Impact



Source: Tourism Economics. STR

State exposure to China

Among the top ten states, California and New York are the largest state destinations with 1.7 million and 1.2 million overnight visits from China, respectively.

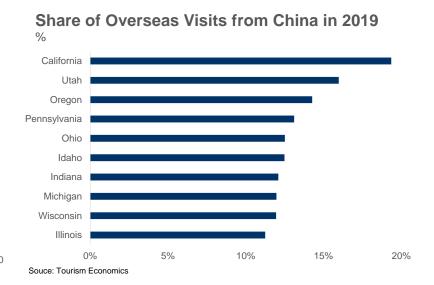
Nevada, Washington, and Hawaii follow with 200,000-250,000 Chinese visitors each in 2019.

California and New York stand to lose the most Chinese visitors

As a share of total overseas visitors to each state in 2019, California, Utah, and Oregon are particularly exposed to the Chinese market. Almost 20% of overseas visits to California are from China.

The sum of state losses in terms of visits will exceed the national loss as the average Chinese visitor to the US travels to 1.7 states.

Overnight Visits from China in 2019 000s California New York Nevada Washington Hawaii Illinois Massachusetts District of Columbia Florida Pennsylvania 200 400 600 800 1000 1200 1600 1800 Souce: Tourism Economics

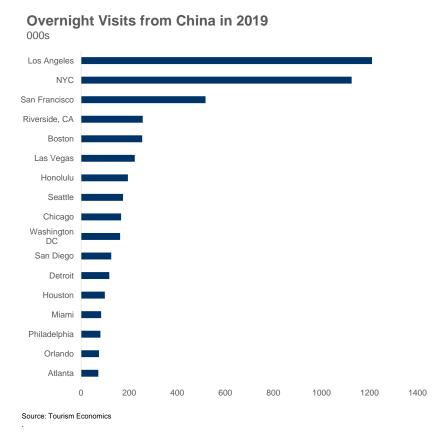


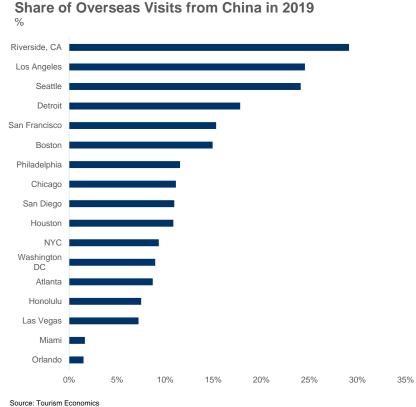
City exposure to China

Los Angeles and New York City are the largest US city destinations with 1.2 million and 1.1 million overnight visits from China in 2019, respectively.

Los Angeles and New York City received the most Chinese visitors in 2019

As a share of total overseas visitors to each city in 2019, Riverside CA, Los Angeles, and Seattle are most exposed to the Chinese market.





About Tourism Economics



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- Global travel data-sets with the broadest set of country, city, and state coverage available
- · Travel forecasts that are directly linked to the economic and demographic outlook for origins and destinations
- · Economic impact analysis that highlights the value of visitors, events, developments, and industry segments
- Policy analysis that informs critical funding, taxation, and travel facilitation decisions
- Market assessments that define market allocation and investment decisions

Tourism Economics operates out of regional headquarters in Philadelphia and Oxford, with offices in Belfast, Buenos Aires, Dubai, Frankfurt, and Ontario.

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