

U.S. TRAVEL ASSOCIATION

Introduction

Initial Findings: Analysis of Future U.S. Highway Performance

The Power of Travel

Travel is an essential part of our lives and a major contributor to the U.S. economy. Travel ranks among the top 10 industries in 48 states and the District of Columbia in terms of employment. In 2012, travel spending generated \$2.0 trillion in economic output, which supports 14.6 million American jobs – 1 out of every 8 jobs.

Growth in domestic and international travel is also fueling our economic recovery. Over the past three years, the travel industry has created jobs at a 15 percent faster rate than the rest of the economy, with more than a half-million jobs added since early 2010.

As the United States strives to remain competitive in a global economy, travel will play an increasingly important role in American business and life. Travel increases corporate sales and profits; it improves employee productivity; and it keeps Americans connected to their families, friends, and the world.

The Growing Crisis in Travel Infrastructure

Economic expansion in the U.S. travel industry is closely tied to investments in America's travel infrastructure. Starting in the 1960's, the creation of the Interstate Highway System gave rise to a vast network of hotels, restaurants and attractions built to serve the booming number of auto travelers. From the early 1900's until 1995, the construction of more than 400 U.S. airports increased long-distance travel between American cities and opened our travel and tourism markets to international visitors from around the world.

U.S. global competitors also realize the importance of modern, multi-modal travel infrastructure and are now placing massive investments in projects to modernize airports, expand high speed rail, and increase capacity along major highways. But while the rest of the world is speeding up, the U.S. is slowing down.

According to the World Economic Forum, the U.S. fell from its first place rank in 2005, to 14th today in 2012. The signs of this decline are becoming more apparent in our everyday lives.

On an average day in the United States, one in five flights is delayed or cancelled, according to the Bureau of Transportation Statistics – due in large part to congested airports that are at or above capacity and an air traffic control system that uses WWII-era technology. In a recent ranking of the world's best airports, not one U.S. airport was listed among the top 25.

While U.S. airports receive low rankings on a global scale, traffic congestion in America also ranks among the worst. According to the INRIX 2012 Traffic Scorecard, the United States is the third-most congested country in the world.¹ As of August 2013, U.S. road congestion was increasing at the fourth-highest rate compared to all other countries.²

Local and national groups that rely heavily on infrastructure – including chambers of commerce, construction companies, engineering firms, and freight companies – have largely defined these problems through their own lens. The American Society of Civil Engineers has assigned a D+ grading to U.S. infrastructure.

The U.S. Chamber of Commerce has created a Transportation Performance Index that measures how our transportation systems impacts the cost of doing business in the United States. And policymakers at all levels of government have highlighted the growing price tag to fund infrastructure improvements and the shrinking budgets that are unable to foot the bill.

But what does our infrastructure challenge look like through the eyes of the traveler and the travel community? If the U.S. continues down this path, how will business and leisure travel patterns change? What will the economic impacts be for travel if the U.S. fails to modernize its infrastructure?

Infrastructure through the Eyes of the Traveler

When it comes to travel infrastructure, very few Americans would describe its impact on their lives in terms of report cards, budget deficits, dedicated funding streams or distribution formulas. Most Americans are likely experiencing its decline in terms of travel times, congestion, delays, cancellations, hassle or lack of alternative transportation options.

For example, our travel infrastructure is often pushed to maximum capacity during peak travel times. Almost any person that has taken a long-distance car trip over the Labor Day weekend can describe the bottlenecks, car accidents, and increased travel times that result from huge spikes in traffic volumes. Similarly, anyone who has passed through a major U.S. airport over Thanksgiving weekend will likely recount stories of long lines at security checkpoints, overcrowded terminals and rampant flight delays caused by the enormous spikes in passenger volumes.

Today, these peak times for long-distance travel are typically the exception rather than the rule. But according to a study commissioned by U.S. Travel, without major policy changes and additional investments, a typical travel day of travel in the United States will be equal to the worst in our nation's major corridors

Report #1: Labor Day on the Roads, Thanksgiving the Skies

In the first of a series of reports, U.S. Travel commissioned a study to measure the future performance of travel infrastructure serving America's two primary modes of long distance travel – highways and airports.

¹ <http://inrix.com/traffic/blog/post/2013/04/24/Three-Takeaways-from-INRIXs-6th-Annual-Traffic-Scorecard>

² <http://scorecard.inrix.com/scorecard/>

The report that follows lays out the initial findings of the highway portion of this analysis. The study examines highway usage data and growth rates along 16 key interstate corridors nationwide. Its conclusion: without investment and policy changes, average daily car volume will soon surpass that of the notoriously congested first weekend of September – within the decade in some places. Given that major transportation projects can take 15 years to complete, timely relief is beyond reach in some locales.

Of greatest concern, a recent survey of Labor Day travelers found that 58 percent would significantly alter their yearly travel habits if U.S. highways experienced Labor Day-like conditions on a "typical day." More than 38 percent of respondents would avoid at least one-to-five trips per year; while almost one in five travelers (19.5 percent) said they would stop taking long distance trips altogether.

To put these findings in perspective, if travelers avoided just one auto trip per year, the U.S. economy would lose \$23 billion in spending that would directly support 208,000 American jobs. U.S. Travel developed this figure using its proprietary economic impact model in conjunction with data from the U.S. Census Bureau and TNS Travel Characteristics database. Specifically, the estimate shows the lost travel spending and resulting job creation that would occur if each auto traveler avoided just one auto trip during 2012 and the trip was not replaced by another form of transportation.

It is the hope of U.S. Travel that this report will begin to frame the magnitude of the problem and economic losses that will occur if Washington is unable to rise to the challenge of revitalizing America's travel infrastructure. Over the next several months, U.S. Travel plans to release additional studies that examine four modes of travel infrastructure and how they facilitate or impede the efficient movement of people and economic growth of the travel industry.

Labor Day on the Roads, Thanksgiving in the Skies

An Analysis by Cambridge Systematics, Inc.

EXECUTIVE SUMMARY & INITIAL FINDINGS

An analysis of seasonal patterns of highway and airport use confirms what longer distance travelers know from painful, personal experience: ***The Labor Day weekend is among the busiest travel periods on highway travel corridors in the United States. Depending upon the corridor, it is frequently the peak day of the year. According to an initial review of the data, the Thanksgiving Day period exhibits intense peaking for air travel associated with the nation's top 100 airports.***

Peak period highway traffic volumes are commonly 140 to 160% or more of average daily demand. Based on growth as projected by state transportation agencies, unless capacity is added the average day will experience Labor Day-like traffic by 2030. Several major corridors will carry as much traffic on a typical day even sooner as they carry today on Labor Day:

- I-95 between Palm Beach and Melbourne, Florida as soon as 2020.
- I-5 between Los Angeles and San Diego, I-70 between Columbus and Pittsburgh, and I-95 between New York and Washington as soon as 2024.
- I-15 between Southern California and Las Vegas will feel like Labor Day weekend every day as soon as 2027.

A forthcoming analysis will examine passenger volumes over the Thanksgiving weekend at the top 100 US airports and use the Federal Aviation Administration's (FAA) projected growth rates to determine when most airports will experience passenger volumes similar to Thanksgiving 2011. That analysis will be completed and released prior to Thanksgiving 2013.

1.0 STUDY OBJECTIVE

The objective of the study is to compare the “normal” traffic levels of passenger longer distance travel corridors and airports with the peak demand that is often associated with seasonal and holiday periods. The study team focused on highway and air transport to test the hypotheses that Labor Day weekend is the busiest period on the highways and Thanksgiving weekend is the busiest period at U.S. airports. Further, the study applies forecasts of travel growth developed by state Departments of Transportation (DOTs) across the country and by the FAA to portray the difference between current average and future use. One goal was to determine when average daily traffic on the highways and airports will look and feel like Labor Day and Thanksgiving, respectively.

2.0 METHODOLOGY

For the highway portion of the analysis, the study team identified a series of critical highway corridors connecting major metropolitan regions to capture longer distance passenger travel. No national personal travel demand model nor database exists that focuses on such scale and use. However, the study team identified a set of 223 permanent Automatic Traffic Recorders (ATRs), maintained for major highways and reported to the Federal Highway Administration (FHWA) as part of the Vehicle Travel Information System (VTRIS) database, that had sufficient data to determine daily fluctuations in such highway traffic. The latest available data is for 2011. For the aviation portion of the analysis, volume data from Orbitz for transactions that represent 94% of United States airport passengers was analyzed for the top 100 US airports to capture daily variations in passenger demand. The period studied was from January 1, 2010 to July 23, 2013. The daily volumes were studied for their distribution to identify average and peak days.

Estimated growth rates in traffic derived from state DOT forecasts were used to determine when the average day would begin to look like the observed peak days on the highway corridors. State DOT forecasts, normalized to common forecast years by FHWA, were weighted and averaged by US Census Divisions. FAA’s estimated growth in air passengers were used for the aviation portion of the analyses. These growth rates were used to determine the year in which the average day would reach the observed peaks.

3.0 FINDINGS: HIGHWAY CORRIDORS

On routes known to be important to longer distance travel, the numbers systematically arrayed in the study provide evidence of how close the Nation is to completely using this component of its highway capacity. The data confirms that Labor Day weekend is among the busiest travel periods on longer distance highway travel corridors in the U.S. and is frequently the peak day on certain corridors. Other peak highway travel periods include the 4th of July, Thanksgiving, and Memorial Day Weekends.

As shown in the table on page 3, "Highway Corridor Summary," peak period traffic volumes are commonly 140 -160% or more of average daily demand. These corridors were selected due to the character of their travel and availability of data. They are not statistically representative and cannot be combined to be considered a measure of national performance. Nor can these attributes alone be ranked to present investment priorities. However, they do represent the stress that is placed on these facilities routinely and have a significant impact on the mobility of travelers. The chart on page 6 is illustrative of the data developed for each corridor and summarized on page 3.

It should be noted that the impacts of peak demand in terms of this order of magnitude of increased traffic volumes is not as obvious in urban areas because there appears to be no surplus capacity – corridors already at capacity on the average day have no excess to be absorbed by additional demand associated with seasonal trends. Thus no peaking at the level in other corridors is observed. This situation is illustrated in the map on page 5 for the routes for which the base condition is shown in red, where the average "base condition" is at capacity.

At current rates of highway traffic growth, unless additional capacity for transportation is created through expansion of existing infrastructure, new facilities, or innovative techniques, the typical day will approach Labor Day peaks. Several major corridors will carry as much traffic on a normal day in the near future as they carry today on Labor Day. For example,

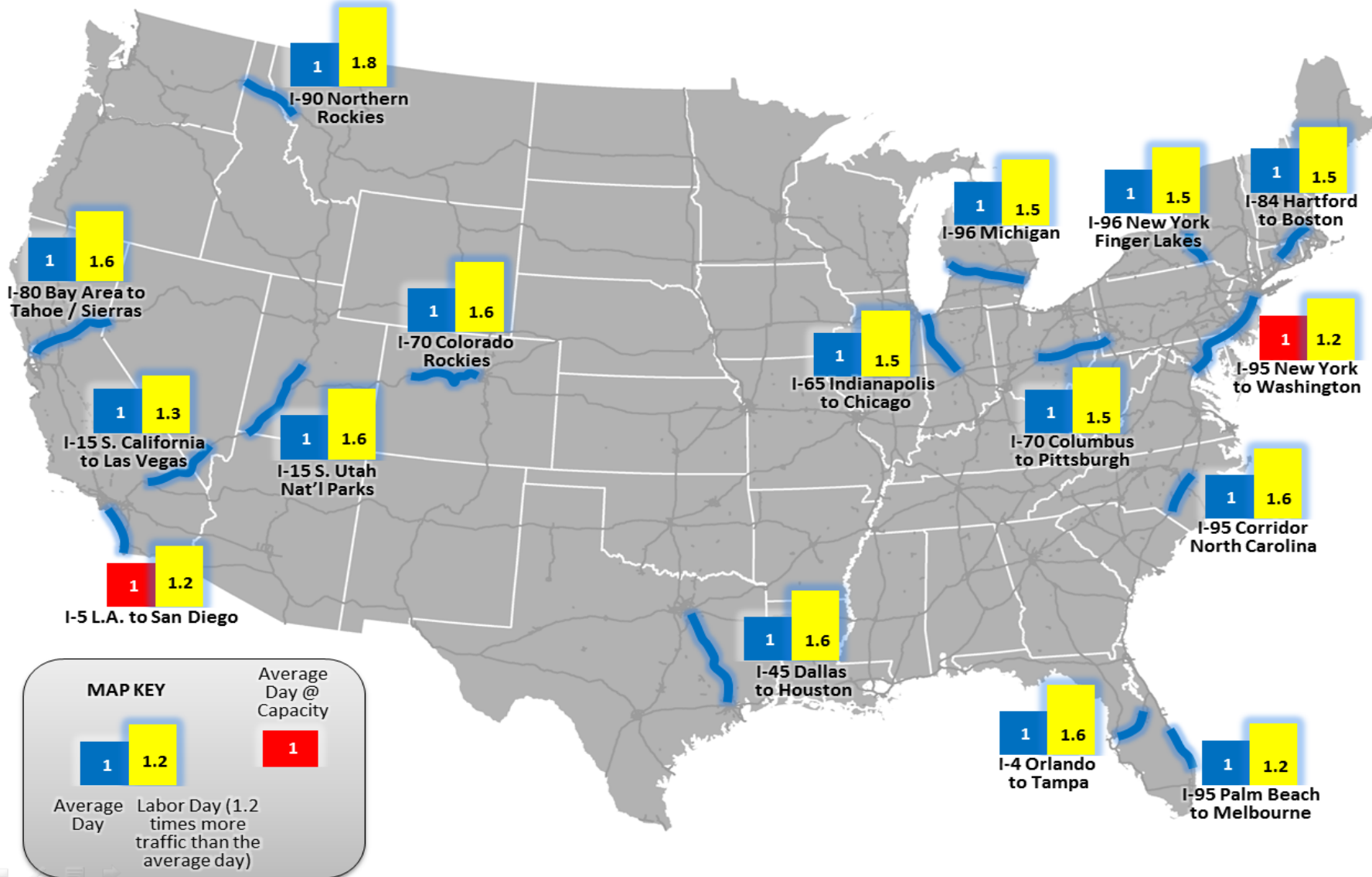
- I-95 between Palm Beach and Melbourne, Florida as soon as 2020.
- I-5 between Los Angeles and San Diego, I-70 between Columbus and Pittsburgh, and I-95 between New York and Washington as soon as 2024.
- I-15 between Southern California and Las Vegas will feel like Labor Day weekend on a typical day as soon as 2027.

Highway Corridor Summary

	Corridor	CAGR Census Division*	Peak of Labor Day weekend as % of Avg Day	Year Average day is 100% of Labor Day 2011	Year average day is 25% of Labor Day	Year average day is 50% of Labor Day	Year average day is 75% of Labor Day
1	Florida Atlantic Coast (Palm Beach to Melbourne) I-95	1.90%	119%	2020	2013	2016	2018
2	New York to Washington DC	1.33%	117%	2023	2014	2017	2020
3	Los Angeles to San Diego I-5	1.63%	122%	2023	2014	2017	2020
4	Columbus to Pittsburgh I-70	2.32%	140%	2026	2015	2019	2022
5	Southern California to Las Vegas I-15	1.63%	128%	2026	2015	2019	2023
6	Leisure/vacation points in Michigan I-96	2.32%	154%	2030	2017	2021	2026
7	Southern Utah (Access to national parks) I-15	1.99%	155%	2033	2018	2023	2029
8	Indianapolis to Chicago I-65	1.79%	149%	2033	2018	2023	2029
9	Central North Carolina (representative of I-95 Corridor) I-95	1.90%	155%	2034	2018	2024	2029
10	Dallas to Houston I-45	1.93%	159%	2035	2018	2025	2030
11	Denver to Vail (Rocky Mountain resorts) I-70	1.99%	162%	2035	2018	2025	2030
12	Central Florida (Orlando to Tampa) I-4	1.90%	160%	2036	2018	2025	2031
13	Bay Area / Sacramento to Lake Tahoe / Sierras I-80	1.63%	156%	2039	2019	2026	2033
14	Finger Lakes, New York I-86 (NYC to Finger Lakes)	1.33%	145%	2039	2019	2026	2033
15	Northern Rockies (Idaho / Montana) I-90	1.99%	178%	2040	2020	2028	2034
16	Hartford to Boston I-84	1.33%	149%	2041	2020	2028	2035

*CAGR is compound annual growth rate by Census Division. Each state provides growth rates to the US DOT---but they can vary in their methodologies. This estimate combine s them from the surrounding region (the Census Region) of which there are 8, to smooth out these differences. The resulting CAGR is what we use to forecast out the growth on the highways. This generally results in a conservative forecast

Labor Day Versus the Average Day on Major Travel Corridors (2011)



11. Colorado Rockies I-70

