## MULTIMODAL:

### Dow Jones Transportation Index

Dow Jones Transportation Index increased **2.03%** during the month of September 2016, ending at a reading of 8,078. *(Stock performance of twenty large, well-known U.S. companies in the transportation industry, average of September 1st thru September 30th)*

### NASDAQ Transportation Index

NASDAQ Transportation Index increased **2.04%** in September 2016, ending at a reading of 3,451. *(Averaged share weights of NASDAQ-listed companies classified as transportation companies, average of September 1st thru September 30th)*

### DOT Freight Transportation Index

The USDOT's freight transportation services index decreased **1.8%** in August, to a reading of 122.3. The decrease was due to declines in pipelines, rail carloads, and particularly trucking, while all other modes grew or were stable. *(Source: US DOT)*

### Cass Freight Index

The August shipments index increased **0.4%** from the previous month to 1.115 and decreased **1.1%** year-over-year. The August expenditures index decreased **3.3%** for the month to 2.278, and decreased **6.3%** year-over-year. *(Source: Cass Information Systems | Cassinfo.com) (Based upon transportation dollars and shipments of Cass clients comprised of over 400 shipping companies)*

### Import Volumes

In August, the U.S. imported **$185.6 billion** of cargo, decreasing **0.6%** from July. The August real dollar imports of petroleum ($18.8 billion) were the highest since May 2013. *(Source: US Census)*

### Export Volumes

In August, the U.S. exported **$125.3 billion** of cargo, increasing **1.0%** from July. The August exports of capital goods ($42.1 billion) were the lowest since September 2011. *(Source: US Census)*

### Import & Export Price Index

U.S. import prices increased **0.1%** in September. The September advance was driven by higher fuel prices. U.S. export prices increased **0.3%** in September, as rising nonagricultural prices more than offset declining agricultural prices. *(Source: Bureau of Labor Statistics)*

### Shippers Conditions Index

The Shippers Conditions Index was at a near-neutral reading of **-0.1 in July**, a miniscule improvement from June. The index will continue to hover around equilibrium until early 2017 when steady increases in regulatory drag may increase trucking costs due to tightened capacity. *(Source: FTR Transportation Intelligence | ftrintel.com) (Figures below zero indicate a less-than-ideal environment for shippers)*

### E-Commerce

E-Commerce revenue was up **11%** in September compared to September 2015. Mobile shopping (phones and tablets) accounted for **29%** of online shopping, up from **26%** in September 2015. The estimate of U.S. retail e-commerce sales for the second quarter of 2016, adjusted for seasonal variation, was **$97.3 billion**, an increase of **4.5%** from the first quarter of 2016. *(Source: Custora E-Commerce Pulse, US Census)*

### Multimodal News Clips:

- U.S. light vehicle sales were a seasonally adjusted and annualized **17.7 million in September 2016**, up 4.4% from August and down 0.7% from September 2015. Year-to-date sales in 2016 through September were **13.04 million units**, fractionally higher than in 2015. 2015 was the all-time record year for sales. *(Source: AAR)*

- UPS has partnered with robot-maker CyPhy Works to test the use of drones to make commercial deliveries to remote or difficult to access locations. The drone tests with UPS allow CyPhy Works to gather engineering and cost information and then work with UPS to look at where drones can add the most value to UPS’ extensive network. However, newly revised federal aviation regulations don’t permit commercial drones to fly over people not involved in their operations and require them to remain within line of sight of their operators at all times, effectively rendering commercial deliveries impossible. But those restrictions aren’t keeping drone-makers and their partners from racing to develop technology suitable for commercial deliveries while they work with regulators to tweak existing rules. *(Source: CRM Daily)*

## RAIL:

### U.S. Freight Rail Traffic

Originations of carloads in September 2016 totaled 1,068,644, a **decrease of 5.4%** from September 2015 and the **20th straight year-over-year monthly decline**. The 5.4% decline in September was the lowest year-over-year monthly decline in a year. Nine of the 20 traffic categories tracked by AAR had higher carloads in September 2016 than in September 2015, including grain, waste & nonferrous scrap, and nonmetallic minerals. *(Source: AAR.org) (Report includes rail car-loadings by 20 different major commodity categories as well as intermodal units)*

### U.S. Intermodal Rail Traffic

Intermodal rail traffic totaled 1,040,934 units in September 2016, a **decrease of 4.2%** from September 2015. This is the seventh straight year-over-year monthly decline for intermodal. Average weekly intermodal volume in September (260,234 units) was the lowest weekly average for September since 2013. *(Source: AAR.org) (Report includes rail car-loadings by 19 different major commodity categories as well as intermodal units)*

### Intermodal Competitive Index

The Intermodal Competitive Index fell to a reading of **0.6** in July. Intermodal volume was unexpectedly weak across the board in July, and lower diesel prices were also a factor in the decline in intermodal volume. July 2016 had two fewer working days than July 2015, a 9% difference, which may have affected the numbers as well. *(Source: FTR Transportation Intelligence | ftrintel.com) (Index includes factors like relative rates vs.*
MARKET SNAPSHOT

truck, industry capacity vs. demand, fuel prices, and intermodal service levels. Figures above 0 indicate favorable conditions for intermodal to compete with truck.

<table>
<thead>
<tr>
<th>Railroad Fuel Price Index</th>
<th>The index of average railroad fuel prices in August was 295.2, down 0.13% from the previous month and 7.69% lower year-over-year. (Source: AAR.org) (Average monthly price for gallons purchased by freight railroads; includes federal excise taxes, transportation, and handling expenses)</th>
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<tbody>
<tr>
<td>Class 1 Railroad Employment</td>
<td>Railroad employment in August increased 0.02% from the previous month, to 152,753 employees total. This is the second straight gain after 14 straight declines. Five of the seven Class I railroads saw employment gains in August. (Source: U.S. STB)</td>
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<td>Short Line Rail Traffic</td>
<td>In September 2016, short line railroad shipments across North America decreased 0.46% compared to the same month last year. A sampling of about 431 small railroads in the U.S. and Canada loaded 533,031 railcars and intermodal units during the month of September. (Source: RailConnect Index</td>
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<td>Railroad News Clips:</td>
<td>• According to Cowen and Company’s Third-Quarter 2016 Rail Shipper Survey, shippers are anticipating the lowest rate of price increases over the next 6-12 months that have been seen in the survey in nearly eight years. This may be largely due to a soft freight market as total North American carloads are down 7% YTD. (Source: Railway Age)</td>
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TRUCKING:

The ATA’s seasonally adjusted For-Hire Truck Tonnage Index increased by 5.7% to 141.8 in August. Compared with August 2015, the index rose 5.9%, the largest year-over-year gain since May 2016. During the month of August over the previous three years, the average change was just 0.3%, reflecting that volatility continues to reign in 2016 and normal seasonal patterns are not holding. (Source: American Trucking Association | Trucking.org)

The spot market for truckload-freight available for pick-up in September increased 2.8% compared to the previous month, and was 34% higher year-over-year. Truck capacity decreased 7.2% for the month, and decreased 1.8% year-over-year. (Source: DAT Trendlines | www.dat.com)

The Trucking Conditions Index was 5.99 in July, a significant gain from June’s reading of 2.92. TCI readings for the rest of the year and into 2017 should remain near the current level, according to FTR. FTR expects increased regulations over the next 6 months which may increase pricing and margins for fleets that have capacity. (Source: FTR Transportation Intelligence | ftrintel.com) (Figures below zero indicate a less-than-ideal environment for trucking)

As of October 10, 2016 the U.S. average diesel price was $2.45 per gallon. The U.S. average diesel price was $0.11 lower than the same week last year. The average price of diesel in the Southeastern Atlantic states was $2.36 per gallon, 3.6% less than the national average price. (Source: U.S. DOE) (Reflects the costs and profits of the entire production and distribution chain.)

The trucking industry workforce decreased by 3,600 employees to 1,456,700 employees total in September. The trucking industry workforce decreased 0.24% over the previous month and decreased 0.14% over September 2015. (Source: U.S. Bureau of Labor Statistics)

The average earnings of truck transportation employees were $22.59/hour in August, down 0.35% from the previous month. The average weekly hours totaled 41.9 in August, unchanged from the previous month. (Source: U.S. Bureau of Labor Statistics)

Preliminary data for heavy-duty Class 8 trucks net orders in North America were 13,800 units in September 2016, a decrease of 2% from the previous month but right in line with expectations of overall seasonal trends. However, this was the worst month of September since 2009 and orders were down 27% compared to September 2015. Final August net trailer orders came in at 14,000 units, up 48% from July but down 48% year-over-year. (Source: FTR Transportation Intelligence | ftrintel.com)

Surface transport-related trade between the U.S. and its NAFTA partners, Canada and Mexico totaled $83.7 billion in July 2016, decreasing 10.0% year-over-year. July was the 19th consecutive month that the total value of U.S.-NAFTA freight declined from the same month of the previous year, and was the lowest monthly amount since February 2011. (Source: U.S DOT)

• The Federal Motor Carrier Safety Administration (FMCSA) will officially publish a final rule amending its commercial driver’s license (CDL) regulations to make it easier for military veterans to get jobs driving trucks and buses in the private sector after leaving active duty. The final rule extends the period of time for applying for a skills test waiver from 90 days to one year after leaving a military position requiring the operation of a commercial vehicle. It also allows states to accept applications from active duty military personnel who are stationed in that state and to administer the written and skills tests for a license. (Source: American Shipper)
### AIR FREIGHT:

**Air Cargo Traffic**
- Global air freight traffic in August increased 3.9% from one year ago, and increased 1.4% year-to-date. There is potential for freight forwarders to turn to air cargo during the peak season of product launches and deliveries of new product lines, which may provide a one-off boost to air cargo similar to that seen during the disruption at seaports on the US west coast in early 2015. (Source: IATA.org) (Global air freight covers international and domestic scheduled air traffic.)

**Atlanta Air Cargo Traffic**
- In August, Hartsfield-Jackson Atlanta International Airport transported 53,614 metric tons of cargo, a 1.8% decrease from the previous month and a 5.2% increase year-over-year. (Source: HJAIA)

**Air Freight Price Index**
- The latest Drewry East-West Airfreight Price Index increased 0.7 points to 87.5 in August, the highest level this year, but the lowest August figure since the index was launched in 2012. (Source: Drewry) (The Drewry East-West Air Freight Price Index is based on the average of rates ($US per kg) for air freight services on 21 major East-West routes.)

**Jet Fuel Prices**
- As of October 7, 2016, the global average jet fuel price was $62.30 per barrel; up 11.5% from the previous month, and 0.8% lower year-over-year. (Source: IATA.org, platts.com) (The weekly index and price data show the global average price paid at the refinery for aviation jet fuel)

**Air Freight News Clips:**
- The African Airlines Association (AFRAA) has launched a cargo steering committee to provide greater focus on the continent’s airfreight business. The new committee will give a platform to cargo, which has not received as much attention as the passenger business. The committee will help airlines overcome challenges they face in their operations and can be an opportunity to build a better future for cargo. (Source: Air Cargo News)

### OCEAN FREIGHT:

**Import Volumes**
- In August, the latest month for which after-the-fact numbers are available, U.S. container ports handled 1.71 million TEUs, a 5% increase from the previous month, and a 1.7% increase from August 2015. August has been the busiest month of the year so far. Source: NRF/Hackett Associates)

**Shanghai Containerized Freight Index**
- The October 14th SCFI comprehensive reading was $776.93 per FEU; down 2.2% from last month. The spot rate for shipments to the U.S. East Coast was $2,563 per FEU, up 4.7% from the previous month. (Source: Shanghai Shipping Exchange | www1.chineseshipping.com.cn/en, American Shipper) (The Shanghai Containerized Freight Index is a weekly reported average export spot rate from Shanghai for 15 different trade lanes.)

**Baltic Dry Index**
- The Baltic Dry Index increased 22.8% in September, ending at 875. The BDI is now around a one-year high, having a notable recovery since hitting a record low reading of 290 last February. (Source: www.bloomberg.com/quote/BDI:IND) (The Baltic Dry Index is an index that tracks and averages worldwide international shipping prices of various dry bulk cargoes.)

**TSA Bunker Surcharges**
- Between October 1 and December 31 2016, the bunker fuel surcharge will total $264 per FEU for shipments to the West coast ocean ports and $525 per FEU for shipments to the East coast and Gulf ports. (Source: Transpacific Stabilization Agreement) (The Transpacific Stabilization Agreement is a research and discussion forum of major ocean container shipping lines that carry cargo from Asia to ports in the U.S.)

**Port of Savannah**
- The Port of Savannah moved 308,350 TEUs in September 2016, a 6.7% decrease from the previous month and a 2.8% decrease from September 2015. This decrease is primarily a result of the recent Hanjin bankruptcy, which has also affected many U.S. and global ports. (Source: GPA)

**Port of Brunswick**
- A 100-acre expansion of the Colonel’s Island auto terminal was announced at the State of the Port address. Twenty of the 100 acres are paved and in use by Wallenius Wilhelmsen Logistics, while International Auto Processing has leased another 49 acres it will occupy by May 2017. The long-term plan for Colonel’s Island’s south side will eventually add 540 acres in GPA-owned land to the auto processing operation. Another 140 south side acres owned by Mercedes and International Auto Processing brings Brunswick’s total vehicle space to 1,039 acres. (Source: GPA)
**OCTOBER 2016**

**LOGISTICS MARKET SNAPSHOT**

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<tr>
<th>Ocean Freight Business News:</th>
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<td>• During a conference call with representatives of clients who have cargo on the carrier’s ships, Hanjin Shipping gave U.S. importers awaiting the discharge of their stranded goods a better idea of when some ships will call, but wasn’t able to give a timeline for two ships under arrest near the Panama Canal and another off the coast of Savannah. The two ships are among four that are scheduled to eventually deliver goods to New York, but have yet to do so, leaving the owners of the cargo waiting desperately for their much-delayed goods. The vessel that is currently waiting to berth at Savannah will come to New York to pick up export containers, but when that will happen is yet to be determined. (Source:IOC)</td>
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<th>WAREHOUSING &amp; DISTRIBUTION:</th>
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<td><strong>Industrial Vacancy</strong></td>
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<td>The nationwide vacancy rate was 6.2% at the end of the second quarter in 2016, level with the first quarter rate and the lowest since 2000. If the economic expansion continues, the vacancy rate may decline further, given the recent plateau in construction and tightening standards for construction loans. (Source: NGKF)</td>
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<td><strong>Warehouse Rent Rates</strong></td>
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<td>In Q2 2016, the average asking rent across the U.S. was $5.85/SF triple net, up 2.1% from the prior quarter and up 5.2% from a year ago. The average asking rent in Atlanta was $4.71/SF. (Source: NGKF)</td>
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<td><strong>Industrial Absorption</strong></td>
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<td>Net absorption in the US during Q2 2016 totaled 56.9 million square feet, breaking the 50 million-square-foot threshold for the sixth time in the last seven quarters. Of the 52 industrial markets NGKF tracks, all 52 posted positive Q2 absorption, a feat that rarely happens. Atlanta led all markets, absorbing 6.9 million square feet. (Source: NGKF) (Absorption is the net change in occupied space between two points in time. Positive absorption means that previously unoccupied space is being occupied.)</td>
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<td><strong>Warehouse Employment</strong></td>
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<td>The warehousing industry workforce increased by 5,300 employees to 872,400 employees total in September. The warehousing industry workforce increased 0.61% from the previous month and increased 5.9% year-over-year. (Source: U.S. Bureau of Labor Statistics)</td>
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<td><strong>Warehouse Earnings and Hours</strong></td>
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<td>The average earnings of warehousing &amp; storage employees were $18.98/hour in August, down 0.31% from the previous month. The average weekly hours totaled 42.1 in August, up 0.47% from the previous month. (Source: U.S. Bureau of Labor Statistics)</td>
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<td><strong>Purchasing Managers Index</strong></td>
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<td>The National PMI increased to 51.5% in September 2016, an increase of 2.1% over the previous month. New orders increased 6.0% to 55.1%. Production increased 3.2% to 52.8%. (Source: Institute for Supply Management) (The PMI combines data on new orders, inventory, production, supplier deliveries, and employment. A reading above 50 indicates that the manufacturing economy is generally expanding.)</td>
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<tr>
<td><strong>Purchasing Managers Index in Georgia</strong></td>
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<tr>
<td>Georgia’s PMI decreased 3.0% during September, to 49.4. New orders in Georgia decreased 9.0% to 46.9 and production decreased 5.5% to 56.3. Lowering total inventory to prepare for the 4th quarter was cited as one reason for the declines. Georgia’s PMI is now 2.1% below the national PMI. (Source: Kennesaw State University) (The PMI combines data on new orders, inventory, production, supplier deliveries, and employment. A reading above 50 indicates that the manufacturing economy is generally expanding.)</td>
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<th>W&amp;D Business News:</th>
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<td>• Wayfair, one of the world’s largest e-commerce destinations for home furnishings and décor, will locate their newest distribution center in a recently completed spec building in Henry County, generating more than 150 new jobs and driving significant investment over the next two years. Wayfair’s new operation will service the southeastern U.S. (Source:Georgia.org)</td>
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<tr>
<td>• Tory Burch LLC, a leading American lifestyle brand, announced that it will create more than 150 new jobs and invest more than $60 million in a Henry County facility by 2020. The distribution center will support Tory Burch’s e-commerce business and is expected to be fully operational by the end of 2017. (Source: Georgia.org)</td>
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<td><strong>Gross Domestic Product</strong></td>
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<td>The U.S. GDP increased at an annual rate of 1.4% in the second quarter of 2016 according to the third estimate released by the Bureau of Economic Analysis in late September. In the first quarter, real GDP increased 0.8%. The latest GDPNow model forecast for real GDP growth (seasonally adjusted annual rate) in the third quarter of 2016 is 1.9%. (Source: US BEA, Federal Reserve Bank of Atlanta) (The GDPNow forecast aggregates statistical model forecasts of 13 subcomponents that comprise GDP.)</td>
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<td><strong>U.S. Trade Deficit</strong></td>
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<tr>
<td>The U.S. goods and services trade deficit increased 3.03% in August to $40.7 billion. Exports of goods increased 0.9% to $125.3 billion and imports of goods increased 0.5% to $185.6 billion. (Source: US DOC &amp; Census Bureau)</td>
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</table>
Consumer Confidence

The Consumer Confidence Index increased to 104.1 in September 2016, up 2.2% from August and the highest reading since the recession. Consumers’ assessment of present-day conditions improved, primarily the result of a more positive view of the labor market. (Source: The Conference Board)

Unemployment Rate

The unemployment rate in America increased to 5.0% in September 2016, mainly due to a 444,000 increase in the measured size of the labor force in September. A rising unemployment rate caused by a growing labor force is a good thing if it means that more people are actively looking for jobs than before. A preliminary 156,000 net new jobs were created in September 2016, down 6.5% from August. The unemployment rate in Georgia was 4.9% in August. (Source: US DOL)

Workforce Participation Rate

The workforce participation rate increased .15% to 62.9 in September. (Source: U.S. Bureau of Labor Statistics)

Leading Economic Index

The Leading Economic Index for the U.S. decreased 0.2% in August to a reading of 124.1. While the U.S. LEI declined in August, its trend still points to moderate economic growth in the months ahead. (Source: Conference Board) The LEI is a composite of 10 economic indicators that together create an analytic system designed to signal peaks and troughs in the business cycle. The LEI reveals patterns in economic data in a clearer and more convincing manner than any individual component alone.

Industrial Production and Capacity Utilization

The Industrial Product Index was 104.2 in September, an increase of 0.1% from the previous month and 1.0% lower year-over-year. Capacity utilization for the industrial sector increased 0.1% from the previous month to 75.4%. (Source: Federal Reserve) The industrial production and capacity utilization rates cover manufacturing, mining, and electric and gas utilities. The industrial detail provided by these measures helps illuminate structural developments in the economy.

Retail Sales

Advanced estimates of retail and food service sales in September were $459.8 billion, an increase of 0.6% from the previous month, and up 2.7% from September 2015. Non-store retailer sales were up 11% from last year, and includes internet-only sales outlets as well as other direct-to-customer channels. (Source: US Census)

Manufacturing & Trade Sales

Total combined sales and manufacturing shipments totaled nearly $1.304 trillion in August 2016, up 0.2% from July and unchanged from August of the previous year. (Source: US Census)

Manufacturing & Trade Inventory

Total value of inventory on hand is estimated at $1.816 trillion in August 2016, up 0.2% from July and up 0.7% from August of the previous year. (Source: US Census)

Housing Starts

In August, housing starts were an annualized 1,140,000 units, down 5.7% from the previous month. The index of pending home sales (sales that haven’t closed yet but contracts have been signed) was 108.5 in August, down 2.4% from the previous month. (Source: U.S. DOC)

Consumer & Producer Price Index

The consumer price index for all urban consumers rose 0.3% to 241.4 in September on a seasonally adjusted basis from the previous month. The producer price index for final demand was 110.7 in September, an increase of 0.3% from the previous month. (Source: US Bureau of Labor Statistics)

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For more information about the Logistics Market Snapshot or the many other resources and activities of the Georgia Center of Innovation for Logistics please contact: Emily Schrenk, Industry Coordinator | ESchrenk@georgia.org | 912.966.7842