PSA

Infrastructure Advocacy
& Education Organization

PSA - IAEO June 2016 Infrastructure Update

Highlights from ASCE's 2016 *Failure to Act* Report

Every four years the American Society of Civil Engineers (ASCE) publishes The Report Card for America's Infrastructure, which grades the current state of national infrastructure. The *Failure to Act* Report is an update and addresses the current infrastructure gaps between today's needs and investment and how they will affect the future productivity of industries, national competitiveness, and future costs to households.

Failure to Act shows that business costs and, therefore, prices will increase if surface transportation systems worsen, ports, airports and inland waterways become outdated or congested, and if water, wastewater and electricity infrastructure systems deteriorate or fail to keep up with changing demand.

Some highlights:

- The cost of deteriorating infrastructure takes a toll on families' disposable household income and impacts the quality and quantity of jobs in the U.S. economy.

- U.S. businesses will be more inefficient. As costs rise, business productivity falls, causing GDP to drop, cutting employment, and ultimately reducing personal income.

- From 2016 to 2025, each household will lose $3,400 each year in disposable income due to infrastructure deficiencies.

- If this investment gap is not addressed throughout the nation's infrastructure sectors by 2025, the economy is expected to lose almost $4 trillion in GDP, resulting in a loss of 2.5 million jobs in 2025.

The impact by infrastructure sectors:

- The average annual investment gap for surface transportation through 2025 is now expected to increase from $91 billion to $110 billion. State action, combined with current levels of federal funding, have stabilized the downward trend in highway investment, but it remains at a level lower than required for effective functioning of the national highway system.

- The average annual investment gap for water and wastewater through 2025 is expected to decrease from $11.3 billion to $10.5 billion in constant 2015 dollars, in large measure due to projects funded through the American Recovery and Reinvestment Act. The total investment gap through 2025 is expected to be $105 billion.

- These shortfalls in funding will cause the U.S. to lose nearly 500,000 jobs by 2025

- The average annual investment gap for electric generation, transmission and distribution through 2025 is expected to decrease from $21 billion to $18 billion.

- The average annual investment gap for airports through 2025 is expected to decrease from $4.6 billion to $4.2 billion. However, by 2040, the cumulative gap is expected to slightly increase from a per year average of $3.3 billion to $3.5 billion in 2015 dollars.

- The investment gap for waterborne infrastructure is roughly equivalent to the initial *Failure to Act* assessment. In the 2016–2025 short term, the average annual gap is expected to decrease from $1.8 billion to $1.5 billion.

Conclusion:

The condition, capacity and performance of America's infrastructure is constantly evolving, and efforts to address those needs are also ongoing. In this update, modeling results from the national economic model used in the initial series were adjusted to reflect findings from the new analysis of infrastructure needs and gaps. The results of this update study underscore the findings of the preceding reports in the Failure to Act series, showing that the economic benefits of infrastructure investment reverberate through every sector of the economy while economic losses that come from deferred investment also become worse over time.

You can read the full report and accompanying charts at http://www.infrastructurereportcard.org/wp-content/uploads/2016/05/2016-FTA-Report-Close-the-Gap.pdf.

FY 2017 EPA Budget Request Targets WIFIA Implementation

The U.S. Environmental Protection Agency's FY2017 budget request includes $20 million to help implement the Water Infrastructure Finance and Innovation Act (WIFIA) by beginning to finance large, innovative drinking water and wastewater projects of regional or national significance. In addition, the WIFIA program will also work to support investments in small communities and promote public-private collaboration. The $15 million increase in the budget is the beginning of funding for WIFIA projects and the program is designed to leverage these funds.

Source: *Water Utility Infrastructure Management* Magazine

U. S. Chamber of Commerce Urges the Next President to Invest in Infrastructure

In an open letter to the next President of the United States the Chamber states: "America has a long and impressive history of providing state-of-the-art infrastructure. However, our nation's infrastructure, once the envy of the world, is now in decline."

To read the entire letter visit: https://www.uschamber.com/above-the-fold/dear-45-america-s-infrastructure-falling-apart-it-s-time-rebuild.

Canadian Infrastructure Also Faces Rapid Deterioration

The U.S. is not alone when it comes to deteriorating infrastructure. One third of Canada's municipal infrastructure faces rapid deterioration according to the 2016 Canadian Infrastructure Report Card published by the Canadian Public Works Association.

The report assesses the condition of infrastructure in four categories: drinking water, wastewater, stormwater, and municipal roads, based on survey responses from 123 Canadian Municipalities. The findings show about 30% of municipal infrastructure is assessed as between fair and very poor, and that many municipalities lack the capacity to manage their infrastructure.

Here are the highlights:

- Municipal Roads - More than half the road assessments fell below good condition: 32% are considered in fair condition, while 20.6% are considered in poor to very poor condition. Replacement costs - $91.1 billion or $7,325 per household in Canada.
- Drinking Water - Rated good overall, 15.4% of the drinking-water systems surveyed were rated fair to very poor for the condition of their pipes;

14.4% were rated fair to very poor for the condition of their plants, reservoirs and pumping stations. Replacement costs - $25.9 billion or $2,082 per household in Canada.

- Wastewater Collection and Treatment - Rated good overall, 40.3% of wastewater plants, pumping stations and storage tanks are in fair to very poor condition; 30.1% of pipes are in fair to very poor condition. Replacement costs - $39 billion or $3,136 per household in Canada.
- Stormwater Management - Rated very good overall, 12.5% of stormwater facilities were assessed as being in less than good condition. For stormwater pipes, the figure was higher: 23.4%. Replacement costs - $15.8 billion or $1,270 per household in Canada.

  ("Replacement Costs means how much it would cost to bring all of the infrastructure up to "Good" condition, defined as *The infrastructure in the system or network is generally in very good condition, typically new or recently rehabilitated. A few elements show general signs of deterioration that require attention.*)

The full report is available at http://www.canadainfrastructure.ca/en/report.html

Public's Use of U.S Public Transit Keeps Growing

Nearly 2.6 billion trips were taken on U.S. public transportation in the first quarter of 2016, according to a report released today by the American Public Transportation Association (APTA), representing a slight increase of 0.4 percent. Rail ridership saw significant increases, with light rail showing the largest increase of 3.0 percent.

"On a national level, public transit ridership was slightly up for the first quarter of 2016, with solid increases in light rail, heavy rail (subways), and commuter rail," said Valarie J. McCall, APTA Chair.

Public transportation systems in the following cities reported record ridership for the first quarter: Albany, NY; Flagstaff, AZ; Oklahoma City, OK; and Seattle, WA. Additionally, public transit systems in cities of all sizes saw ridership increases due to economic expansion, as new jobs were added and unemployment decreased. These cities were: Albany, NY, Boston, MA; Detroit, MI; Hartford, CT; Lewisville, TX; Little Rock, AR; New York City, NY; San Antonio, TX; and San Francisco, CA.

U.S. Moving to Retake Global Manufacturing Lead by 2020

The 2016 Global Manufacturing Competitiveness Index, published every three years by Deloitte Global and the Council on Competitiveness, shows the U.S. rising to the No. 2 position in 2016 behind China, and it is poised to take over the top spot by 2020. The study is the result of interviews with more than 500 CEOs and senior leaders at global manufacturing companies.

The study points to significant growth in U.S. manufacturing and belies statements throughout the political season that U.S. manufacturing is in decline. Yet there are challenges ahead.

“While the U.S. lead is a positive signal, the existing engineering and manufacturing workforce that pushed the country forward is beginning to get older, said Michelle Drew Rodriguez, manufacturing leader for Deloitte US’s Center for Industrial Insights. “Therefore it is important that that public and private sectors collaborate on the nation’s educational and technological future to remain a top manufacturing competitor.” The full study is available at www.deloitte.com.us/global-competitiveness.

Source: *Plant Engineering* Magazine

DOT and FAA Finalize Rules for Commercial Use of Small Drones

The Department of Transportation’s Federal Aviation Administration has finalized the first operational rules (PDF) for routine commercial use of small unmanned aircraft systems (UAS or “drones”), opening pathways towards fully integrating UAS into the nation’s airspace. These new regulations work to harness new innovations safely, to spur job growth, advance critical scientific research and save lives.

“We are part of a new era in aviation, and the potential for unmanned aircraft will make it safer and easier to do certain jobs, gather information, and deploy disaster relief,” said U.S. Transportation Secretary Anthony Foxx. “We look forward to working with the aviation community to support innovation, while maintaining our standards as the safest and most complex airspace in the world.”

According to industry estimates, the rule could generate more than $82 billion for the U.S. economy and create more than 100,000 new jobs over the next 10 years.

The new rule, which takes effect in late August, offers safety regulations for unmanned aircraft drones weighing less than 55 pounds that are conducting non-hobbyist operations.

The rule’s provisions are designed to minimize risks to other aircraft and people and property on the ground. The regulations require pilots to keep an unmanned aircraft within visual line of sight. Operations are allowed during daylight and during twilight if the drone has anti-collision lights. The new regulations also address height and speed restrictions and other operational limits, such as prohibiting flights over unprotected people on the ground who aren't directly participating in the UAS operation.

The FAA is offering a process to waive some restrictions if an operator proves the proposed flight will be conducted safely under a waiver. The FAA will make an online portal available to apply for these waivers in the months ahead.

For more information on the ruling please go to https://www.transportation.gov/briefing-room/dot-and-faa-finalize-rules-small-unmanned-aircraft-systems.

Cybercrime and Utilities: Preparing for Attack

In the February, 2016 issue of Pipeline & Gas Journal, David Meltzer, chief research officer at Tripwire (Tripwire (www.tripwire.com), shares his concerns about the potential damage a cyberattack could cause to America's utility infrastructure. The following are excerpts from the article:

"Cyber-crime is one of the biggest threats organizations face. Computers control almost everything we do, from the level of chlorine put into our water to the electricity supply into our town. Hackers are fully aware of this, and they understand if they infiltrate these systems or do anything to jeopardize the supply of these utilities, it wouldn't take long before chaos erupted."

"Cyber-criminals are constantly looking for new targets and energy companies can deliver significant return on investment. A cyber-criminal, for example, could hold a country at ransom by stopping its gas supply. This illustrates how cybercrime can be an extremely profitable business, and depending on the scale of an attack, hackers have the potential to earn millions of dollars and cause plenty of damage."

"Unlike with a retail company, which risks losing customer credit card data and personal information, the primary concern for cyber-attacks against energy companies can easily become a safety issue, and a successful cyber-attack can cause actual physical harm to people. Thankfully, that is a line we haven't seen crossed yet."

"Attackers know if the national power grid were to go down, it would cost many hundreds of millions of dollars per hour and, in the case of hospitals or air-traffic control systems, for example, any disruption to services could place people's lives in jeopardy. Attacks targeting oil and gas infrastructure could potentially cause situations like oil spills or reprogram logic controllers to create dangerous situations by opening a valve or changing a temperature setting."

“Because of the devastating consequences any cyber-attack on these systems could have, the key question we need to ask ourselves is, ‘How do we make energy companies more secure?’”

“…a recent survey by Tripwire of 400 executives and IT professionals in the energy, oil, gas, and utility industries found there is widespread agreement the cyber threat is real. Of executives responding to the survey, 94% said their organization is a target of cyber criminals, and 83% of all respondents believed such an attack could cause serious physical damage.”

To read the complete article, please go to https://pgjonline.com/2016/01/31/cybercrime-and-utilities-preparing-for-attack/

Infrastructure Show Calendar

- July 18-20, 2016, NAPA, Renaissance Seattle Hotel, Seattle, WA – National Asphalt Pavement Association
- July 31-August 3, 2016 ACT’s International Conference, Portland, OR, Association for Commuter Transportation (ACT)
- August 28-31, 2016, APWA’s PWX Public Works EXPO, Minneapolis, MN – American Public Works Association
- August 30-31, 2016 Water Finance Conference, Denver Athletic Club, Denver, CO
- September 25-28, ICMA Annual Conference, Kansas City, MO – International City/County Management Association
- September 24-28, 2016, WEFTEC 2016, Morial Convention Center, New Orleans, LA – Water Environment Federation
- October 20-21, 2016, GIE + EXPO, The Green Industry & Equipment Expo, Kentucky Expo Center, Louisville, KY, National Association of Landscape Professionals (NALP)
- October 30 – November 2, 2016, AWWA Water Infrastructure Conference & Exhibition, Phoenix, AZ, American Water Works Association
- November 12-15, 2016 AASHTO Annual Meeting, Westin Boston Waterfront, Boston, MA, American Association of State Highway and Transportation Officials (AASHTO)
- March7-11, 2017 CONEXPO-CON/AGG, Las Vegas, NV, Association of Equipment Manufacturers (AEM)
- April 9-13, 2017 No-Dig Show, Gaylord Convention Center, Washington, DC, North American Society for Trenchless Technology (NASTT)

Builder Confidence on the Rise

After holding steady for the past four months, builder confidence in the market for newly constructed single-family homes rose two points in June to a level of 60 on the National Association of Home Builders/Wells Fargo Housing Market Index (HMI). This is the highest reading since January 2016.

“Builders in many markets across the nation are reporting higher traffic and more committed buyers at their job sites,” said NAHB Chairman Ed Brady, a home builder and developer from Bloomington, Ill. “However, our members are also relating ongoing concerns regarding the shortage of buildable lots and labor and noting pockets of softness in scattered markets.”

“Rising home sales, an improving economy and the fact that the HMI gauge measuring future sales expectations is running at an eight-month high are all positive factors indicating that the housing market should continue to move forward in the second half of 2016,” said NAHB Chief Economist Robert Dietz.

Derived from a monthly survey that NAHB has been conducting for 30 years, the NAHB/Wells Fargo Housing Market Index gauges builder perceptions of current single-family home sales and sales expectations for the next six months as "good," "fair" or "poor." The survey also asks builders to rate traffic of prospective buyers as "high to very high," "average" or "low to very low." Scores for each component are then used to calculate a seasonally adjusted index where any number over 50 indicates that more builders view conditions as good than poor.

All three HMI components posted gains in June. The component gauging current sales conditions rose one point to 64, the index charting sales expectations in the next six months increased five points to 70, and the component measuring buyer traffic climbed three points to 47.

Source: National Association of Home Builders (NAHB)

Latest Economic Indicators at a Glance

Annual Employment Report

Nonfarm payroll employment changed little in May (+38,000). Health care added jobs over the month, and mining continued to lose jobs. A strike resulted in a job loss in information.

Average hourly earnings of all employees on private-sector payrolls increased by 5 cents in May and are up 2.5 percent over the year. Average weekly hours, at 34.4 hours, have been unchanged since February.

Construction Employment

The U.S. construction industry lost 15,000 net jobs in May according to an analysis by the Associated Builders and Contractors (ABC). This represents the industry’s worst month since December 2013, when payrolls also shrank by

15,000 jobs. Including April's estimate, which was downwardly revised from 1,000 net new jobs to a loss of 5,000 net jobs, the industry has now lost jobs in two consecutive months for the first time in four years.

"Today's jobs report was earth-shattering," said Anirban Basu, ABC's chief economist. "While the construction industry unemployment rate fell to its lowest level since October 2006, the fact that the unemployment rate has shed 3.5 percentage points in two months while losing 20,000 jobs is indicative of a shrinking labor force. This signals the worsening of the industry-wide skilled labor shortage.

"Coming just days after a disappointing nonresidential construction spending report, these job losses will undoubtedly spark talk of recession after a hiatus of roughly three months," said Basu. "Without question, the U.S. economy is associated with significant weakness. However, there are sources of strength based on other data series, including both the auto and housing sectors. Recent retail sales data have become somewhat more upbeat. These positive influences may be enough to keep the U.S. economy out of recession this year.

"Still, contractors should be on guard," said Basu. "Many developers believe that the current real estate cycle is now in its seventh inning or later. It is quite likely that job growth will pick up during the months to come, but financial markets will be shaken by today's report. The weak jobs number will also impact Federal Reserve policy, and what had been a likely interest rate increase in June or July may be off the table for now.

The construction industry unemployment rate fell to 5.2 percent in May, its lowest level since October 2006. The nonresidential construction sector lost 2,100 jobs in May after adding 4,700 jobs in April (revised down from 6,600 net new jobs). The heavy and civil engineering sector, which shed 8,200 positions in May, accounted for over half of the month's job losses.

- Nonresidential building employment fell by 5,100 jobs in May but is up by 16,900 jobs or 2.3 percent on a year-over-year basis.
- Residential building construction employment shrank by 1,200 jobs in May but is up by 33,700 jobs or 4.9 percent on a year ago basis.
- Nonresidential specialty trade contractors added 3,000 jobs for the month, and employment in that category is up by 67,500 jobs or 2.9 percent from the same time one year ago.
- Residential specialty trade contractors reduced payrolls by 3,200 in May but have added 94,000 jobs or 5.3 percent since May 2015.
- The heavy and civil engineering construction segment lost 8,200 jobs in May but is up by 7,000 positions or 0.8 percent on a year-over-year basis.

Consumer Confidence

“Consumer confidence declined slightly in May, primarily due to consumers rating current conditions less favorably than in April,” said Lynn Franco, Director of Economic Indicators at The Conference Board. “Expectations declined further, as consumers remain cautious about the outlook for business and labor market conditions. Thus, they continue to expect little change in economic activity in the months ahead.”

Consumers’ assessment of current conditions weakened in May. The percentage stating business conditions are “good” improved from 24.2 percent to 25.9 percent. However, those saying business conditions are “bad” also increased, from 18.2 percent to 21.6 percent. Consumers’ appraisal of the labor market was less favorable. The proportion claiming jobs are “plentiful” was virtually unchanged at 24.3 percent, however those claiming jobs are “hard to get” increased from 22.8 percent to 24.4 percent.

Consumers were less optimistic about the short-term outlook than last month. Those expecting business conditions to improve over the next six months increased from 13.8 percent to 15.1 percent, but those expecting business conditions to worsen also rose, from 10.8 percent to 11.6 percent.

Consumers’ outlook for the labor market was less favorable. Those anticipating more jobs in the months ahead was virtually unchanged at 12.8 percent, but those anticipating fewer jobs increased from 16.7 percent to 18.1 percent. The proportion of consumers expecting their incomes to increase improved from 15.8 percent to 16.2 percent, while the proportion expecting a reduction in income remained steady at 12.4 percent.

<u>Gross Domestic Product (GDP)</u>

Real gross domestic product -- the value of the goods and services produced by the nation’s economy less the value of the goods and services used up in production, adjusted for price changes -- increased at an annual rate of 1.1 percent in the first quarter of 2016, according to the "third" estimate released by the Bureau of Economic Analysis. In the fourth quarter of 2015, real GDP increased 1.4 percent.

<u>Consumer Price Index</u>

The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.2 percent in May on a seasonally adjusted basis. Over the last 12 months, the all items index rose 1.0 percent before seasonal adjustment.

The food index declined in May, but the indexes for energy and all items less food and energy rose, resulting in the seasonally adjusted all items increase.

The food index fell 0.2 percent, as all six major grocery store food group indexes declined. The energy index increased 1.2 percent as the gasoline index rose 2.3 percent and the indexes for fuel oil and natural gas also advanced.

The index for all items less food and energy increased 0.2 percent in May. The shelter index rose 0.4 percent, and the indexes for medical care, apparel, motor vehicle insurance, and education were among indexes that also increased. These advances more than offset declines in an array of indexes including used cars and trucks, communications, household furnishings and operations, airline fares, and new vehicles.

The all items index rose 1.0 percent for the 12 months ending May, compared to a 1.1-percent increase for the 12 months ending April. The index for all items less food and energy rose 2.2 percent over the last 12 months. The food index has risen 0.7 percent over the last year, with the index for food at home declining 0.7 percent and the index for food away from home rising 2.6 percent. The energy index has declined 10.1 percent over the past 12 months, with all major components falling over the span.

<u>Producer Price Index</u>

The Producer Price Index for final demand increased 0.4 percent in May, seasonally adjusted. Final demand prices rose 0.2 percent in April and declined 0.1 percent in March. On an unadjusted basis, the final demand index inched down 0.1 percent for the 12 months ended in May.

In May, over 60 percent of the advance in the final demand index can be traced to prices for final demand goods, which climbed 0.7 percent. The index for final demand services moved up 0.2 percent.

Prices for final demand less foods, energy, and trade services edged down 0.1 percent in May after rising 0.3 percent in April. For the 12 months ended in May, the index for final demand less foods, energy, and trade services increased 0.8 percent.

Final Demand:

Final demand goods: The index for final demand goods rose 0.7 percent in May, the largest advance since a 1.2-percent jump in May 2015. Two-thirds of the May 2016 increase can be traced to prices for final demand energy, which climbed 2.8 percent. The indexes for final demand goods less foods and energy and for final demand foods both moved up 0.3 percent.

Product detail:

Over one-third of the increase in the index for final demand goods is attributable to gasoline prices, which advanced 6.6 percent. Prices for diesel fuel, iron and steel scrap, fresh and dry vegetables, jet fuel, and oilseeds also moved higher. In contrast, the index for beef and veal fell 5.2 percent. Prices for electric power and for carpets and rugs also decreased.

Final demand services:

The index for final demand services rose 0.2 percent in May after inching up 0.1 percent in April. The May increase can be traced to margins for final demand trade services, which advanced 1.2 percent. (Trade indexes measure changes in margins received by wholesalers and retailers.) Conversely, prices for final demand services less trade, transportation, and warehousing and for final demand transportation and warehousing services fell 0.2 percent and 0.6 percent, respectively.

Product detail:

Leading the rise in prices for final demand services, margins for machinery and equipment wholesaling advanced 3.6 percent. The indexes for apparel, jewelry, footwear, and accessories retailing; inpatient care; residential property brokerage fees and commissions; flooring and floor coverings retailing; and legal services also increased. In contrast, prices for loan services (partial) declined 3.0 percent. The indexes for food retailing and airline passenger services also moved lower.

Productivity and Costs

Nonfarm business sector labor productivity decreased at a 0.6-percent annual rate during the first quarter of 2016, as output increased 0.9 percent and hours worked increased 1.5 percent. (All quarterly percent changes in this release are seasonally adjusted annual rates.) From the first quarter of 2015 to the first quarter of 2016, productivity increased 0.7 percent. (See table A.)

Labor productivity, or output per hour, is calculated by dividing an index of real output by an index of hours worked of all persons, including employees, proprietors, and unpaid family workers. Measures released today were based on more recent source data than were available for the preliminary report.

Unit labor costs in the nonfarm business sector increased 4.5 percent in the first quarter of 2016, reflecting a 3.9-percent increase in hourly compensation and a 0.6-percent decline in productivity. Unit labor costs increased 3.0 percent over the last four quarters.

Factory Orders

New orders for manufactured durable goods in April increased $7.7 billion or 3.4 percent to $235.9 billion. This increase, up three of the last four months, followed a 1.9 percent March increase. Excluding transportation, new orders increased 0.4 percent. Excluding defense, new orders increased 3.7 percent.

Transportation equipment, also up three of the last four months, led the increase, $7.1 billion or 8.9 percent to $87.1 billion.

Employment Cost Index

Compensation costs for civilian workers increased 0.6 percent, seasonally adjusted, for the 3-month period ending in March 2016. Wages and salaries (which make up about 70 percent of compensation costs) increased 0.7 percent, and benefits (which make up the remaining 30 percent of compensation) increased 0.5 percent.

Civilian Workers

Compensation costs for civilian workers increased 1.9 percent for the 12-month period ending in March 2016. In March 2015, compensation costs increased 2.6 percent. Wages and salaries increased 2.0 percent for the current 12-month period, and increased 2.6 percent for the 12-month period ending in March 2015. Benefit costs increased 1.7 percent for the 12-month period ending in March 2016. In March 2015, the increase was 2.7 percent. (See chart 2 and tables A, 4, 8, and 12.)

Private Industry Workers

Compensation costs for private industry workers increased 1.8 percent over the year, lower than the March 2015 increase of 2.8 percent. Wages and salaries increased 2.0 percent for the current 12-month period. In March 2015, the increase was 2.8 percent. The increase in the cost of benefits was 1.2 percent for the 12-month period ending in March 2016, significantly lower than March 2015 when the increase was 2.6 percent.

Employer costs for health benefits increased 3.3 percent for the 12-month period ending in March 2016, and increased 2.5 percent in March 2015.

Among occupational groups, compensation cost increases for private industry workers for the 12-month period ending in March 2016 ranged from 1.4 percent for sales and office occupations to 2.5 percent for production, transportation, and material moving occupations.

Among industry supersectors, compensation cost changes for private industry workers for the current 12-month period ranged from -1.7 percent for information to +2.8 percent for trade, transportation and utilities.

State and Local Government Workers

Compensation costs for state and local government workers increased 2.4 percent for the 12-month period ending in March 2016. In March 2015, the increase was 2.1 percent. Wages and salaries increased 1.8 percent for the 12-month period ending in March 2016, the same increase as the 12-month period ending in March 2015. Benefit costs increased 3.5 percent for the 12-month period ending in March 2016, a higher rate than in the prior year when the increase was 2.8 percent.

<u>Real Earnings</u>

All employees

Real average hourly earnings for all employees were unchanged from April to May, seasonally adjusted. This result stems from a 0.2-percent increase in average hourly earnings being offset by a 0.2-percent increase in the Consumer Price Index for All Urban Consumers (CPI-U).

Real average weekly earnings were unchanged over the month due to no changes in both real average hourly earnings and the average workweek.

Real average hourly earnings increased 1.4 percent, seasonally adjusted, from May 2015 to May 2016. This increase in real average hourly earnings combined with a 0.3-percent decrease in the average workweek resulted in a 1.1-percent increase in real average weekly earnings over this period.

Production and nonsupervisory employees

Real average hourly earnings for production and nonsupervisory employees decreased 0.1 percent from April to May, seasonally adjusted. This result stems from a 0.1-percent increase in average hourly earnings being offset by a 0.2-percent increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Real average weekly earnings decreased 0.1 percent over the month due to the decrease in real average hourly earnings combined with no change in average weekly hours.

From May 2015 to May 2016, real average hourly earnings increased 1.7 percent, seasonally adjusted. The increase in real average hourly earnings combined with no change in the average workweek resulted in a 1.6-percent increase in real average weekly earnings over this period.

Construction Spending

Construction spending during April 2016 was estimated at a seasonally adjusted annual rate of $1,133.9 billion, 1.8 percent below the revised March estimate of $1,155.1 billion. The April figure is 4.5 percent above the April 2015 estimate of $1,085.0 billion.

During the first 4 months of this year, construction spending amounted to $334.8 billion, 8.7 percent above the $307.9 billion for the same period in 2015.

Private Construction

Spending on private construction was at a seasonally adjusted annual rate of $843.1 billion, 1.5 percent below the revised March estimate of $855.9 billion. Residential construction was at a seasonally adjusted annual rate of $439.7 billion in April, 1.5 percent below the revised March estimate of $446.3 billion. Nonresidential construction was at a seasonally adjusted annual rate of $403.5 billion in April, 1.5 percent (±0.8%) below the revised March estimate of $409.6 billion.

Public Construction

In April, the estimated seasonally adjusted annual rate of public construction spending was $290.8 billion, 2.8 percent below the revised March estimate of $299.2 billion. Educational construction was at a seasonally adjusted annual rate of $70.0 billion, 2.5 percent below the revised March estimate of $71.8 billion. Highway construction was at a seasonally adjusted annual rate of $89.4 billion, 6.6 percent below the revised March estimate of $95.7 billion.

Nonresidential Construction Spending

Nonresidential construction spending fell 2.1 percent in April according to analysis by the Associated Builders and Contractors (ABC). Nonresidential spending totaled $688.2 billion on a seasonally adjusted, annualized rate.

Much like last month, the sting of a disappointing headline number was mitigated by upward revisions to the previous two months of data. March's estimate was revised from $695.7 billion to $702.6 billion, while February's estimate saw a 0.1 percent increase. March represents the first month in which spending exceeded $700 billion since March 2009.

"Nonresidential construction spending growth continues to struggle to maintain momentum," said ABC Chief Economist Anirban Basu. "The amount of nonresidential construction value put in place has expanded by just 2.5 percent over the past year, with private spending up 3.4 percent and public spending up just 1.4 percent. While many will primarily attribute this to a sluggish U.S.

economy, one that has expanded by less than 1.5 percent during each of the last two completed calendar quarters, there are other factors at work.

“Lower materials prices are embodied in the value of completed work,” said Basu. “Though commodity prices have been firming recently, commodity prices had been in decline for more than a year. Moreover, in some communities, nonresidential construction is facing severe constraints given an insufficient number of qualified workers. Both factors would tend to constrain the level of observed growth in nonresidential construction spending.

“There may also be growing skittishness among private developers, who have become increasingly concerned by possible overbuilding in commercial, office and lodging markets,” warned Basu. “Both lodging and commercial construction spending dipped in April. This hesitancy is reflected in many ways, including in the Architectural Billings Index, which has struggled to consistently stand meaningfully above its threshold value of 50. Public spending also remains lackluster as many states deal with underfunded pensions and ballooning Medicaid costs.”

Only five of 16 nonresidential construction sectors experienced spending increases in April on a monthly basis:

- Religious-related spending expanded 9.6 percent from March 2016 and 7.3 percent from April 2015.
- Spending in the public safety category grew 5.2 percent on a monthly basis but fell 6.2 percent on a yearly basis.
- Office-related spending expanded 1.6 percent for the month and 20.3 percent for the year.
- Amusement and recreation-related spending expanded 0.8 percent month-over-month and 8.3 percent year-over-year.
- Spending in the power category rose by 0.3 percent for the month and 0.6 percent from April 2015.

Spending in 11 of the nonresidential construction subsectors fell in April on a monthly basis:

- Spending in the communication category fell 7.7 percent from March 2016 and is down 16.4 percent from April 2015.
- Highway and street-related spending fell 6.5 percent on a monthly basis but is up 4 percent on a yearly basis.
- Commercial-related spending dipped 3.7 percent for the month but is up 6.8 percent from April 2015.
- Spending in the health care category fell 3 percent from March 2016 and is down 0.6 percent from the same month one year ago.
- Educational-related spending dropped 2.4 percent month-over-month but is up 5.4 percent year-over-year.
- Spending in the lodging category fell 2 percent on a monthly basis but is up 24.6 percent on a yearly basis.

- Transportation-related spending fell 1.7 percent since March 2016 and is down 1 percent from April 2015.
- Sewage and waste disposal-related spending fell 1.4 percent for the month but is up 1 percent from April 2015.
- Manufacturing-related spending fell 1.4 percent month-over-month and 9.8 percent year-over-year.
- Spending in the conservation and development category dipped 1.2 percent for the month and 6.5 percent year-over-year.
- Water supply-related spending fell 0.5 percent on a monthly basis and 6.5 percent on a yearly basis.

Construction Materials Prices

Construction input prices expanded by 0.7 percent in May and have now expanded for three consecutive months according to an analysis by the Associated Builders and Contractors (ABC). The rise follows eight consecutive months during which construction input prices fell; prices remain 3.4 percent below their year-ago level.

Nonresidential construction input prices expanded by 0.9 percent in May, but are still 3.5 percent below their year-ago level. Price gains were largely driven by iron and steel prices and steel mill product prices, which expanded 5.8 percent and 4.6 percent for the month, respectively.

"After falling sharply during all of 2015 and into the early months of 2016, an increase in global commodities prices had to happen as markets firmed," said ABC Chief Economist Anirban Basu. "While much attention has been given to the recent rise in oil prices to around $50 per barrel, other commodity prices have also experienced a resurgence, including iron ore.

"That said, the global economy continues to disappoint relative to expectations established at the start of the year," said Basu. "Higher prices may stimulate new rounds of production, including in energy markets, but the implication is that prices are unlikely to rise smoothly or dramatically going forward. Analyst views regarding the direction of commodity prices diverge wildly. While supply and demand play a role in fashioning commodity prices, so too does the value of the U.S. dollar. U.S. interest rates remain low and in many cases have been declining. The dollar has correspondingly weakened in recent weeks. Should that continue, commodity price increases could be sharper than we presently anticipate."

Nine key input prices expanded or remained unchanged in May on a monthly basis:

- Crude petroleum prices expanded 0.6 percent from April 2016, but are down 32.5 percent from May 2015.

- Unprocessed energy material prices expanded 0.9 percent on a monthly basis, but have fallen 23.1 percent on a year-ago basis.
- Prices for steel mill products expanded 4.6 percent from a month ago, but are down 5.2 percent on a yearly basis.
- Iron and steel prices expanded 5.8 percent month-over-month, but are down 2 percent year-over-year.
- Softwood lumber prices expanded 2.2 percent for the month and 6.3 percent from May 2016.
- Fabricated structural metal prices remained unchanged month-over-month and are down 1.9 percent year-over-year.
- Prices for plumbing fixtures and fittings expanded 0.2 percent for the month and are up 0.3 percent from the same time last year.
- Prices for prepared asphalt and tar and roofing and siding products expanded by 0.4 percent month-to-month and 0.7 percent year-over-year.
- Natural gas prices rose 2.9 percent for the month, but are down 23.5 percent from the same period one year ago.

Two key input prices declined on a monthly basis:

- Nonferrous wire and cable prices fell 1.3 percent on a monthly basis and have fallen 9.2 percent on a yearly basis.
- Concrete product prices inched down by 0.1 percent month-over-month, but are up 3 percent year-over-year.

Retail Sales

U.S. retail and food services sales for May, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were $455.6 billion, an increase of 0.5 percent from the previous month, and 2.5 percent above May 2015. Total sales for the March 2016 through May 2016 period were up 2.4 percent from the same period a year ago. The March 2016 to April 2016 percent change was unrevised at up 1.3 percent.

Retail trade sales were up 0.4 percent from April 2016, and up 2.0 percent from last year. Nonstore retailers were up 12.2 percent from May 2015, while Health and Personal Care Stores were up 8.3 percent from last year.

New Residential Sales

Sales of new single-family houses in April 2016 were at a seasonally adjusted annual rate of 619,000. This is 16.6 percent above the revised March rate of 531,000 and is 23.8 percent above the April 2015 estimate of 500,000.

The median sales price of new houses sold in April 2016 was $321,100; the average sales price was $379,800. The seasonally adjusted estimate of new houses for sale at the end of April was 243,000. This represents a supply of 4.7 months at the current sales rate.

New Residential Construction

Privately-owned housing units authorized by building permits in April were at a seasonally adjusted annual rate of 1,116,000. This is 3.6 percent above the revised March rate of 1,077,000.

Single-family authorizations in April were at a rate of 736,000; this is 1.5 percent above the revised March figure of 725,000. Authorizations of units in buildings with five units or more were at a rate of 348,000 in April.

Privately-owned housing starts in April were at a seasonally adjusted annual rate of 1,172,000. This is 6.6 percent above the revised March estimate of 1,099,000, but is 1.7 percent below the April 2015 rate of 1,192,000.

Single-family housing starts in April were at a rate of 778,000; this is 3.3 percent above the revised March figure of 753,000. The April rate for units in buildings with five units or more was 373,000.

Privately-owned housing completions in April were at a seasonally adjusted annual rate of 933,000. This is 11.0 percent below the revised March estimate of 1,048,000 and is 7.4 percent below the April 2015 rate of 1,008,000.

Single-family housing completions in April were at a rate of 691,000; this is 3.6 percent below the revised March rate of 717,000. The April rate for units in buildings with five units or more was 232,000.

U.S. Trade Balance

The goods and services deficit was $37.4 billion in April, up $1.9 billion from $35.5 billion in March, revised. April exports were $182.8 billion, $2.6 billion more than March exports. April imports were $220.2 billion, $4.5 billion more than March imports.

The April increase in the goods and services deficit reflected an increase in the goods deficit of $1.4 billion to $58.8 billion and a decrease in the services surplus of $0.5 billion to $21.4 billion.

Year-to-date, the goods and services deficit decreased $8.1 billion, or 4.8 percent, from the same period in 2015. Exports decreased $39.0 billion or 5.1 percent. Imports decreased $47.1 billion or 5.1 percent.