



U.S. Department of Transportation
Office of Public Affairs
1200 New Jersey Avenue, SE
Washington, DC 20590
<http://www.dot.gov/briefingroom>

BTS Data

BTS 12-17

Wednesday, March 8, 2017

Contact: Dave Smallen

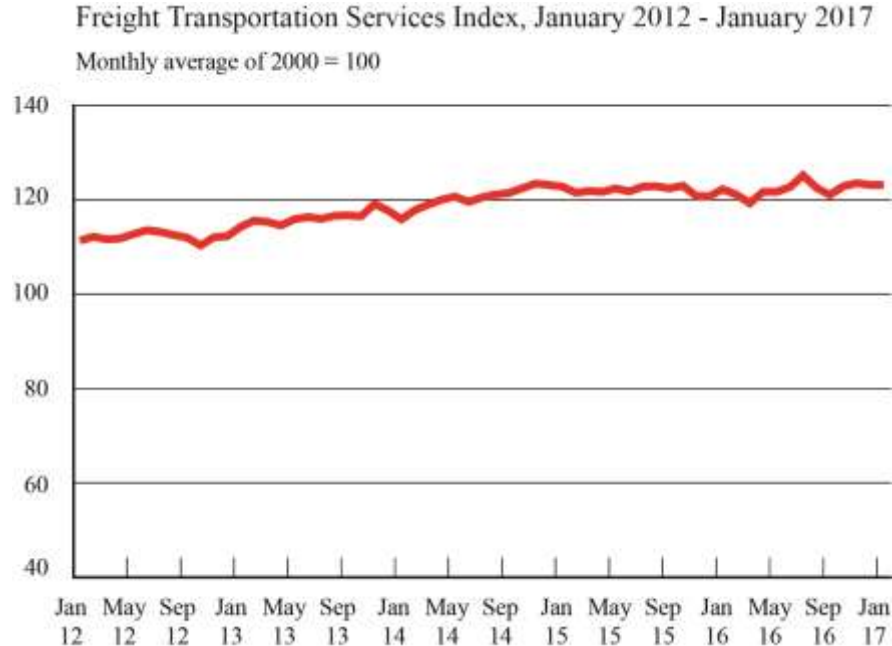
Tel: 202-366-5568

david.smallen@dot.gov

Embargoed until Wednesday, March 8, 2017 11:30 a.m. EST

January 2017 Freight Transportation Services Index (TSI)

The Freight Transportation Services Index (TSI), which is based on the amount of freight carried by the for-hire transportation industry, remained unchanged in January from its December level, according to the U.S. Department of Transportation's Bureau of Transportation Statistics' (BTS). The January 2017 index level (123.2) was 30.1 percent above the April 2009 low during the most recent recession (Tables 1, 2, and 2A).



The level of for-hire freight shipments in January measured by the Freight TSI (123.2) was 1.6 percent below the all-time high level of 125.2 in July 2016 (Table 2A). BTS' TSI records begin in 2000. See historical [TSI data](#).

The December index was revised to 123.2 from 124.7 in last month's release as a result of fewer actual air freight ton-miles than forecast.

The Freight TSI measures the month-to-month changes in for-hire freight shipments by mode of transportation in tons and ton-miles, which are combined into one index. The index measures the output of the for-hire freight transportation industry and consists of data from for-hire trucking, rail, inland waterways, pipelines and air freight. The TSI is seasonally-adjusted to remove regular seasons from month-to-month comparisons.

Analysis: In January, there were increases in air freight, water, and rail carloads, while trucking, pipeline, and rail intermodal declined, resulting in no change in the Freight TSI. The January stability in Freight TSI took place against a background of mixed signals in other economic indicators. [Employment](#) and [Personal Income](#) both grew in January, and the ISM Purchasing Managers' Index showed positive and accelerating growth. However the [Federal Reserve Board Industrial Production index](#) declined by 0.3 percent, caused by a decline in utility output, and housing starts were off by 2.6 percent.

Trend: The January Freight TSI remained in the same narrow range that has continued for two and a half years. Since the index reached 121.1 for the first time in August 2014, it has with only two exceptions fluctuated between a low of 120.5 and a high of 123.5, slightly above the January level. The two exceptions were March 2016 when the index dropped to a three-year low of 119.3 and July 2016 when it reached a new peak of 125.2. The index dropped 3.4 percent in the two months after reaching that peak, then rose 2.1 percent in the following two months to reach 123.5 in November 2016, its highest point since reaching the July high. The January 2017 level is 0.2 percent below the November 2016 index. The January index was 30.1 percent above the April 2009 low during the most recent recession. For additional historical data, go to [TSI data](#).

Index highs and lows: For-hire freight shipments in January 2017 (123.2) were 30.1 percent higher than the recent low in April 2009 during the recession (94.7). The January 2017 level was 1.6 percent below the historic peak reached in July 2016 (125.2) (Table 1A).

Year to date: For-hire freight shipments measured by the index were at the same level as in January compared to the end of 2016 (Table 3).

Long-term trend: For-hire freight shipments are up 10.6 percent in the five years from January 2012 and are up 12.3 percent in the 10 years from January 2007 (Table 5).

Same month of previous year: January 2017 for-hire freight shipments were up 0.8 percent from January 2016 (Tables 4, 5).

The TSI has three seasonally-adjusted indexes that measure changes from the monthly average of the base year of 2000. The three indexes are freight shipments, passenger travel and a combined measure that merges the freight and passenger indexes. See [Seasonally-Adjusted Transportation Data](#) for numbers for individual modes. TSI includes data from 2000 to the present. Release of the February 2017 index is scheduled for April 12.

Passenger Index: The TSI for passengers rose 0.6 percent in January from its December level (Table 6). The Passenger TSI January 2017 level of 124.8 was 1.1 percent above the January 2016 level (Table 7). The index is up 8.2 percent in five years and up 9.6 percent in 10 years (Table 5). The passenger TSI measures the month-to-month changes in travel that involves the services of the for-hire passenger transportation sector. The seasonally-adjusted index consists of data from air, local transit and intercity rail.

Combined Index: The combined freight and passenger TSI rose 0.2 percent in January from its December level (Table 8). The combined TSI January 2017 level of 123.8 was 0.9 percent above the January 2016 level (Table 9). The combined index is up 9.9 percent in five years and up 11.3 percent in 10 years (Table 5). The combined TSI merges the freight and passenger indexes into a single index.

Revisions: Monthly data has changed from previous releases due to the use of concurrent seasonal analysis, which results in seasonal analysis factors changing as each month's data are added.

BTS research has shown a clear relationship between economic cycles and the Freight and Passenger Transportation Services Indexes. See a [study of this relationship](#) using smoothed and detrended TSI data. Researchers who wish to compare TSI over time with other economic indicators, can use the [FRED database](#), which includes freight, passenger and combined TSI, and which makes it possible to easily graph TSI alongside the other series in that database. See [TSI data on FRED](#).

For a webinar on the TSI, see [Past Webinars](#). For a video explanation of the TSI, see [Overview of the Transportation Services Index](#). A BTS report explaining the TSI, [Transportation Services Index and the Economy](#), is available for download.

Table 1: Freight, Passenger and Combined Transportation Services Indexes since July 2016

Percent Change from Previous Month

(Seasonally-Adjusted, Monthly Average of 2000 = 100)

	Freight		Passenger		Combined	
	Index	Pct. Change	Index	Pct. Change	Index	Pct. Change
July	125.2	2.0	124.5	-1.2	125.1	1.1
August	122.5	-2.2	122.8	-1.4	122.7	-1.9
September	121.0	-1.2	124.9	1.7	122.3	-0.3
October	122.9	1.6	123.6	-1.0	123.2	0.7
November	123.5	0.5	124.5	0.7	123.8	0.5
December	123.2	-0.2	124.1	-0.3	123.5	-0.2
January	123.2	0.0	124.8	0.6	123.8	0.2

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

Table 1A: Annual High and Low Points in Freight Transportation Services Index, 2009-2017

Year	Month	Peak	Month	Bottom
2009	December	101.6	April	94.7
2013	November	119.1	January	114.3
2014	November	123.4	May	115.9
2015	October	123.0	December	120.8
2016	July	125.2	March	119.3
2017 (thru January)	January	123.2	January	123.2

SOURCE: Bureau of Transportation Statistics

Table 2: Freight Transportation Services Index Monthly Changes, 2014-2017
Percent change from previous month

	2014	2015	2016	2017
	% Change	% Change	% Change	% Change
January	-1.5	-0.3	1.2	0.0
February	1.6	-1.1	-0.9	
March	1.0	0.3	-1.5	
April	0.8	-0.2	2.0	
May	0.6	0.6	0.0	
June	-0.9	-0.5	0.8	
July	0.8	0.8	2.0	
August	0.5	0.1	-2.2	
September	0.2	-0.4	-1.2	
October	0.8	0.5	1.6	
November	0.8	-1.7	0.5	
December	-0.2	-0.1	-0.2	

SOURCE: Bureau of Transportation Statistics

Table 2A: Freight Transportation Services Index by Month, 2014-2017

	2014	2015	2016	2017
January	115.9	122.8	122.2	123.2
February	117.8	121.5	121.1	
March	119.0	121.9	119.3	
April	120.0	121.7	121.7	
May	120.7	122.4	121.7	
June	119.6	121.8	122.7	
July	120.5	122.8	125.2	
August	121.1	122.9	122.5	
September	121.4	122.4	121.0	
October	122.4	123.0	122.9	
November	123.4	120.9	123.5	
December	123.2	120.8	123.2	

SOURCE: Bureau of Transportation Statistics

Table 3: Freight, Passenger and Combined Transportation Services Indexes Year-to-Date Change, 2008-2017
Percent change to January from December of the previous year

Year	Freight	Passenger	Combined
2008	2.2	0.3	1.7
2009	-1.9	-0.6	-1.5
2010	1.4	0.2	1.1
2011	1.1	0.1	0.8
2012	-3.2	-0.3	-2.4
2013	1.8	1.0	1.5
2014	-1.5	0.0	-1.0
2015	-0.3	-0.7	-0.5
2016	1.2	-0.8	0.6
2017	0.0	0.6	0.2

SOURCE: Bureau of Transportation Statistics

Table 4: Freight Transportation Services Index from Year-to-Year Percent Change in the January Freight TSI (Monthly average of 2000 = 100)

	January Freight TSI	Percent change from same month previous year
2008	113.2	3.2
2009	98.5	-13.0
2010	103.0	4.6
2011	110.0	6.8
2012	111.4	1.3
2013	114.3	2.6
2014	115.9	1.4
2015	122.8	6.0
2016	122.2	-0.5
2017	123.2	0.8

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

**Table 5: Transportation Services Indexes from Previous Years
Percent Change to 2017 (January to January)**

Since January ...	Duration in years	Freight TSI Percent change to January 2017	Passenger TSI Percent change to January 2017	Combined TSI Percent change to January 2017
2016	1	0.8	1.1	0.9
2015	2	0.3	3.9	1.5
2014	3	6.3	5.9	6.2
2013	4	7.8	6.5	7.5
2012	5	10.6	8.2	9.9
2011	6	12.0	10.2	11.4
2010	7	19.6	12.8	17.6
2009	8	25.1	13.8	21.5
2008	9	8.8	7.0	8.1
2007	10	12.3	9.6	11.3

SOURCE: Bureau of Transportation Statistics

**Table 6: Passenger Transportation Services Index Monthly Changes, 2014-2017
Percent change from previous month**

	2014 % Change	2015 % Change	2016 % Change	2017 % Change
January	0.0	-0.7	-0.8	0.6
February	-0.8	-1.8	-0.1	
March	2.5	2.8	-1.1	
April	-0.1	0.2	1.6	
May	0.5	0.2	0.2	
June	-0.6	0.6	1.4	
July	0.1	2.0	-1.2	
August	0.4	-1.9	-1.4	
September	-0.2	0.3	1.7	
October	0.4	1.4	-1.0	
November	-0.6	-1.0	0.7	
December	0.9	0.9	-0.3	

SOURCE: Bureau of Transportation Statistics

**Table 7: Passenger Transportation Services Index from Year-to-Year
Percent change in the January Passenger TSI
(Monthly average of 2000 = 100)**

	January Passenger TSI	Percent change from same month previous year
2008	116.6	2.4
2009	109.7	-5.9
2010	110.6	0.8
2011	113.3	2.4
2012	115.3	1.8
2013	117.2	1.6
2014	117.9	0.6
2015	120.1	1.9
2016	123.5	2.8
2017	124.8	1.1

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

**Table 8: Combined Transportation Services Index Monthly Changes, 2014-2017
Percent change from previous month**

	2014 % Change	2015 % Change	2016 % Change	2017 % Change
January	-1.0	-0.5	0.6	0.2
February	0.9	-1.3	-0.7	
March	1.4	1.2	-1.3	
April	0.6	-0.1	1.8	
May	0.6	0.5	0.1	
June	-0.8	-0.2	1.0	
July	0.6	1.2	1.1	
August	0.5	-0.6	-1.9	
September	0.1	-0.2	-0.3	
October	0.6	0.8	0.7	
November	0.5	-1.5	0.5	
December	0.2	0.2	-0.2	

SOURCE: Bureau of Transportation Statistics

**Table 9: Combined Transportation Services Index from Year-to-Year
 Percent change in the January Combined TSI
 (Monthly average of 2000 = 100)**

	January Combined TSI	Percent change from same month previous year
2008	114.5	3.0
2009	101.9	-11.0
2010	105.3	3.3
2011	111.1	5.5
2012	112.6	1.4
2013	115.2	2.3
2014	116.6	1.2
2015	122.0	4.6
2016	122.7	0.6
2017	123.8	0.9

SOURCE: Bureau of Transportation Statistics

NOTE: Percent changes based on numbers prior to rounding.

Brief Explanation of the TSI

The Transportation Services Index (TSI) is a measure of the month-to-month changes in the output of services provided by the for-hire transportation industries. The freight index measure changes in freight shipments while the passenger index measures changes in passenger travel.

The TSI tells us how the output of transportation services has increased or decreased from month to month. The index can be examined together with other economic indicators to produce a better understanding of the current and future course of the economy. The movement of the index over time can be compared with other economic measures to understand the relationship of changes in transportation output to changes in Gross Domestic Product (GDP).

The freight transportation index consists of:

- For-hire trucking,
- Railroad freight services (including rail based intermodal shipments such as containers on flat cars),
- Inland waterways transportation,
- Pipeline transportation (including principally petroleum and petroleum products and natural gas), and
- Air freight.

The index does not include international or coastal waterborne movements, private trucking, courier services, or the US Postal Service.

The passenger transportation index consists of:

- Local transit,
- Intercity passenger rail, and
- Passenger air transportation.

The index does not include intercity bus, sightseeing services, ferry services, taxi service, private automobile usage, or bicycling and other non-motorized transportation.

The TSI includes only domestic "for-hire" freight and passenger transportation. For-hire transportation consists of freight or passenger transport services provided by a firm to external customers for a fee. The TSI does not include taxi services, paid ride services in personal motor vehicles (e.g., Uber, Lyft, etc.), intercity bus services, in-house transportation (vehicles owned and operated by private firms for their own use), or noncommercial passenger travel (e.g., trips in the household car).