Travel and Tourism: An Overlooked Industry in the U.S. and Tenth District

By Chad Wilkerson

With the onset of recession in early 2001, the U.S. travel and tourism industry fell into its worst slump since World War II. The September 11 terrorist attacks and subsequent tightening of airport restrictions dealt the industry an unprecedented blow. Many travel destinations continued to suffer in 2002 and early 2003 from a declining stock market, sluggish economic recovery, and war in Iraq. Prior to these recent difficulties, however, travel and tourism's role in the national economy had been rising steadily for decades.

As in the nation, the travel and tourism industry has become increasingly important in the Tenth Federal Reserve District.[1] Indeed, by the late 1990s, the industry contributed more to gross output in the district than either agriculture or oil and gas extraction, the region's defining industries for much of the 20th century. Travel and tourism is especially important in the district's Rocky Mountain states, which are home to popular vacation spots like Yellowstone National Park, Santa Fe, and the Colorado ski resorts, as well as Denver, a top business travel destination.

Policymakers have begun to recognize travel and tourism's economic significance. In early 2003, for example, Colorado's state legislature—despite facing a severe budget crisis—approved $9 million in new tourism-promotion funds to try to boost economic activity in the state. At

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about the same time, Congress approved $50 million for an international tourism marketing campaign and to create a U.S. Travel and Tourism Promotion Advisory Board. Yet comprehensive analysis of how travel and tourism performs over time and across areas is lacking, making it difficult to know the benefits and costs of greater reliance on the industry.

To provide a better understanding of the travel and tourism industry's role in the economy, this article compares and contrasts travel activity in the nation with that in the Tenth District. The article shows that national travel and tourism activity generally grows rapidly during economic expansions but slows during recessions. In the district, the effect of recessions on the industry is much less than in the nation, due largely to the different types of travelers the region attracts. At the same time, many travel destinations in the district are susceptible to other types of shocks, such as wildfires or inadequate snowfall, which can disrupt local activity.

The first section of the article defines travel and tourism and explains the industry's importance and historical performance at the national level. The second section shows the reliance of the district on travel and tourism and points out overall differences in historical performance from the nation. The third section investigates activity in specific types of tourist areas to determine why the travel and tourism industry sometimes performs differently in the region than in the nation. The article concludes with a discussion of implications of the findings.

I. OVERVIEW OF U.S. TRAVEL AND TOURISM

Because travel and tourism is not generally classified as a separate industry in economic data sources, determining its importance and tracking its performance can be difficult. This section reviews several measures of travel and tourism's national importance and provides a working definition of the industry for comparing activity across geographic areas. The section also looks at the historical performance of national travel and tourism activity and explains the industry's behavior.

Measuring travel and tourism

Most researchers would likely agree with the definition of travel and tourism provided by the Bureau of Economic Analysis (BEA) in its national travel and tourism satellite accounts: "the economic activity generated inside the United States by 'visitors' of all types—for business and pleasure, by residents and nonresidents alike—and outside the United States by U.S. residents" (Okubo and Planting).[2] Yet measuring travel and tourism activity is not easy, particularly at the state and local levels. Unlike industries such as construction, manufacturing, or retail trade, most data sources do not list an industry called "travel and tourism." At the national level, the BEA is able to use detailed industry-level data to provide estimates of travel and tourism's importance. To do this, it first determines which commodities are typically purchased by visitors and which industries produce these items. The BEA then attributes various proportions of output and employment in an industry to travel and tourism based on the share of its products that are consumed by visitors as opposed to nonvisitors. These proportions range from greater than 75 percent for the hotel and air transportation industries to less than 5 percent for the railroad and retail trade industries.[3]

Studies that compare travel and tourism activity across states and local areas must generally rely on other methods to determine travel and tourism's importance. In this article, the basic measure of travel and tourism used to compare activity across states and localities will be employment in hotels, air travel, and amusement/recreation.[4] Employment is often the only industry-level measure available for these geographic areas (although when other types of estimates are available they will sometimes be used for comparison purposes). The choice of the three industries was based largely on the proportions of their total output and employment that the BEA attributes to travel and tourism at the national level. As mentioned above, this share is very high for hotels and air travel. The share of national activity in the amusement/recreation industry attributed to travel and tourism is considerably smaller (about 25 percent) because local residents are often responsible for a large portion of this industry's revenues. Still, if an area has a high concentration of amusement/recreation employment—

which would include jobs in such establishments as museums, casinos, ski resorts, and amusement parks—then the area more than likely attracts a large number of visitors.

Some studies include other industries in their measures of travel and tourism activity as well, such as restaurants, car rental agencies, and public transit. The basic measure in this article excludes these industries, usually either because economic data are missing for most geographic areas or because only a very small portion of activity in the industry can be attributed to travel and tourism.[5] Given that these other industries are excluded, however, the basic measure likely understates travel and tourism's importance in many areas.[6]

The national importance of travel and tourism

Travel and tourism is clearly an important industry in the United States. While estimates of travel expenditures as a share of national output vary based on the measure used, most studies place the current share between 4 and 6 percent. This is larger than the contribution to U.S. GDP of residential fixed investment, motor vehicle output, and national defense. In its travel and tourism satellite accounts, the BEA found that total domestic tourism demand in 1997 was approximately $408 billion.[7] Of this total, slightly more than 70 percent was for leisure travel. A recent study by Global Insight found that travel and tourism accounted for 4.0 percent of total output in the nation's top 100 metropolitan areas in 2000. Perhaps the most widely cited statistics of travel and tourism's importance are those of the Travel Industry Association of America (TIA), whose estimates show that travel expenditures in the United States were $591 million in 2000 before falling to $555 million in 2001.

Since comparisons across states and localities in this article will often be based on employment in the basic travel and tourism industries (hotels, air travel, amusement/recreation), the amount of national employment in these industries is also relevant. In 2000, the most recent year for which data are available, the basic travel and tourism industries accounted for 3.6 percent of total U.S. employment, up from 3.3 percent in 1990. These shares are similar to those found in the BEA's satellite accounts for 1997 (3.5 percent of total employment) and the Global Insight study (4.2 percent).

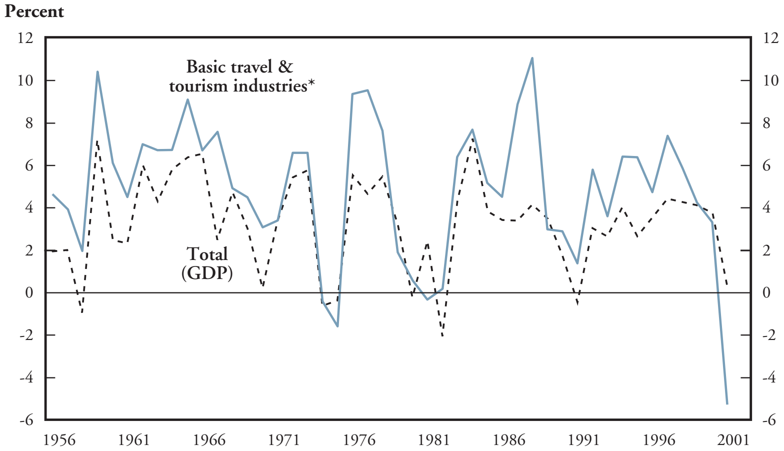
Unlike in some industries—such as retail trade, which accounts for 14 to 19 percent of employment in all U.S. states—travel and tourism's share of employment varies considerably across states. The highest shares are found in Nevada (27.7 percent) and Hawaii (12.3 percent), while the lowest shares are in Alabama (1.8 percent) and Arkansas (2.0 percent). The disparities in travel and tourism's share are even greater across metropolitan areas. In Atlantic City and Las Vegas, for example, roughly 30 percent of all jobs are in the basic travel and tourism industries, and many other jobs undoubtedly rely on visitors to the casinos and other attractions in those cities. By contrast, four of the nation's metro areas have less than 1 percent of their total employment in travel and tourism.[8] Across nonmetro counties, the variation is wider still. A total of 106 rural counties had more than 1,000 travel and tourism jobs in 2000, with some counties having as much as 90 percent of their total employment in the industry. By contrast, 71 rural counties had no travel and tourism jobs whatsoever in 2000, and 759 others had less than 1 percent of their employment in the industry.

The differing importance of travel and tourism across the nation is due to several factors. Travel and tourism employment is concentrated in some locations because of the presence of natural amenities such as ocean coasts or mountain ranges and the recreational opportunities they provide. Many other areas benefit from important transportation infrastructure, such as interstate highways or airports. And some places, such as Las Vegas and Orlando, are major tourist areas because of massive development of tourist attractions.

Growth in national travel and tourism

Travel and tourism's importance in the U.S. economy has grown steadily over the last half century. From 1956 to 1999, growth in the basic travel and tourism industries outpaced U.S. GDP growth in all but four years (Chart 1). As a result, travel and tourism's share of overall output more than doubled during that period. Rising incomes in the United States and abroad are likely responsible for much of the industry's growth in recent decades, although other factors have contributed as well.

Chart 1
ANNUAL REAL GROWTH IN U.S. OUTPUT



* Hotels & other lodging places, air transportation, and amusement & recreation services

Source: Bureau of Economic Analysis

During economic expansions, the travel and tourism industry has historically behaved like a luxury good. When incomes rise, demand for luxury goods increases more than proportionally, as people are able to spend a smaller share of their income on necessary items like food and clothing.[9] Thus, during periods of economic growth, demand for luxury goods should rise rapidly. In every economic expansion of the past fifty years, output in the travel and tourism industry grew faster than overall national output.

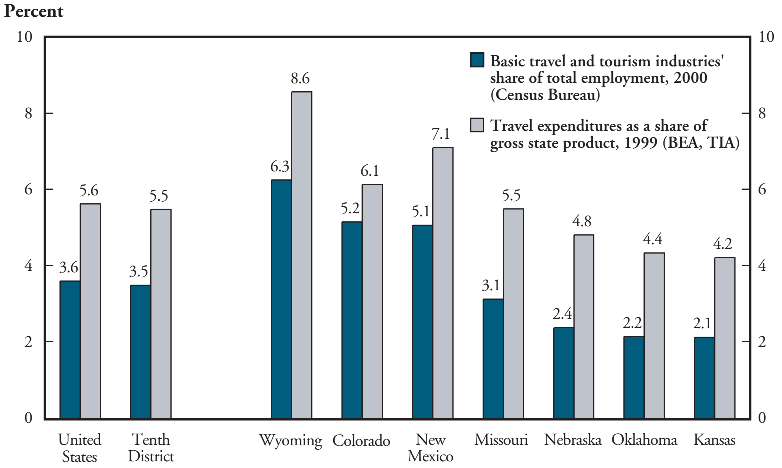
As income growth slows or even declines during economic recessions, demand for luxury goods should fall even more quickly. Yet during the economic recessions of the second half of the 20th century, travel and tourism output usually did not fall any more than the overall economy. Indeed, travel and tourism output continued to rise in the 1990-91 recession and during the recessions of the 1950s and 1960s. One explanation given by researchers for why travel and tourism activity has held up—or even grown—during economic downturns is that, while travel spending in general may be a luxury, taking some kind of vacation may be a necessity (Ryan).[10]

The experience of 2001-02, however, differs from any other recession and recovery period in recent history. Real output in the travel and tourism industry declined more than 5 percent in 2001, even though both real GDP and real per capita disposable income rose slightly that year. Likewise, the BEA's travel and tourism satellite accounts show that real national tourism-related sales fell another 2 percent in 2002, even as national output and incomes increased moderately. This atypical behavior of travel and tourism since 2001 would suggest that other shocks besides recession have recently impacted the industry, which has indeed been the case.

In addition to rising incomes, other factors have undoubtedly contributed to the expansion of travel and tourism activity over time. For example, increased vacation time and the rise of flexible work schedules in the United States and abroad have made it easier for many people to travel in recent decades. Perhaps more significantly, the cost of traveling has declined. Several regulatory and technological advances—most notably the deregulation of airlines in the late 1970s and travelers' enhanced ability to find travel bargains in the 1990s due to the Internet—have lowered the real price of airfares, making it possible for more and more business and pleasure travelers to visit faraway places. Statistics from the Air Transport Association (ATA) show that inflation-adjusted airfares for domestic and international flights have fallen more than 50 percent since the mid-1970s and more than 25 percent since 1990.

Given its historical performance as a luxury good during expansions and a necessity during recessions, travel and tourism's future economic prospects look quite bright. Although several studies have found that the link between incomes and spending on leisure travel diminishes somewhat over time (as travel in general becomes less of a luxury and more of a necessity), once the effects of terrorism have faded, leisure travel activity will likely continue to grow faster than the overall economy for the foreseeable future.[11] The long-term outlook for business travel is less clear. Although strong corporate profits, globalization, and lower airfares in recent decades have boosted business travel, greater use of teleconferencing and the increased time required for air travel due to heightened security might dampen future business travel demand.

Chart 2
TRAVEL AND TOURISM'S SHARE OF ECONOMIC ACTIVITY



Sources: Census Bureau, Bureau of Economic Analysis (BEA), Travel Industry Association of America (TIA)

As a whole, the U.S. travel and tourism industry has performed fairly consistently over time. However, the industry's importance and performance have not been the same throughout the country. To illustrate this point, the next section looks at recent travel and tourism activity in a particular region—the Tenth Federal Reserve District.

II. TRAVEL AND TOURISM IN THE TENTH DISTRICT

As in the nation, travel and tourism activity in the Tenth District has grown in importance and varies considerably across space. The industry's economic significance in the district as a whole is almost identical to that in the nation. However, travel and tourism is much more important in the region's Rocky Mountain states than in its Plains states. And although travel and tourism accounts for a similar share of economic activity in the district and the nation, the industry's performance has been quite different in the region in recent decades. Most notably, the district's travel and tourism sector has held up much better than the nation's during each of the past two recessions.

Importance in the district economy

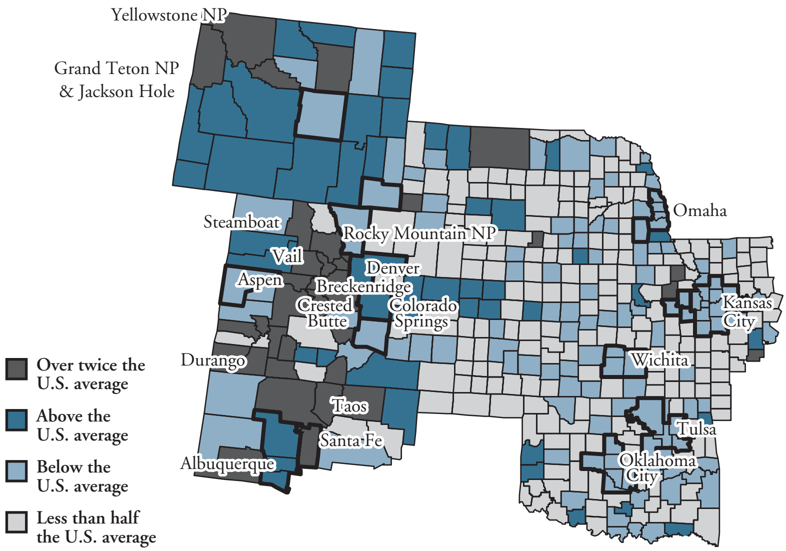
The basic travel and tourism industries accounted for 3.5 percent of total employment in the Tenth District in 2000, basically the same share as in the nation (Chart 2).[12] Likewise, estimates from the TIA show that travel expenditures in Tenth District states in 1999 were equivalent to 5.5 percent of total output in the region, also quite similar to the nation. This similarity in travel and tourism's importance has persisted over time, with the industry's share of economic activity rising approximately 40 percent from the early 1980s to the late 1990s in both the nation and the district.

While travel and tourism's importance to the Tenth District as a whole resembles that of the nation, the industry's role in most individual district states is far from average. The district's three Rocky Mountain states—Colorado, New Mexico, and Wyoming—are among the top ten states in the country in terms of their concentration of employment in the basic travel and tourism industries. Travel and tourism is considerably less important in the Plains region of the district. Kansas, Nebraska, and Oklahoma rank among the bottom ten states in concentration of basic travel and tourism jobs, and Missouri's share of such jobs is also slightly below the national average.[13] Despite these differences across states, the industry's importance has grown in all seven district states in recent decades. From the early 1980s to the late 1990s, the basic travel and tourism industries' share of gross state product grew about 20 percent in Colorado and Missouri, roughly 50 percent in Kansas, Nebraska, New Mexico, and Oklahoma, and over 80 percent in Wyoming.

A map of travel and tourism's employment share in Tenth District counties shows that the highest concentrations are indeed in the mountain states, particularly in northwestern Wyoming, western Colorado, and northern New Mexico (Figure 1). Recent visitor statistics show that several national parks and ski resorts in these states are among the most popular in the country (Table 1). Recent rankings from travel magazines also show that some Rocky Mountain destinations—most notably Yellowstone National Park, several Colorado ski areas, and Santa Fe, New Mexico—are among their readers' favorite vacation spots.[14]

Figure 1

TRAVEL AND TOURISM'S SHARE OF LOCAL EMPLOYMENT IN THE TENTH DISTRICT, 2000



Note: For metropolitan areas (areas with bold borders), shading represents weighted average across all metropolitan counties.

Source: Census Bureau

Although less dependent on travel and tourism than many leisure travel spots in the Rocky Mountain states, three large metro areas there also depend on travel and tourism. In 2000, Colorado Springs, Denver, and Albuquerque ranked 11th, 23rd, and 30th, respectively, among the nation's top 100 metros in concentration of travel and tourism output, according to a recent study by Global Insight. These cities are attractive arrival points for trips into the mountains or other nearby attractions as well as being popular destinations in their own right. In addition, Denver ranks among the top ten business destinations in the country, according to the Business Travel Association of America, and its airport is the fifth-busiest in the nation and tenth-busiest in the world.

In contrast, few areas in the district's Plains states have above-average levels of travel and tourism activity. Those that do are generally sparsely populated and are often located along interstate highways or contain an

Table 1
RANKINGS OF U.S. TRAVEL DESTINATIONS

Leisure destinations

Most-visited U.S. national parks, 2002
(National Park Service)

1, Great Smoky Mountains (TN-NC)
2. Grand Canyon (AZ)
3. Olympic (WA)
4. Yosemite (CA)
5. Cuyahoga Valley (OH)
6. Rocky Mountain (CO)
7. Yellowstone (WY)
8. Grand Teton (WY)
9. Zion (UT)
10. Acadia (ME)

Most-visited U.S. ski resorts, 2000-01
(Keeplan International, Inc.)

Breckenridge, CO
Copper Mountain, CO
Heavenly, CA
Keystone, CO
Killington, VT
Mammoth Mountain, CA
Park City, UT
Snowbird, UT
Squaw Valley, CA
Steamboat, CO
Vail, CO
Winter Park, CO

Business destinations

Top 10 U.S. Business Travel Destinations
(National Business Travel Association)

Atlanta	Los Angeles
Boston	New York
Chicago	Orlando
Dallas	San Francisco
Denver	Washington, DC

Most Large Exhibitions Hosted, U.S., 2000
(Center for Exhibition Industry Research)

1. Orlando	7. New York
2. Las Vegas	8. San Diego
3. Chicago	9. Washington, DC
4. New Orleans	10. Nashville
5. Atlanta	***11. Denver***
6. Dallas	12. San Francisco

World's Busiest Airports, 2002
(Airports Council International)

1. Atlanta	6. Dallas/Ft. Worth
2. Chicago (O'Hare)	7. Frankfurt, Germany
3. London (Heathrow)	8. Paris
4. Tokyo (Haneda)	9. Amsterdam
5. Los Angeles	***10. Denver***

Note: Tenth District areas in bold italics.

Indian reservation casino. In recent years, however, some areas formerly dependent on agriculture have begun to focus on attracting greater numbers of hunters, fishermen, and wildlife-watching enthusiasts. In addition, some rural areas of the district have increasingly turned to "heritage tourism" as a potential way to improve economic activity in their area. For example, many towns located on the Missouri River have planned festivals and re-enactments to celebrate the upcoming bicentennial of the Lewis and Clark Expedition. Some farmers in the region have also begun to supplement their incomes by charging visitors to participate in or observe traditional agricultural activities.

None of the metro areas in the Plains region of the district had above-average shares of travel and tourism output in 2000 according to Global Insight. However, the five largest metros all ranked near the middle of the nation's top 100 metro areas in travel and tourism concentration—Kansas City (41st), Oklahoma City (33rd), Tulsa (54th), Omaha (62nd), and Wichita (61st). Several of these cities have recently opened or expanded major regional tourist attractions. In the western part of the Kansas City metro, for example, the Kansas Speedway hosted its first NASCAR and Indy Racing League (IRL) races in 2001 and a Cabela's Outfitters (whose original store in Sidney, Nebraska, draws nearly one million visitors per year) opened next to the racetrack in 2002. In Oklahoma City, a national memorial to the 1995 bombing of the downtown federal building opened in 2000, and several attractions in the city's Bricktown area have been added in recent years as well.

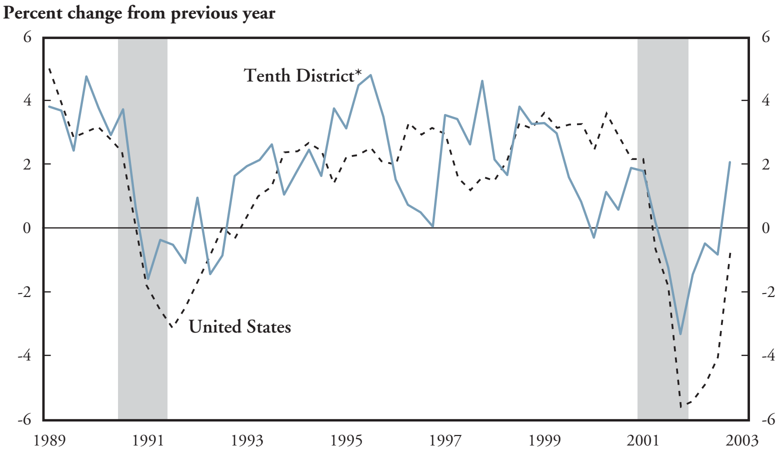
Different historical performance than the nation

Since recessions rarely start and end at the beginning of a year, monthly or quarterly data are needed to compare activity in the Tenth District's travel and tourism industry with that of the nation over the course of the business cycle. Such data exist for just one of the three basic travel and tourism industries—hotels. Fortunately, though, employment in the hotel industry likely serves as an adequate proxy for overall travel and tourism activity, since hotels encompass both business and leisure travel.

In recent decades, growth in district hotel employment has clearly differed from the national experience at times. Prior to the 1990s, hotel job growth in the Tenth District was much more volatile than in the country as a whole.[15] The district's travel and tourism sector declined considerably more during the recession of the early 1980s and also experienced a downturn in the late 1980s. In addition, travel and tourism activity in the district differed at times from that of the nation during the expansion of the 1990s.

Chart 3

U.S. VS. TENTH DISTRICT HOTEL EMPLOYMENT GROWTH



* Includes the five states fully within the boundaries of the district (CO, KS, NE, OK, WY) plus New Mexico. Although only the northern half of New Mexico is in the district, over 75 percent of that state's travel and tourism employment is in the district portion of the state, so it is included in the chart. By contrast, Missouri is excluded since less than a quarter of its travel and tourism employment is in the district portion of that state.

Note: Shaded areas represent official economic recessions.

Source: Bureau of Labor Statistics

Perhaps the most notable difference between the district and national hotel sectors in recent years, however, has been the district's better performance during the past two recessions (Chart 3). Oklahoma was the only district state to experience a larger percentage decline in hotel jobs than the nation during the recession of the early 1990s. Oklahoma's hotel employment had been falling almost constantly since the oil bust of the mid-1980s as large reductions in business travel likely led to the state's 27 percent loss in hotel jobs from 1985 to 1994. Likewise, during the recession that began in March 2001, Colorado was the only district state that posted a larger percentage decline in hotel jobs than the nation (but its worse performance lasted for just the third and fourth quarters of 2001).[16]

What explains the better performance of the travel and tourism industry in the district in recent recessions? Why does activity sometimes appear more volatile during expansion periods? Do some of the major tourist areas of the region perform differently than similar destinations across the country? Or are there other factors that might make district destinations behave differently?

III. A DIFFERENT BRAND OF TRAVEL AND TOURISM?

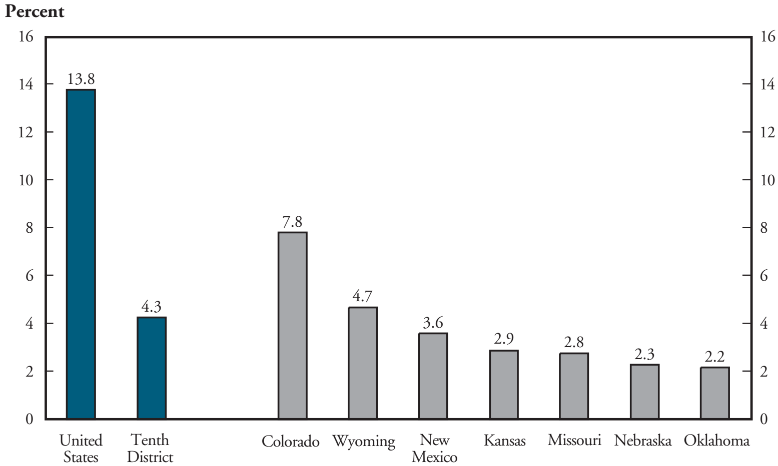
As in the nation, most Tenth District travel destinations have suffered declines in activity over the past couple of years, and many experienced a slowdown during the recession of the early 1990s as well. However, the overall performance of travel and tourism in the district during these two periods has been better than in the nation as a whole. This section shows that the region's smaller reliance on international and business travelers—due largely to its relative lack of very large cities—appears to be the primary reason for its better performance. The section also shows, however, that several leisure destinations in the district are susceptible to weather conditions and other factors that can disrupt local economies at any time.

Smaller reliance on international travelers

According to the TIA, spending by international travelers in the United States fell 14 percent in real terms in 2001, over twice as big a decline as in travel expenditures by U.S. residents that year. Since international visitors generally account for around 15 percent of all travel expenditures in the United States annually, the slowdown in foreign travelers' spending has noticeably dampened the national travel and tourism industry.[17] The impact in the Tenth District has likely been much less, however, as destinations in the region are considerably less reliant on foreign visitors.

In the Tenth District, travel expenditures by foreigners represented only about 4 percent of total travel spending in recent years, including 1999, the last year for which data are available (Chart 4). Among the district states, only Colorado received more than 5 percent of its annual travel and tourism revenues from international visitors, and even it was

Chart 4
SHARE OF TOTAL TRAVEL EXPENDITURES BY INTERNATIONAL VISITORS, 1999



Source: Travel Industry Association of America

well below the national average. By contrast, several non-district states that attract a large number of travelers relied heavily on international visitors, including Hawaii (50 percent of total travel revenues), Florida (30 percent), New York (26 percent), and California (19 percent).

The Tenth District draws fewer international visitors for several reasons. First, the district has no international borders or coastlines, which means foreign visitors must travel farther to get to the region. Second, the district has few very large cities or—perhaps more important—major international airports, at which a large portion of international visitors arrive.[18] Finally, according to the 2000 Census, the foreign-born share of the population in the district (5 percent) is less than half the national average (11 percent), which likely results in fewer visits from family members living in other countries.

While the Tenth District's larger reliance on domestic travelers is a likely reason why its travel and tourism sector held up better than the nation's in 2001 and 2002, it does not help explain the district's better performance during the recession of the early 1990s. Average real growth in international visitor spending in 1990 and 1991 was more than 8 percent, considerably higher than growth in U.S. resident travel spending in those years. Indeed, the strong demand from international visitors in the early 1990s appears to be a major reason why U.S. travel and tourism in general held up better than the overall economy during that period.

Moreover, the district's smaller reliance on international travelers does not help explain the volatility in travel and tourism activity in the region during periods of economic expansion. From 1993 to 2000, travel expenditures by both U.S. residents and foreign visitors increased at an average annual rate of 6 percent. However, growth in travel expenditures by foreign visitors varied considerably more from year to year, likely due to variations in foreign exchange rates and foreign economic growth.[19]

Fewer major metropolitan areas and business destinations

Besides attracting few international visitors, the Tenth District's lack of very large cities and relatively large number of midsized cities may also help explain why travel and tourism has held up better in the region during recent recessions. According to Global Insight, travel and tourism output in the nation's top 100 metro areas fell 10 percent from 2000 to 2002. In contrast, the industry's output fell just 4 percent in the eight Tenth District metropolitan areas included on the list.[20] In general, the nation's largest metro areas were hit harder than somewhat smaller metro areas. Likewise, larger cities also suffered bigger declines in hotel employment during the recession of the early 1990s.

From 2000 to 2002, travel and tourism output fell by 14 percent in the ten largest U.S. metros and by nearly 9 percent in the next 40 largest cities (Table 2).[21] In contrast, the industry's output in the remainder of Global Insight's Top 100 metros—roughly those with populations between 500,000 and 1.2 million—fell by less than 4 percent during that time (and by just 1.4 percent if Honolulu is excluded from this group). Global Insight attributes the larger declines in the bigger cities to several factors, including these cities' larger reliance on international travel, business travel, and air travel in general—all of which have been in a slump since early 2001. In addition, terrorism-related fears may have recently kept some leisure travelers away from larger cities.

Table 2
TRAVEL & TOURISM OUTPUT IN METRO AREAS, 2000 TO 2002

Metro area(s)	Growth (percent)
Top 100 U.S. metro areas	**-10.1**
8 Tenth District metros in Top 100	-3.8
10 largest U.S. metros (pop. > 3.4m)	**-14.0**
Tenth District metros in group: none	n/a
Next 40 largest U.S. metros (pop. > 1.2m)	**-8.7**
Tenth District metros in group: 2	-7.6
Denver	*-8.5*
Kansas City	*-5.9*
Other U.S. metros with pop. > 500,000	**-3.9**
excluding Honolulu	***-1.4***
Tenth District metros in group: 6	0.7
Tulsa	*-6.4*
Wichita	*-3.3*
Colorado Springs	*-0.9*
Albuquerque	*3.1*
Oklahoma City	*3.3*
Omaha	*5.0*

Source: Global Insight, Census Bureau

Regardless of the reason for the larger travel and tourism declines in big cities, the Tenth District appears to have benefited from this trend. None of the nation's ten largest metros are located in the district, and only Denver and Kansas City—which suffered travel and tourism output declines of 8.5 percent and 5.9 percent, respectively, from 2000 to 2002—are among the 50 largest cities. On the other hand, the region has six of the 50 smallest metros among Global Insight's top 100—Oklahoma City, Tulsa, Omaha, Albuquerque, Wichita, and Colorado Springs. Although travel and tourism fell somewhat in Tulsa, Wichita, and Colorado Springs in 2001 and 2002, the declines were much less than the national average. In addition, Omaha, Albuquerque, and Oklahoma City were among only ten of Global Insight's Top 100 metros whose growth in travel and tourism exceeded 3 percent over the past two years.

Table 3
ANNUAL GROWTH IN LEISURE TRAVEL ACTIVITY, 1990-2002, PERCENT

Leisure travel activity	1990-91	1992-2000	2001-02
Recreation visits to National Parks			
United States (55 parks)	**0.7**	**0.8**	**-1.2**
Tenth District (5 parks)	***6.1***	***1.3***	***-0.6***
Yellowstone & Grand Teton NPs	*7.0*	*2.1*	*1.5*
Rocky Mountain NP	*4.9*	*1.7*	*-3.1*
Skier/snowboarder visits*			
United States	**-6.4**	**2.2**	**-5.1**
Colorado resorts	*-1.0*	*1.9*	*-4.5*
Other Rocky Mountain (incl. NM & WY)	*2.4*	*1.3*	*-8.9*
Real retail sales in upscale areas**			
Charleston, SC	-13.4	3.8	-10.4
South Lake Tahoe, CA	-12.5	0.4	-2.7
Carmel, CA	-8.7	1.3	-14.6
Santa Fe, NM	*2.7*	*4.6*	*-1.2*
Aspen & Vail, CO	*-0.7*	*6.0*	*-5.0*
Jackson, WY	*5.2*	*7.5*	*-5.7*

* Growth in skier visits for the recession periods represent growth from the winter of 1989-90 to the winter of 1990-91 and from the winter of 2000-01 to the winter of 2001-02

** Data prior to 1990 and after 2001 is missing for some areas, so 1990-91 average is actually only 1991 and 2001-02 is actually only 2001. For Charleston, Santa Fe, Aspen, Vail, and Jackson, data are for the county in which they are located. Due to the large size of counties in California, data for Carmel and South Lake Tahoe are for the actual cities.

Sources: National Park Service, National Ski Areas Association, Colorado Ski Country USA, state departments of revenue

As in 2001 and 2002, the nation's largest cities also suffered a larger downturn in travel and tourism activity than the rest of the country during the recession of the early 1990s. The district's relative lack of very large cities and major business destinations likely helps explain its travel and tourism sector's better performance during this period as well. Although travel and tourism output data for metropolitan areas are not available for the early 1990s, data on hotel employment are available for most major U.S. cities. Hotel employment fell between 5 and 10 percent below year-ago levels in Chicago, New York, San Francisco, and Atlanta at some point from 1990 to 1992, and declined more than 3 percent in Dallas. In the U.S. as a whole, hotel employment declined 3.1 percent. But in the Tenth District, hotel employment never fell more than 1.6 percent during the downturn despite a 5.5 percent decline in Denver, the region's largest city.

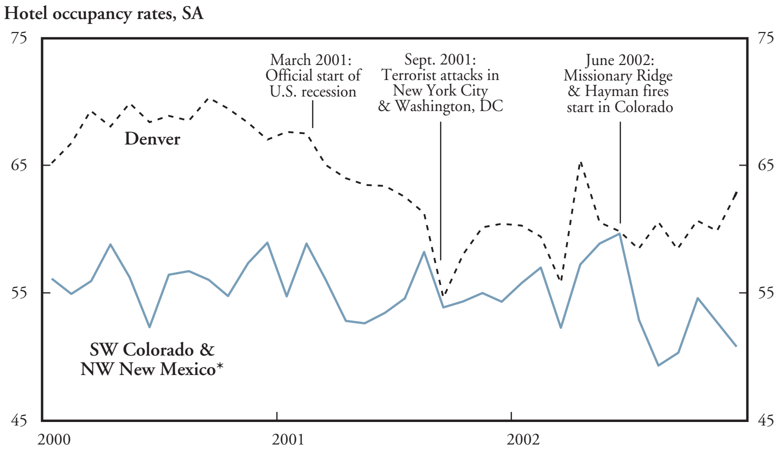
Similar performance of leisure destinations

Since 1990, activity at the Tenth District's major leisure travel destinations has been similar to that at comparable destinations around the country, although with some exceptions (Table 3). The decline in recreational visits to national parks in the Tenth District in 2001 and 2002 was only slightly less than the decline across all national parks, and average increases in visits from 1992 to 2000 were only slightly higher. Ski areas around the country suffered a poor season in 2001-02, and resorts in the Tenth District were no different. Skier/snowboarder visits fell 4.5 percent from the previous year at Colorado resorts, nearly 9 percent at other Rocky Mountain resorts (including in Wyoming and New Mexico), and around 5 percent at ski areas in the rest of the country. These declines followed rather sluggish growth in skier visits throughout the country in the 1990s.[22] Finally, economic activity at major upscale destinations of the district, such as Santa Fe, Aspen, Vail, and Jackson Hole, appears to have been similar to that at comparable areas around the country in recent years.[23]

Notably, several leisure destinations in the region witnessed faster growth than their national counterparts during the recession of the early 1990s. This better performance undoubtedly helped the district's travel and tourism sector hold up better during that period. However, the faster growth can likely be attributed to a recovery of many of these areas from economic disruptions in the late 1980s. The Rocky Mountain states suffered a regional recession following the oil bust—and subsequent real estate bust—of the mid-1980s, and recreational visits to several major leisure destinations in those states therefore slowed prior to the 1990-91 recession. In addition to recovering from this regional recession, tourism growth rates in northwestern Wyoming were also boosted in the early 1990s by the recovery of that area from the devastating Yellowstone fires of 1988.

Chart 5

RESPONSES OF LOCAL HOTEL OCCUPANCY RATES TO TRAVEL AND TOURISM SHOCKS IN 2001 AND 2002



*Durango, Cortez, & Farmington

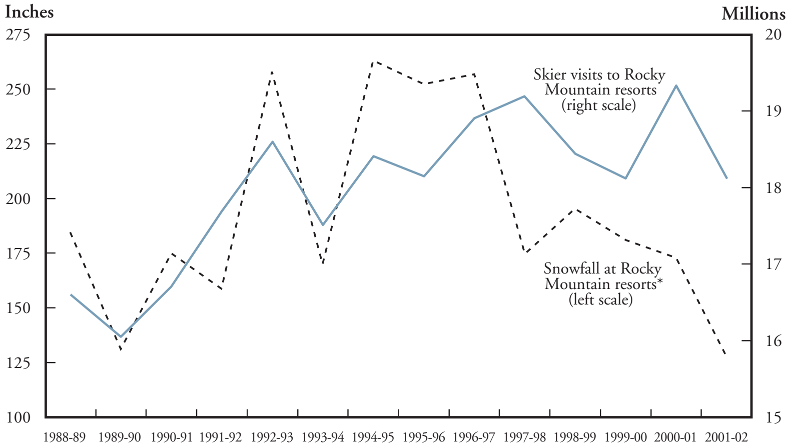
Source: Rocky Mountain Lodging Report

Effects of nature

Although most leisure destinations in the Tenth District have performed similarly to their national counterparts over the business cycle, several tourist areas of the district are susceptible to natural events or disasters unrelated to changes in the national economy. Most notably, many areas of the mountain states must cope with wildfires, drought, or lack of snowfall, the occurrence of which can severely disrupt local travel and tourism activity.

Perhaps the most famous natural disaster in recent Tenth District history is the Yellowstone fires of 1988, which burned over 1.6 million acres of the world's oldest national park and surrounding forests. Recreational visits to Yellowstone National Park and the adjacent Grand Teton National Park fell more than 15 percent in 1988. Likewise, real retail sales in Park and Teton Counties, Wyoming, fell 9 percent that year. While separating out the impact of the overall economic decline in Wyoming in the 1980s from the effects of the Yellowstone fires is difficult, the fires appeared to have an impact on the whole state, as most travelers to the

Chart 6
SNOWFALL AMOUNTS AND SKIER VISITS



*Average of Breckenridge and Crested Butte

Sources: National Climatic Data Center and National Ski Areas Association

national parks arrive by motor vehicles. While real retail sales in Wyoming fell approximately 3 percent annually from 1983 to 1986 and were nearly flat in 1987, they fell 10 percent in the year of the fires.

Wildfires also hurt travel and tourism activity in several areas of the district in 2002. The two most damaging fires were the Hayman fire near Denver and the Missionary Ridge fire near Durango in southwestern Colorado, both of which started in early June. As an indication of the severity of the fires, the cost of each was approximately $40 million, according to the *Rocky Mountain News*, as nearly 200 houses were destroyed between the two fires and thousands of people were evacuated from their homes. While separating out the effects of the Hayman fire on the Denver area from the other problems of that city's travel industry is difficult, the Missionary Ridge fire appeared to have an immediate and sizable effect on travel and tourism near Durango. Although hotel occupancy rates in southwestern Colorado and northwestern New Mexico largely withstood the shocks of recession and terrorism in 2001, activity at local hotels fell sharply in mid-2002 following the start of the Missionary Ridge fire (Chart 5).

As with wildfires, snowfall amounts can sometimes have a sizable effect on travel and tourism activity in some areas of the district. Since the late 1980s, declines in snowfall amounts in the Rocky Mountains have generally been associated with declines, or at least slower growth, in skier visits (Chart 6).[24] Poor snowfall in the late 1990s, in particular, may help explain the leveling off in skier visits during that period despite continued expansion in the national economy. Likewise, the largest snowfall amounts in five years during the winter of 2002-03 had Colorado ski resorts on pace for a record number of visits as of February, despite problems caused by a sluggish economy and war uncertainty (Blevins).

The lack of snowfall in the Rocky Mountains during the winter of 2001-02 not only contributed to a poor ski season and set the stage for wildfires in 2002, but the resulting drought also hit the whitewater rafting industry extremely hard during the following summer. According to the Colorado River Outfitters Association, commercial rafting visits to Colorado fell nearly 40 percent in 2002, by far the worst decline on record. Likewise, hotel occupancy rates in the Glenwood Springs area of Colorado—a major rafting base—dropped markedly during the summer of 2002, after largely withstanding the shocks of recession and terrorism a year earlier.

IV. CONCLUSIONS AND IMPLICATIONS

The travel and tourism industry has emerged as an economic force in both the nation and the Tenth Federal Reserve District. Rising incomes, increased leisure time, and declining airfares in the United States and abroad have allowed more and more people to travel in recent decades. This article has shown how the travel and tourism industry performs over time and across areas. At the national level, the industry has consistently outperformed the overall economy during times of expansion and seldom fallen more than the rest of the economy during recessions. Travel and tourism performs somewhat differently in the Tenth District. Specifically, the industry has withstood the effects of the last two recessions much better in the district than in the nation due largely to less reliance on business and international travelers. Many leisure destinations in the district, however, remain highly susceptible to the effects of nature, which can strike at any time.

There are some noteworthy implications of these findings. First, the travel and tourism industry has become at least as important to the economy as several sectors that often receive greater focus from policymakers and researchers. In addition, the analysis in the article suggests travel and tourism's economic significance is likely to become even greater in the future, as living standards advance around the globe. Yet research about travel and tourism has been lacking, at least in part due to limited availability of data about the industry. For travel and tourism to receive the attention it deserves, analysts will need both more and better data about the industry, particularly data that can be disaggregated to the state and local level.

Second, while travel and tourism may have good long-term prospects, the findings in this article also suggest that state and local development officials must be realistic about the potential of their particular areas and wary of the possible costs of relying on the industry. The article shows that travel and tourism activity tends to be highly concentrated in areas with unique natural amenities or in large cities with good airline service. In addition, the findings in the article suggest that travel and tourism may be subject to shocks such as fires or inadequate snowfall that will not necessarily match general economic conditions. Likewise, the article shows that travel and tourism activity tends to decline sharply in major metropolitan areas during economic recessions. As such, officials may not want to make their economic development strategies overly dependent on travel and tourism.

ENDNOTES

[1]The Tenth Federal Reserve District includes the entire states of Colorado, Kansas, Nebraska, Oklahoma, and Wyoming, plus the northern half of New Mexico and the western third of Missouri.

[2]The BEA's definition of a "visitor" is a person who travels outside of his or her "usual environment" (more than 50-100 miles) for a period less than a year or stays overnight in a hotel. This is similar to definitions used by the WTO and OECD.

[3]For a complete explanation of the BEA's methodology, see Okubo and Planting (1998).

[4]This article uses both the SIC and NAICS definitions of these industries (which are almost identical), depending on the data available.

[5]Although restaurants are included as a travel and tourism industry in many studies, they are excluded from the measure in this article for several reasons. First, as with amusement/recreation, a large portion of revenues at restaurants usually comes from local residents. At the national level, the BEA estimates that less than one-fifth of restaurant employment and output can be attributed to travel and tourism. Second, unlike establishments in the amusement/recreation industry, few visitors come to an area just for the restaurants. Finally, the restaurant industry is considerably larger than the three industries included and its size could therefore distort results, particularly given the relatively small share of its output that is consumed by visitors.

[6]One possible way to avoid understating travel and tourism's importance would be to apply the BEA's industry shares to states and local areas. However, this method would likely overstate travel and tourism in areas where little activity actually occurs and likely still understate it in high tourism areas. For example, the BEA attributes approximately 17 percent of national activity at eating and drinking places to travel and tourism. In areas that attract few visitors, however, virtually all of the restaurant industry's revenues come from local residents. In areas that attract large numbers of visitors, on the other hand, a considerably larger share of revenues at restaurants can likely be attributed to travel and tourism.

[7]This is equivalent to 4.9 percent of GDP. However, it should be noted that the BEA's estimate of travel and tourism's contribution to value added (the actual measure of GDP) in 1997 was much lower—2.1 to 2.4 percent—since business and some other types of travel expenditures are considered to be intermediate expenditures in the National Income and Product Account (NIPA) tables. However, even this share was greater than the contributions of such industries as agriculture (1.6 percent), mining (1.4 percent), and metal manufacturing (1.8 percent) that year.

[8]Kankakee, IL; Vineland-Millville-Richland, NJ; Florence, AL; and Elkhart-Goshen, IN.

[9]In economic terms, a luxury good is a good that has an income elasticity greater than 1 (demand for it increases faster than incomes). By contrast, necessary goods have income elasticities between 0 and 1 (demand increases slower than incomes) and inferior goods have negative income elasticities (demand actually falls as incomes rise). Recent estimates of the income elasticity of travel and

tourism include: 2.4—UK travel to other countries (Song et al, 2000); 1.4—International travel to Spain (Garin-Munoz and Amaral, 2000); 1.2—West German travel to six Mediterranean countries (Bakkal, 1991). By comparison, typical income elasticities for other items include: 1.5—owner-occupied housing; 1.4—furniture; 1.0—clothing; 0.75—physicians' services; 0.4—eggs; -0.2—pork products (Kohler, 1986).

[10]Ryan (1991) suggests that the demand for travel becomes income inelastic during recessions.

[11]For example, Bakkal (1991) found that the income elasticity of West German demand for travel to six Mediterranean countries (Greece, Turkey, Italy, Portugal, Yugoslavia, and Spain) fell from an average of 1.5 in 1966 to an average of 1.2 in 1985.

[12]The most recent year for which detailed regional industry-level employment data were available was 2000.

[13]Other measures of the importance of travel and tourism activity across states, while often different in scale, result in similar rankings. For example, as shown in Chart 2, the TIA's estimates show that travel expenditures as a share of gross state product is above the national average in Colorado, New Mexico, and Wyoming, similar to the national average in Missouri, and below the national average in Kansas, Nebraska, and Oklahoma. More detailed studies of the industry's importance in individual district states have also been performed by private consulting firms, including Dean Runyon Associates (2001) and Longwoods International (2002).

[14]See for example, *Conde Nast Traveler's* 2002 "Readers' Choice Awards," *FamilyFun Magazine's* 2002 Travel Awards, and *Ski Magazine's* 2003 "Reader Resort Survey."

[15]The standard deviation in quarterly hotel employment growth (from a year ago) in the district from 1973 to 1989 was 3.2 percent, compared with just 2.2 percent in the U.S. as a whole.

[16]It should be noted that growth in hotel employment in Missouri also fell slightly below the national average at times during each of the past two recessions. However, Missouri is excluded from Figure 1 and is not mentioned in this paragraph since most of its major travel destinations (Branson, St. Louis, Lake of the Ozarks) are located outside of the Tenth District, as are over 75 percent of the travel and tourism jobs in the state.

[17]This 15 percent excludes international airfares which, if included, would increase the share to more than 17 percent. The 15 percent figure is used due to a lack of breakdown of international airfares by state.

[18]While Denver's airport is the nation's fifth-busiest, the district's next busiest airport—Kansas City's—ranked 35th in passenger traffic in 2001.

[19]The standard deviation in annual growth of foreign visitor spending was 5 percent from 1993 to 2000, versus just 1 percent for U.S. resident spending.

[20]These eight district cities accounted for over half of the region's population in the 2000 Census.

[21]The ten largest U.S. metros (PMSAs or MSAs) in the 2000 Census were: Los Angeles-Long Beach, New York, Chicago, Philadelphia, Washington DC, Detroit, Houston, Atlanta, Dallas, and Boston.

[22]It should be noted that national park and skier visits do not necessarily reveal actual economic activity in these areas over time. However, a comparison with growth in retail sales in these areas shows that visits may serve as an adequate proxy for overall activity. While data availability varies across areas, retail sales growth in surrounding areas is generally associated with growth in visits to the parks or ski areas. For example, real taxable retail sales in Park and Teton Counties, Wyoming, fell 5 percent in fiscal year 2001-02, only slightly more than the percentage decline in visits to Yellowstone and Grand Teton in 2001. These two counties' inflation-adjusted retail sales rose by an average of 9 percent in 1990-91 and 1991-92, similar to the increase in visits to the parks in those years. Likewise, real retail sales in Colorado counties that have major ski resorts declined 7 percent from 2000-01 to 2001-02, slightly larger than the decline in skier visits over that period.

[23]Charleston, Carmel, and Lake Tahoe were selected as comparison "upscale" destinations in Table 2 due to their similarities in size and amenities to major upscale areas of the district.

[24]Average snowfall at Breckenridge and Crested Butte, Colorado, is used as a proxy for Rocky Mountain snowfall, as these are the only ski areas with complete historical statistics available from the National Climatic Data Center. The correlation in annual growth in skier visit and snowfall amounts was 0.58 for the dates available (1988-2002).

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