FMI's Construction Outlook

1st Quarter 2013 Report

The end of the economic world has been postponed. For the time being, the Mayan apocalypse has been avoided, we have bypassed the fiscal cliff, and we are facing the great sequestration with only minimal upset to the economy, so far, that is.

Gold is retreating from its peak, the stock market is hitting new highs, and residential building is on the rise. With all the new exploration and extraction of shale oil and gas coming on the market, energy prices are going down, and analysts are now talking about American energy independence day coming in the next decade. Office, commercial and lodging construction are even making a bit of a comeback. Could it be that we are actually seeing a real recovery in process? Yes, the inchworm economy continues to move mostly in the direction of renewed growth. As you will see in our forecast, we continue to be guardedly optimistic forecasting growth in almost all markets—the exception is public safety with a flat outlook for growth in 2013. In fact, for the first time since 2008, we expect construction activity to grow faster than GNP.

Too good to be true, you say? Maybe a case of cabin fever morphing into spring fever? For those who have been acclimated to recessionary thinking, we can offer a darker scenario. If you are among the many wealthy people, mostly Russian investors—many speculate large holdings of Russian mob rubles—then you may very well be looking at the end of the world, economically speaking. Seems someone might have become suspicious when the large Cyprian banks were investing heavily in Greek debt. The upshot is, we aren't sure what the upshot is, as the banks reopen under new rules and the lines of depositors begin to form outside wondering if they can get their money out. It's a small country, and all we are talking about is a "mere" 10 billion Euros. Pocket lint for the wealthy nations like Germany. Yet, it reminds every one of the fragility of the European and global economy. Can this happen in Greece? Italy? Spain? And the list goes on. If that isn't enough to shake us from our brightening outlook, we can always spend a few minutes pondering what's up with North Korea. As supreme leader, Kim Jong-Un meets with one of his basketball idols, none other than Dennis Rodman, and then threatens global warfare and the retraction of all communications with its neighbor to the south.

This is the type of news that bleak scenarios are made from. However, the continued slow recovery is something immediate and real, and it is beginning to show signs of sustainability. Looking at some major indicators, one might wonder why the economy isn't just heating up; for instance, interest rates remain near all-time lows, mortgage rates and housing prices are still in the highly affordable range, wages are a little higher, job figures are improving somewhat, corporate profits for large organization are at all-time highs, and GDP growth is slow but still positive. Even consumer confidence and most major indexes are upward trending. The FMI Nonresidential Construction Index for the first quarter again reached 58.1. Although that is the same score that we saw in the first quarter of 2012, the NRCI has been in slow-growth territory for 11 quarters now. So what's holding the economy back?

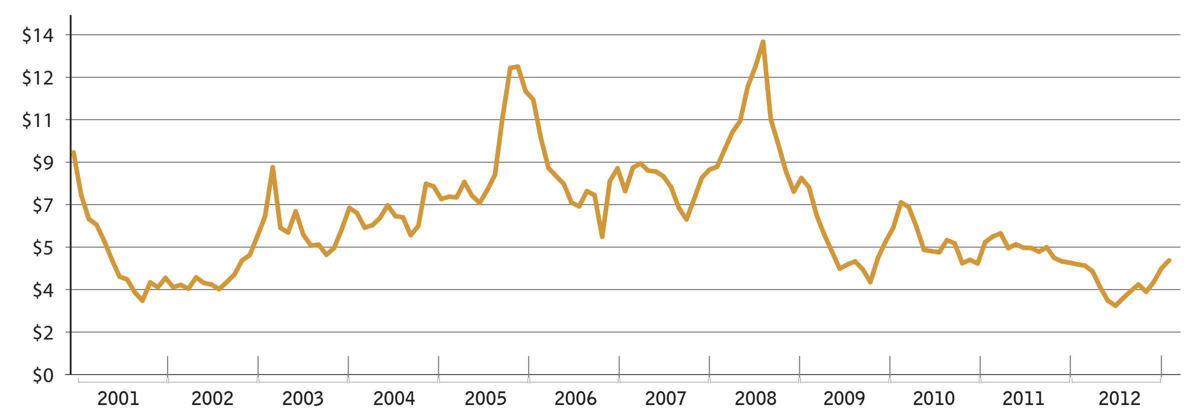
In no small part, it is the continuing global and national uncertainty and lack of more benevolent leaders. There are those who benefit from global unrest and war posturing. Then there are those who just can't get their act together to do what is right for the country instead of their own political aspirations. However, those explanations, although regrettably real, are a bit of a copout. Even though large corporations are building up a ton of cash reserves, they are using a lot of it to pay down debt or buy back shares. Some are using their cash to purchase other competitors or to make strategic acquisitions, but most are just waiting for the market to show some signal of returning. So how many signals do they need?

We tend to forget just how long and how deep the recession was—and still is for many. According to research firm Trepp, "The delinquency rate for U.S. commercial real estate loans in CMBS fell 15 basis points to 9.42% in February. Overall, the Trepp CMBS Delinquency Rate has fallen 92 basis points since hitting a peak of 10.34% at the end of July 2012." (U.S. CMBS Delinquency Report, Trepp, February 2013.) Homeowner foreclosure filings are also trending lower, according to Realty Trac and reported in CNN Money (2/14/13): "Notices of default, scheduled auctions, bank repossessions and other filings fell to 150,864 last month, a 7% decline from the previous month and a 28% drop from January 2012, according to RealtyTrac. New foreclosure filings fell to the lowest level since June 2006." All this is good news, but there are still a lot of CRE loans maturing in the next four to five years, and homeowners and banks are not yet over their nightmares and under performing loans. It takes no time for the markets to fall apart, or so it seems, but years for them to rebuild.

Another reason the economy isn't just heating up with all the good news is that there are natural economic governors in place that will put a chill on growth this year. Chief among those is material costs that continue to rise and may rise even faster as the market starts to grow. Ironically, although it seems we should have a great pool of people needing jobs, the construction industry has lost thousands of employees that won't be coming back when the market improves. There are now, and will continue to be, some labor shortages, particularly in the skilled trades in growth areas like the energy sector and even housing in some areas of the country. Regulation also has a dampening effect on a quick recovery in the construction industry. The recession was so long that projects were mothballed or just not even begun by developers. It takes four, five or more years to get shopping malls, multiuse, multifamily or large industrial plans off the drawing board and over the many government hurdles before breaking ground. Then there is the problem of who will make the first move. The government stimulus plans have tried to take the lead, but haven't been as effective as hoped. Now it is time for private capital to make its move, but few are ready to take the "build it and they will come" approach.

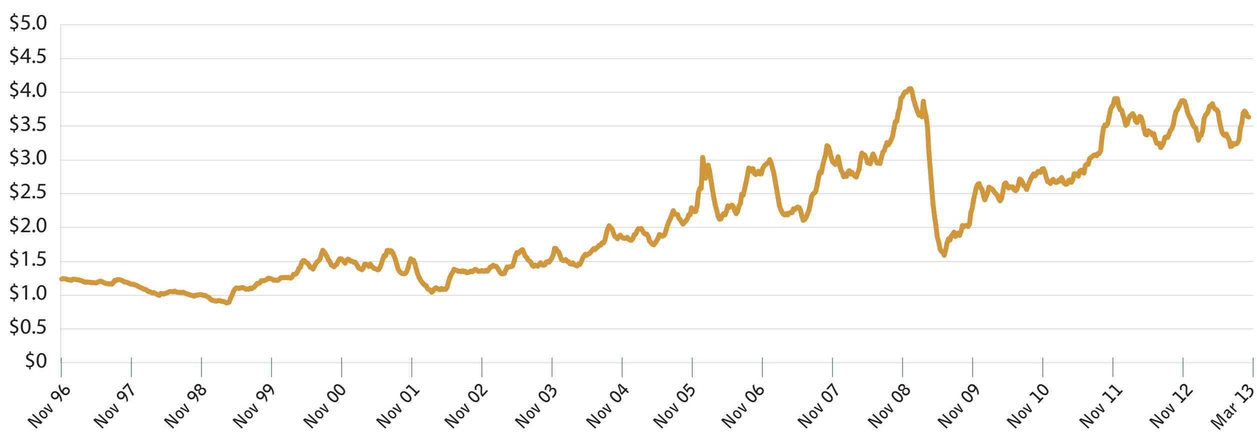
Hopefully, we are approaching a time when investors tire of getting little to no return on their money socked away in banks of small island nation states. As Cyprus shows, there is no such thing as a no-risk investment, and fewer places to send your money on vacation. The wealth of nations is built by labor and calculated risks that increase productivity and create goods for trade. This picture is a little bit over simplified, of course. But it is time for investors to get back into the waters; and, hopefully, not in a lifeboat built of gold that won't make it out of the harbor. Alternatively, if the waters still look too dangerous, one might go back to spending time calculating the end of the world. For a list of others who have predicted this event, see http://en.wikipedia.org/wiki/List_of_dates_predicted_for_apocalyptic_events.

United States Natural Gas Industrial Price
(Dollars Per Thousand Cubic Feet)



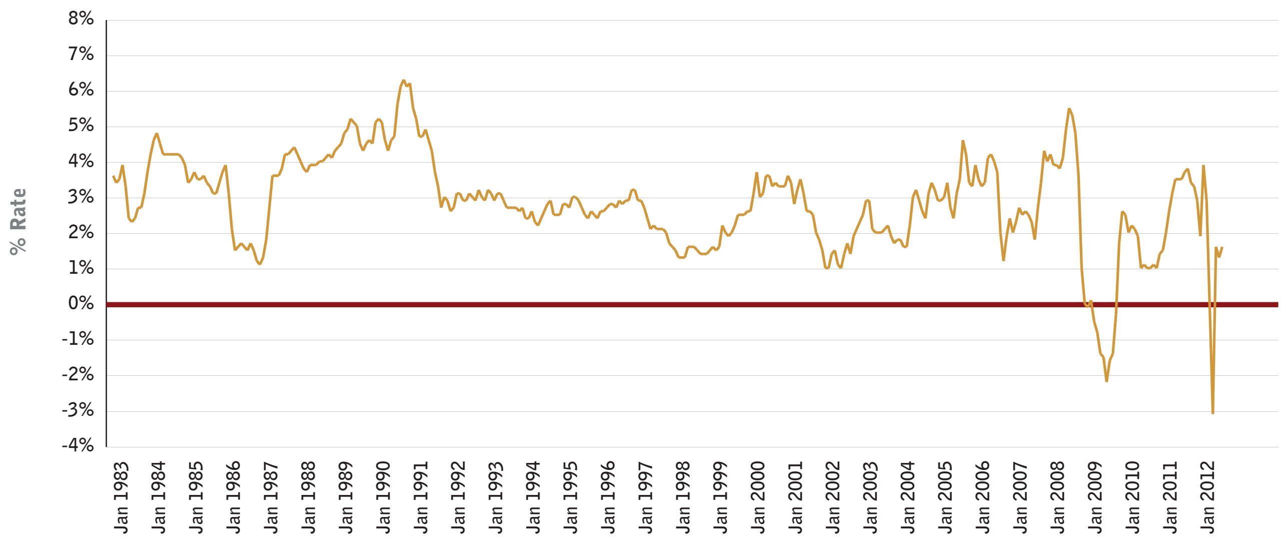
Source: U.S. Energy Information Administration

Weekly U.S. Regular Conventional Retail Gasoline Prices
(Dollars Per Gallon)

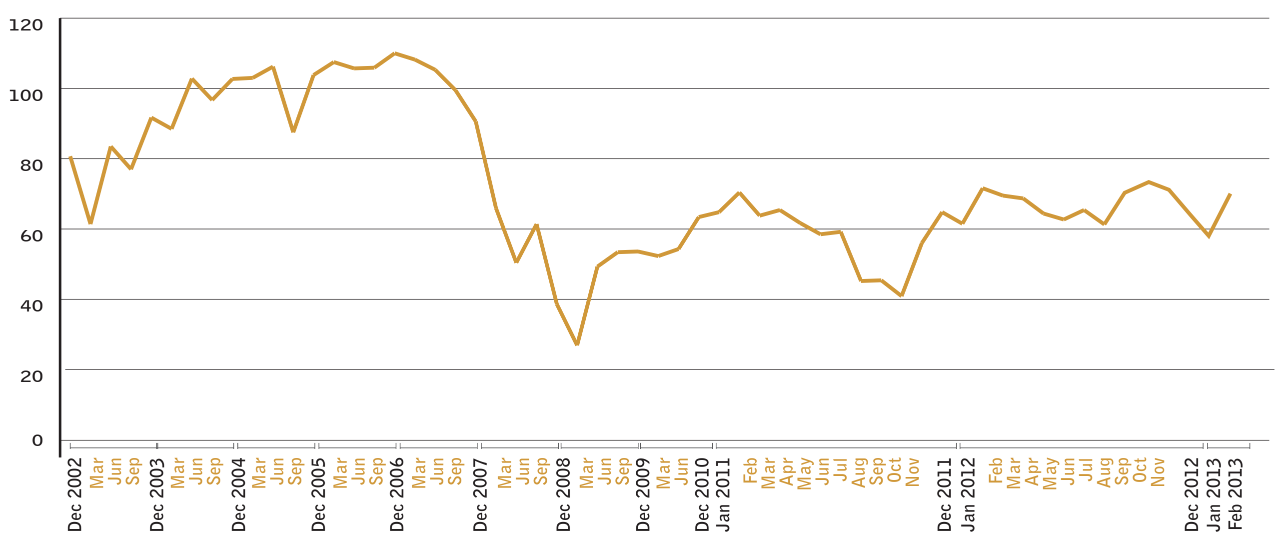


Source: hppt://www.eia.gov/petroleum/gasdiesel/

Consumer Price Index
Inflation Remains Under Control

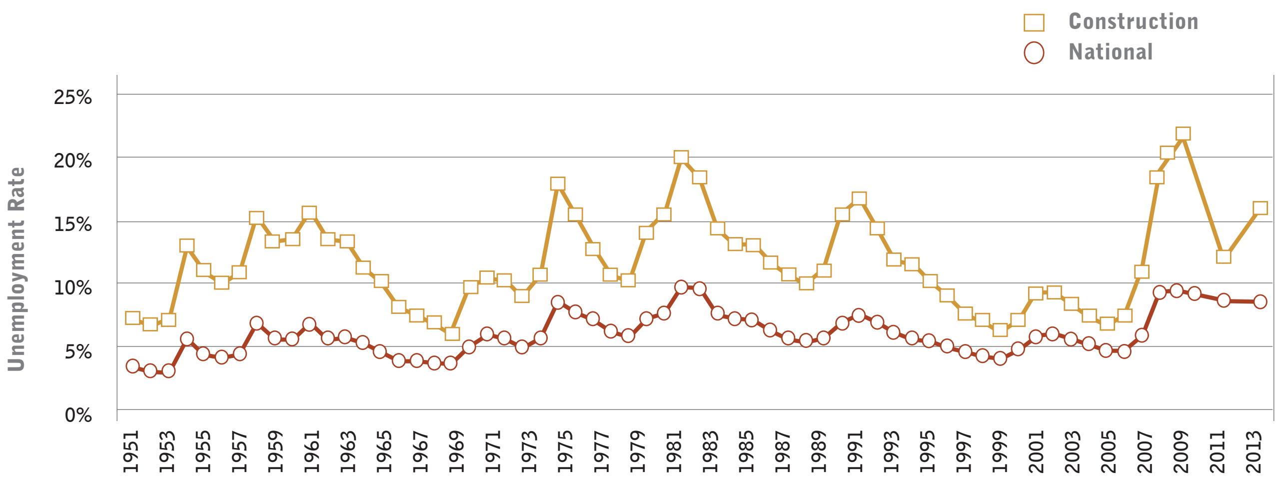


Consumer Confidence Index



Source: The Conference Board

Construction Unemployment Rates



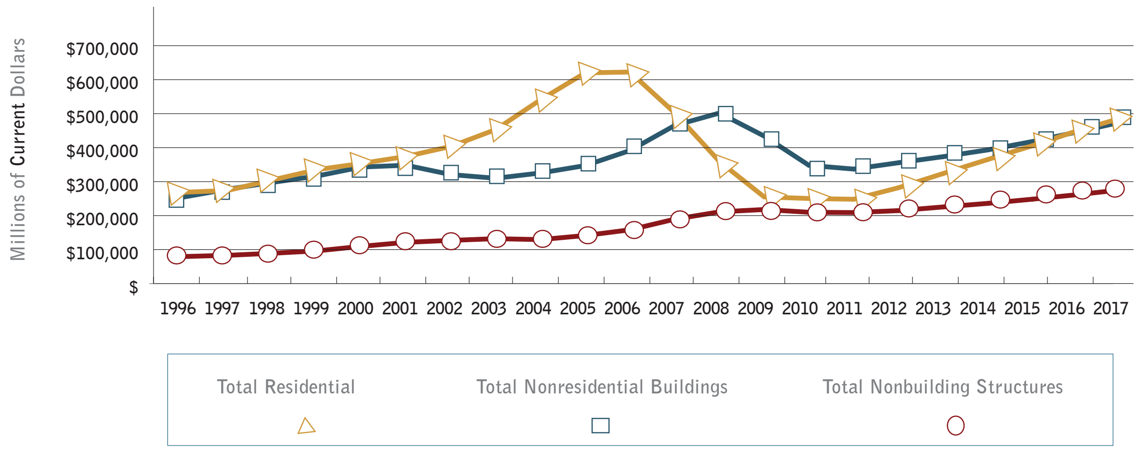
"Construction employment declined by 28,000 in May." (BLS)

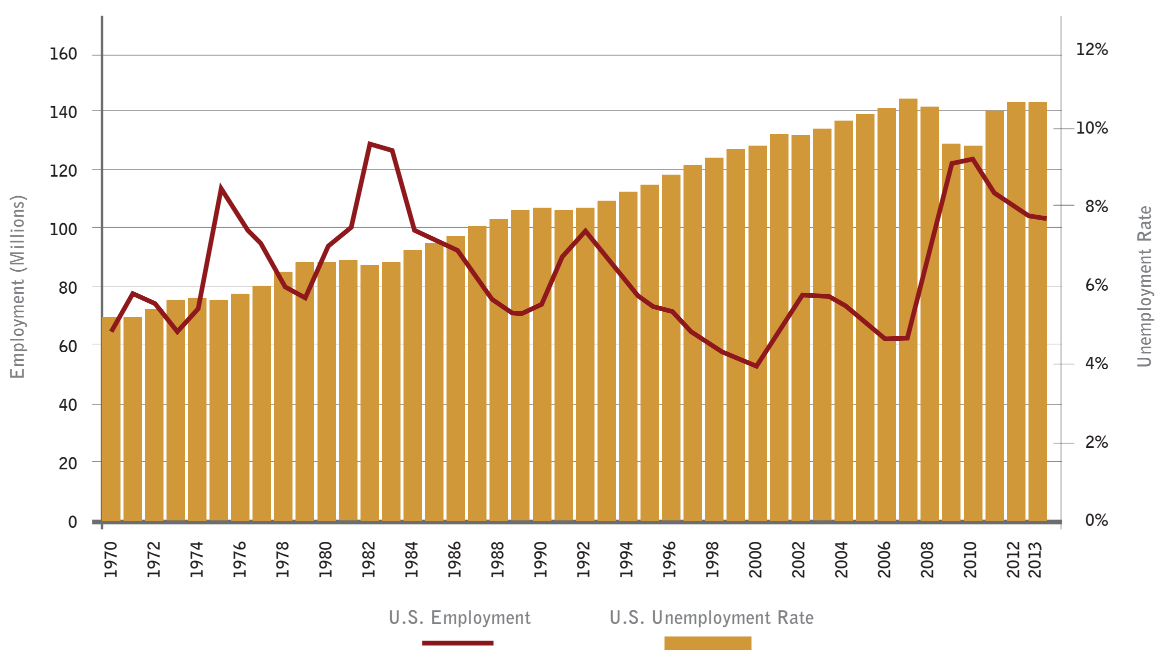
Construction Forecast

Although the strength of individual markets is shifting, our forecast for total construction put in place for 2013 continues to show an increase of 8% over 2012 levels. The forecast total for construction in 2013 is $918,897 million, a solid improvement, but we don't expect to return to the days of annual construction above the trillion-dollar mark until 2015. The star of the show is residential buildings with a 23% rise in single-family buildings. In the early months of the Great Recession, it seemed that nonresidential construction would manage to hold enough momentum to carry it through even though residential construction was tanking. It might have made it if the recession had been of the brief variety. We are now seeing a lag on the upside as commercial, lodging and office construction finally start to pick up.

Continued low interest rates provide much of the stimulus for the new growth in capital spending, but that hasn't been enough for many large businesses focused on using their record profits to pay down debt or otherwise strengthen their balance sheets. While much of business is still in wait-and-see mode, some are breaking the mold and planning for growth. Then there is the power industry, oil and gas exploration is booming in the rich shale regions. These booming regions buck the trends across the nation, with rising labor costs and need for housing and construction of roads, rail and pipelines to move the product from the fields to refining and distribution sites. The potential for greater energy independence and lower energy prices is helping to make the U.S. more competitive in the global market and enticing more manufacturing to relocate in the U.S., and that is not just American companies. While low interest rates, rising material and labor costs as well as the growth in housing sales and construction smack of a coming period of inflation, so far, the consumer price index remains relatively tame. Nonetheless, higher interest rates are inevitable down the road, but most economists don't expect that to happen this year.

FMI Construction Put in Place, Estimated for the United States



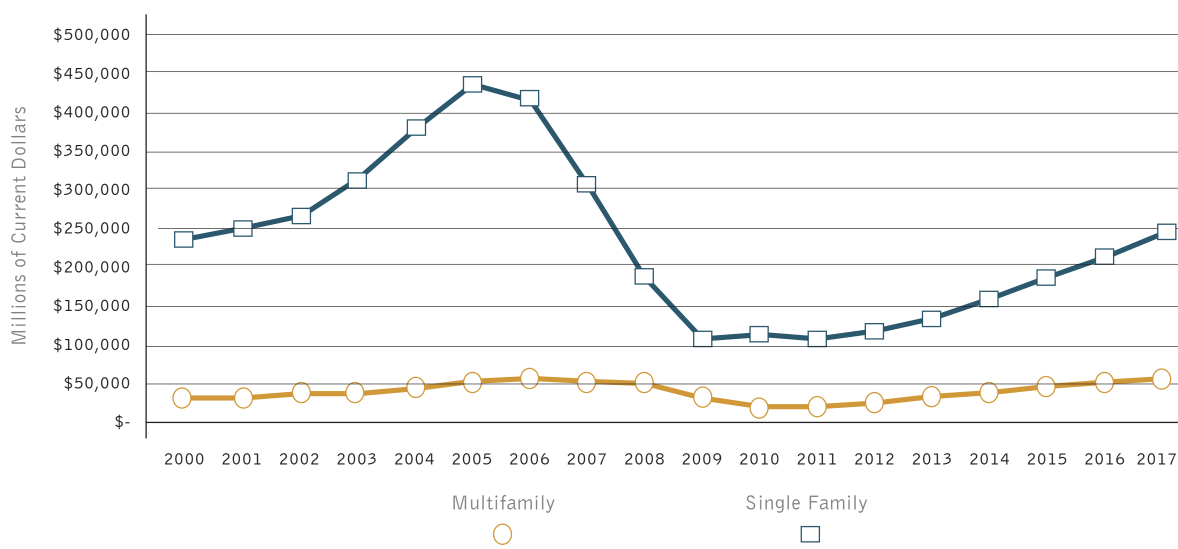


RESIDENTIAL

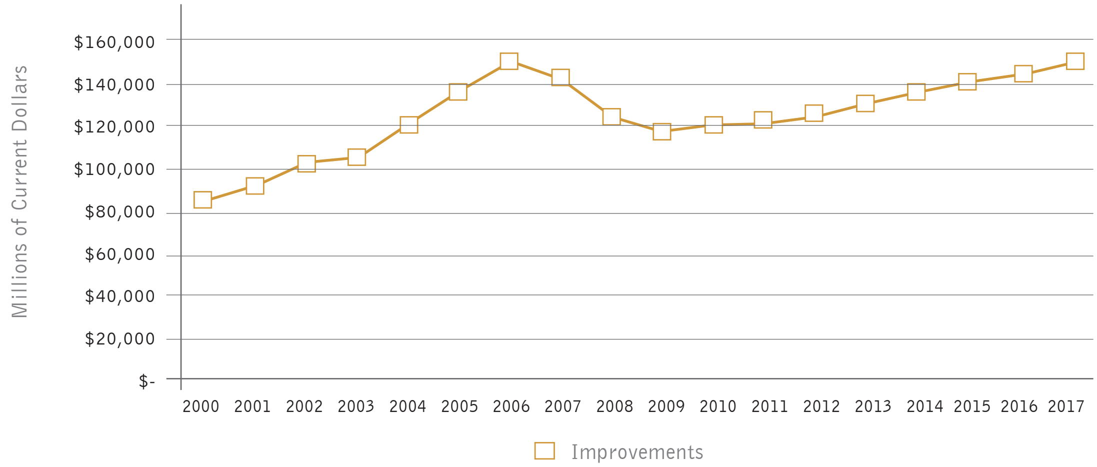
Since residential construction was at the epicenter of the economic meltdown way back in 2007, it is good to see that six years later we can finally say housing is making a solid comeback. Single-family housing put in place grew 19% in 2012, and we expect another 23% growth to reach $161 million by the end of 2013. Multifamily construction improved a whopping 47% in 2012, and we are looking for another 31% in 2013. If it didn't take so long to get projects approved, this rate might even go up. However, the other side of that coin is that, as reported by the National Association of Home Builders (NAHB), the NAHB "Multifamily Vacancy Index (MVI), which measures the multifamily housing industry's perception of vacancies, dropped two points to 31." That translates into higher rents. Generally, higher cost of rental housing would both drive more building in multifamily as well as spark more home sales. However, even if the job market is improving and banks are beginning to lend to homebuyers again, many new households are shy to buy and will wait to save the larger down payment as well as look for the security of holding down a job for more than a year or two.

The biggest challenge to the housing market may be to avoid the temptations of over-exuberance, while at the same time scaling up to be ready for the challenges of a return to growth. That means dealing with higher prices for materials and labor. Finding enough skilled labor is once again becoming a challenge as the more than 30% of those who lost their jobs in the recession have retired or moved on, many retired or started new careers and some are headed for the boom towns of shale oil and gas exploration. That will require homebuilders to seek new ways of recruiting and new efficiencies for building homes.

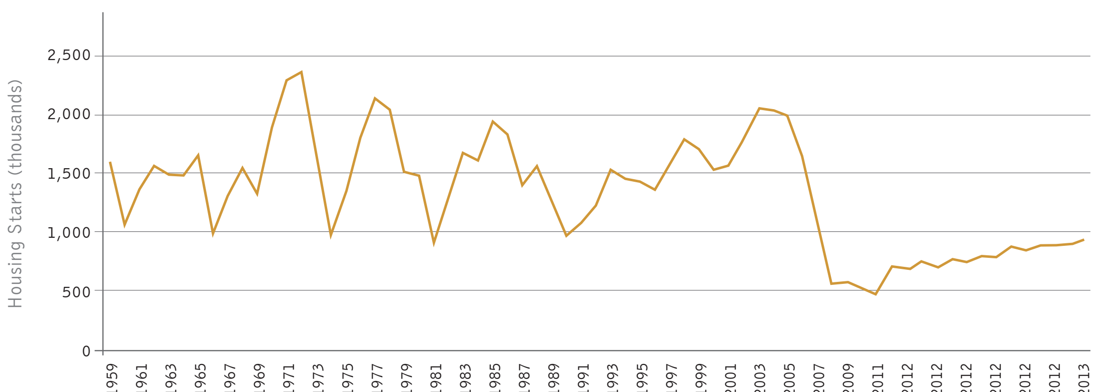
Residential Construction Put in Place



Residential Construction Improvements Put in Place
Forecast as of Q1 2013



Housing Starts
(Seasonally Adjusted Annual Rate)



TRENDS:

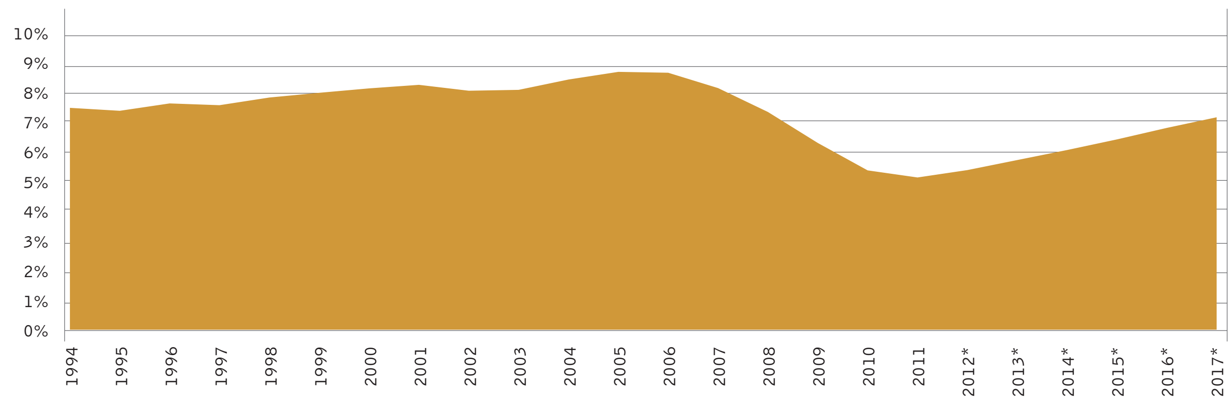
- According to a recent report from CoreLogic, "[T]here were 56,000 completed foreclosures in the U.S. in December 2012, down from 71,000 in December 2011, a year-over-year decrease of 21 percent." It reported that, "Since the financial crisis began in September 2008, there have been approximately 4.1 million completed foreclosures across the country." (CoreLogic press release, "National Foreclosure Report," February 1, 2013)
- Ben Bernanke and the governors of the Federal Reserve say they will keep interest rates low until unemployment drops to 6.5%. It was 7.7% in February 2013.
- Housing affordability remains high. According to NAHB, "In all, 74.9% of homes sold between the beginning of October and the end of December were affordable to families earning the U.S. median income of $65,000. This was up nearly a percentage point from the 74.1% of homes sold that were affordable to median-income earners in last year's third quarter." (NAHB "Nationwide Housing Affordability Increases at Year-End 2012" February 21, 2013)
- The S&P/Case-Shiller index reported a 6.8% rise in home prices over December 2011 and in January, prices increased 8.1% over January 2012. That is the best gain since 2006.

DRIVERS:

- ↓ Unemployment
- ↑ Core CPI
- ↑ Income
- ↓ Mortgage rates
- ↑ Home prices
- ↑ Housing starts
- ↑ Housing permits

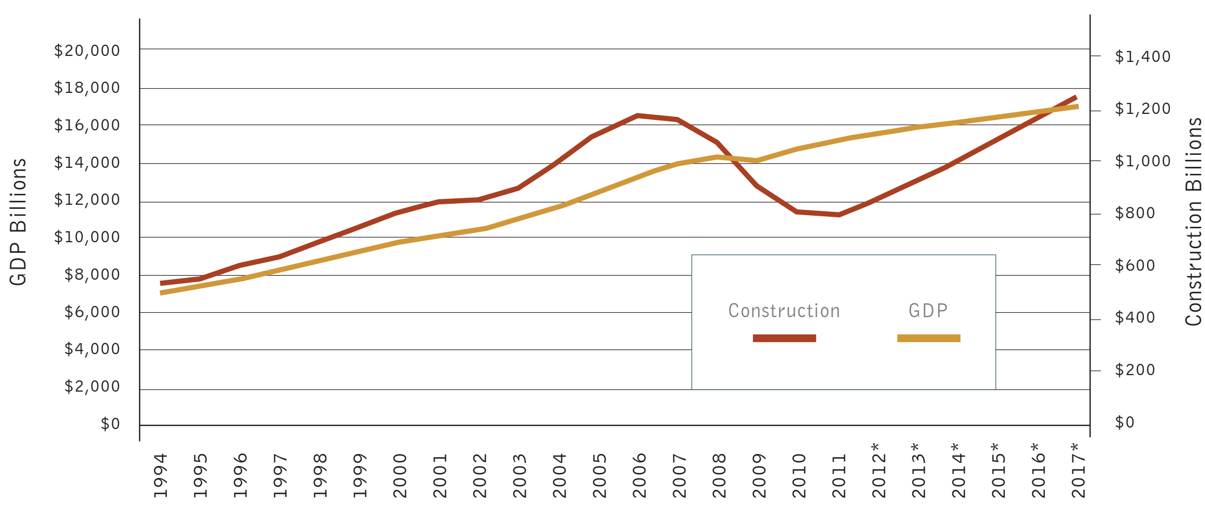
NONRESIDENTIAL BUILDINGS

Construction as a Percentage of GDP



*FMI Forecast

Construction Spending and Nominal GDP



*FMI Forecast

Value of Public Construction Put in Place (Seasonally Adjusted Annual Rate)

Millions of dollars. Details may not add up to totals due to rounding.

Value of Construction Put in Place — Seasonally Adjusted Annual Rate (Millions of Dollars) as of August 2012	Total Construction Put in Place (Jan 2012)	% of Total Construction Put in Place (Q1 2012)	Total Construction Put in Place (Jan 2013)	% of Total Construction Put in Place (Q1 2013)
*Public Construction	$277,228	33%	$269,038	29%
*State and Local	$251,108	30%	$244,390	27%
*Federal	$26,120	3%	$24,647	3%
FMI Forecast: Private Construction Put in Place	$610,981	72%	$649,859	71%
FMI Forecast Construction Put in Place	$848,698	100%	$918,897	100%

* Source: U.S. Census Bureau Construction Spending

Lodging

After three years of steep declines, the market for lodging construction came back a strong 25% in 2012 and we expect another 10% growth in construction put in place for 2013 to $12.2 billion. Lodging's comeback has been slow as both consumers and businesspeople cut down sharply on travel in the past few years. However, lately, according to STR, "[T]he U.S. hotel industry's occupancy rose 2.0% to 58.5%, its average daily rate was up 4.4% to US$107.72, and its revenue per available room increased 6.4% to US$63.04." (Reported in http://www.hotelnewsnow.com/Articles.aspx/10087/STR-reports-US-hotel-pipeline-for-February)

The sharp drop in construction of new properties has helped to keep the rates high, but now the lodging industry is looking at a longer-term plan to add rooms. According to Lodging Econometrics, the number of projects in the pipeline increased 38% in 2012. Although starts are expected to slow in 2013, there are 341,204 rooms currently in the pipeline. The "pipeline mix," according to Lodging Econometrics, shows "big increases for smaller projects Under Construction and a decline in larger Early Planning projects." Smaller projects enter the pipeline faster. "At year-end, Luxury, Upper Upscale and Casino projects totaled just 7% of all projects in the Pipeline, while Upscale and Upper Midscale accounted for a whopping 76%. 91% of all Pipeline projects are less than 200 rooms." ("United States Lodging real estate trends" - executive summary, Winter 2013, Lodging Econometrics)

TRENDS:

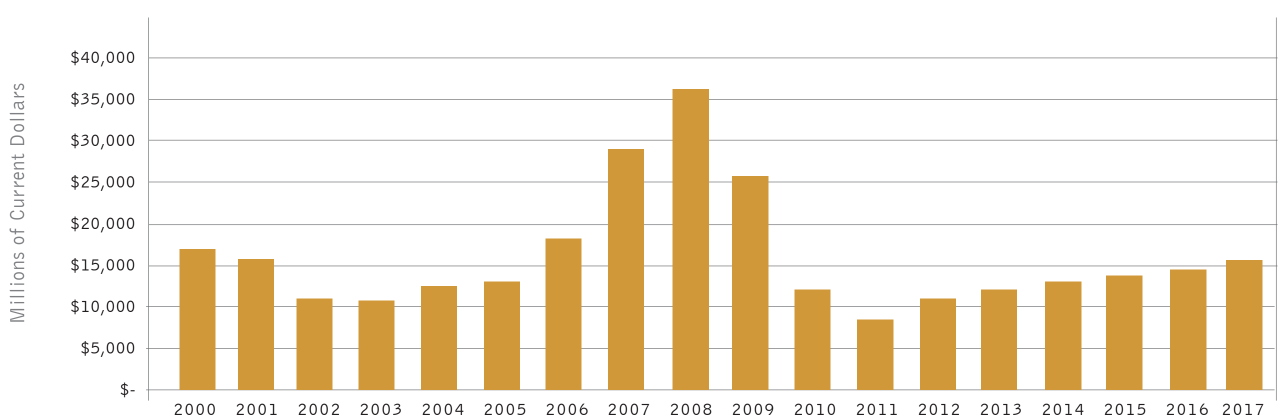
- Hotel developers will renovate before building new properties.
- As the economy continues to improve, business and vacation travelers are taking to the roads and airways, but this will be a slow transition.
- International travel is still steady due to the weak dollar.
- Occupancy rates are on the rise.
- Green building is more commonplace in remodels and retrofits.

DRIVERS:

- Occupancy rate
- RevPar
- Average daily rate
- Room starts

Lodging Construction Put in Place

Forecast as of Q1 2013



Office

Office construction is finally showing a solid but slow turnaround with 5% growth in 2012 and another 5% increase expected in 2013. High unemployment rates and sharp downsizing in the financial sector took its toll on office vacancy rates since the recession. Now, companies enjoying higher profits are again looking at growth and expansion. New office space is being absorbed at a faster rate, thus allowing for increased rents. According to the National Association of Realtors, “Office rents should increase 2.6% in 2013 and 2.8% next year, following a 2.0% gain in 2012.”

TRENDS:

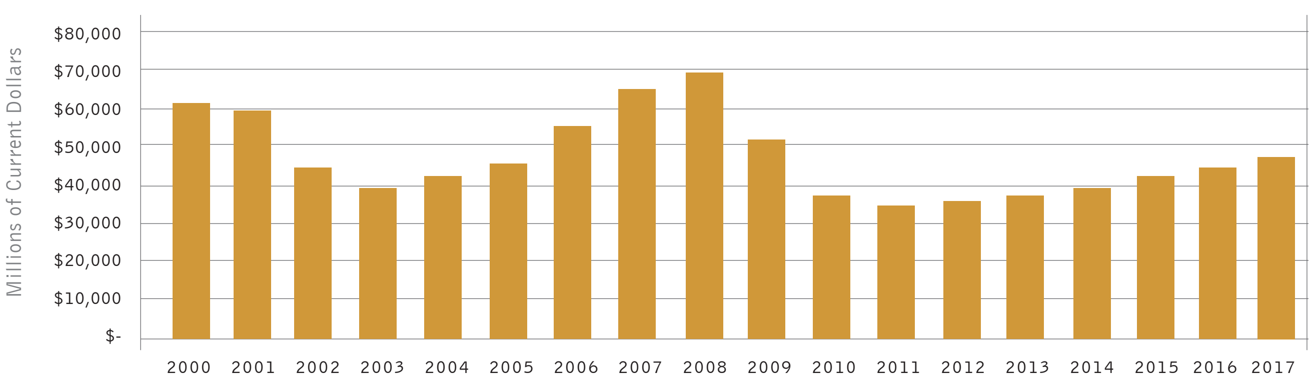
- The National Association of Realtors reports, “Vacancy rates in the office sector are forecast to fall from a projected 16.0% in the first quarter to 15.6% in the first quarter of 2014.”
- Asking rents increased 0.8% to an average $28.46 per square foot, according to Reis.

DRIVERS:

- Office vacancy rate
- Unemployment rate

Office Construction Put in Place

Forecast as of Q1 2013



Commercial

Commercial construction is the third largest nonresidential construction market behind education construction and manufacturing construction. That's why it is good to see that it continues into its third year of good growth, moving up 8% in 2012 and looking for another 7% to reach $50.3 billion in 2013. The slow rebound is coordinated with the return of consumer confidence and disposable income. The U.S. Census Bureau reported in March "Total sales for the December 2012 through February 2013 period were up 4.5% (±0.5%) from the same period a year ago."

TRENDS:

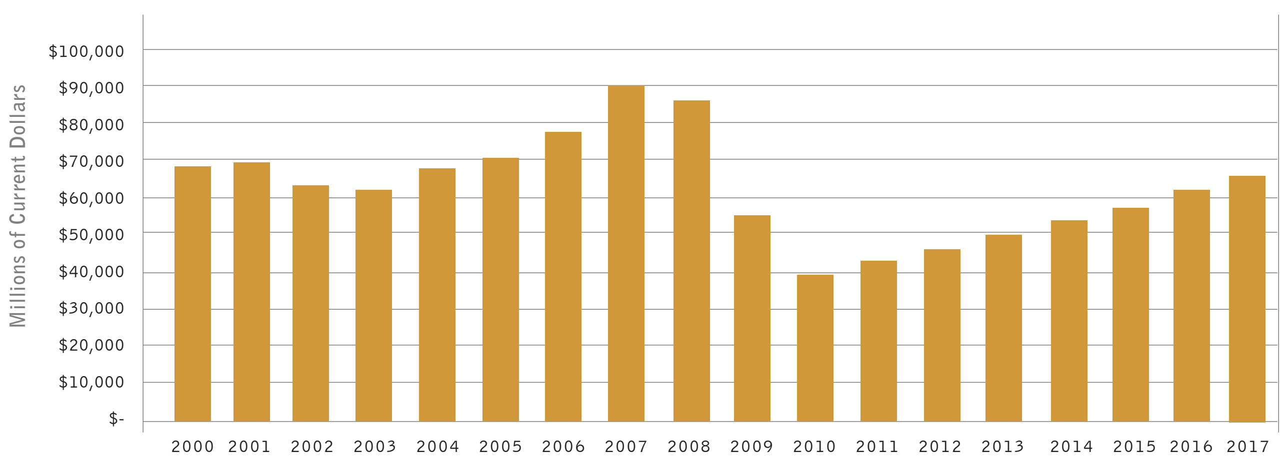
- According to the Department of Commerce, "[A]dvance estimates of U.S. retail and food services sales for February, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were $421.4 billion, an increase of 1.1% (±0.5%) from the previous month and 4.6% (±0.7%) above February 2012."
- "Nonstore retailers were up 15.7% (±2.3%) from February 2012, and auto and other motor vehicle dealers were up 8.8% (±2.3%) from last year."
- Consumer confidence was down in March 59.7 from 68.0 in February. (The Conference Board)
- Expect more rethinking of commercial construction space to accommodate smaller stores and to combine in-store sales with online shopping.
- Increased store remodeling could stall new construction.
- Look for increasing multiuse projects.

DRIVERS:

- ↑ Retail sales
- ↑ CPI
- ↓ Unemployment rate
- ↑ Income
- ↑ Housing starts
- ↑ Building permits

Commercial Construction Put in Place

Forecast as of Q1 2013



Health Care

Health care construction was moderate in 2012, growing only 3%, but we expect it to pick up in 2013 to 8% to $44.2 billion construction put in place for the year. Demographics continue to drive our forecast, and baby boomers are retiring in larger numbers and more likely to need greater health care. However, there is a larger elephant in the room that makes prediction a bit dicey right now. The Affordable Healthcare Act, Obamacare, is set to provide access to affordable health insurance for millions of Americans who are currently uninsured. This looks like a potentially sudden shock to the system, even though it has been coming for three years now, because many have ignored it or tried to legislate it away. The "2013 CFO Outlook, Survey of U.S. Senior Financial Executives" by Bank of America/Merrill-Lynch cites 58% of CFOs as seeing rising healthcare costs as a chief concern. That response isn't based solely on the coming changes due to Obamacare, but also the concern for the continually rising health care costs that Obamacare seeks to improve. Meantime, health care providers will continue to focus on reducing costs for new facilities through use of technology and fewer frills.

TRENDS:

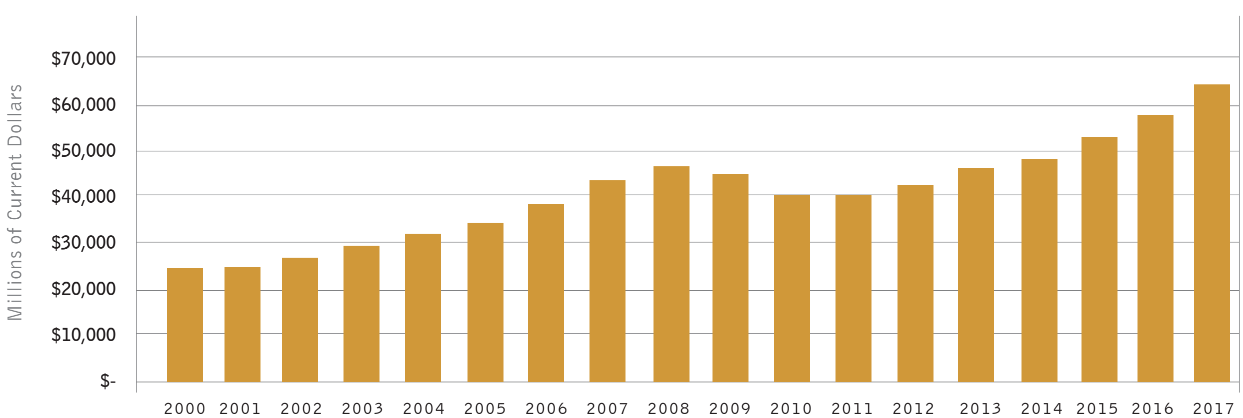
- Hospital beds per 1,000 people trending downward
- Shorter patient stays
- Increasing use of growing number of ambulatory-care facilities
- Heath care industry still not prepared for increased number of insured starting in 2014
- Trend toward rebuilding existing facilities to use modern hospital design and allow for greater use of technology
- Nontraditional funding sources for private nonprofit facilities
  - Private development and equity.
  - Government or government-backed.
  - Pension and life insurance companies.

DRIVERS:

- ↑ Population change younger than age 18
- ↑ Population change ages 18-24
- ↑ Stock market
- ↓ Government spending
- ↑ Nonresidential structure investment

Health Care Construction Put in Place

Forecast as of Q1 2013



Educational

Construction for schools will pick up slightly in 2013 to 3% over 2012 levels at an annual rate for construction put in place of $87.2 billion. The increases in residential construction and tax revenues for states and municipalities will help bring this market back in many areas of the country. At the same time, states and communities with decreasing populations, due to people moving to find better jobs, continue to try to consolidate older, underutilized schools. Private schools may continue to suffer as parents facing tight budgets avoid the higher costs. For higher education, students are becoming more discerning about their return on investment and taking a closer look at the growing number of degree programs offered online.

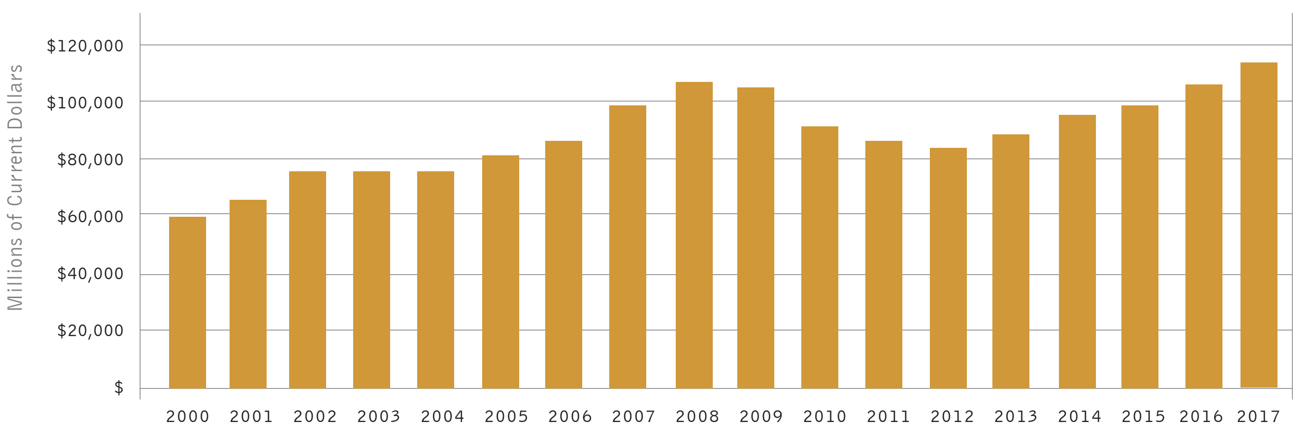
TRENDS:

- Significantly less funding from states for K-12 schools.
- Enrollment growth 2.5 million in the next four years.
- New school designs more flexible for changing classrooms and greater use of natural light.
- Greater attention to reducing energy use and employing green building technologies.
- Harvard installs 600-kilowatt solar array.
- Greater focus on safe schools after recent horrific shootings on campus.

DRIVERS:

- ↑ Population change younger than age 18
- ↑ Population change ages 18-24
- ↑ Stock market
- ↓ Government spending
- ↑ Nonresidential structure investment

Educational Construction Put in Place
Forecast as of Q1 2013



Religious

After nine years of being in a shrinking market, religious construction is set to grow 2% in 2013 to $3.9 billion. Much of this growth is likely to be renovation as newly formed congregations move into vacated retail space or reoccupy church buildings abandoned by other faiths. As the housing market slowly continues a growth trend in the coming years, we may also see more expendable income for contributing to new community houses of worship.

TRENDS:

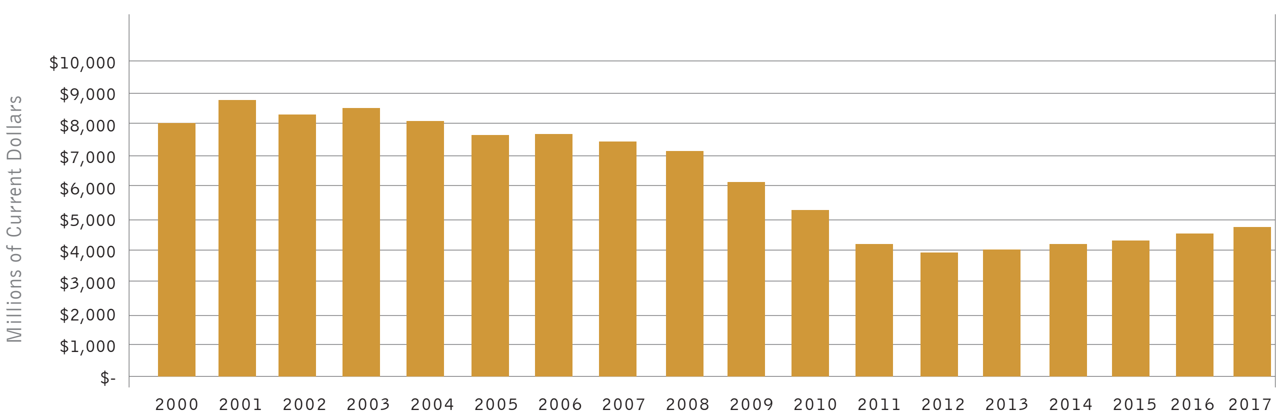
- The lending environment continues to be a challenge for many congregations.
- Establishing a capital campaign is becoming increasingly common.
- Many churches are seeing tremendous declines in contributions and tithes.
- More parishioners are relying on their houses of worship to provide guidance and assistance, further stretching thin resources.
- New methods for charitable giving, including online giving and donation collections, are empowering religious organizations.
- Improved space utilization and additions are taking the forefront, as new construction is increasingly not an option.
- Churches are becoming smarter about attracting parishioners who are drawn in by facilities and the church building itself.
- Energy efficiency, green sustainability and long-lasting quality are becoming top features many congregations want in worship houses..

DRIVERS:

- GDP (slowing)
- Population
- Income
- Personal savings rate

Religious Construction Put in Place

Forecast as of Q1 2013



Public Safety

A new report from the Congressional Research Services states "The growing prison population is taking a toll on the infrastructure of the federal prison system. The BOP reports that it has a backlog of 154 modernization and repair projects with an approximate cost of $349 million for FY2012." (The Federal Prison Population Buildup: Overview, Policy Changes, Issues, and Options January 22, 2013.) According to the report, "[T]he federal prison system was 39% over its rated capacity in FY2011, but high- and medium-security male facilities were operating at 51% and 55%, respectively, over rated capacity."

TRENDS:

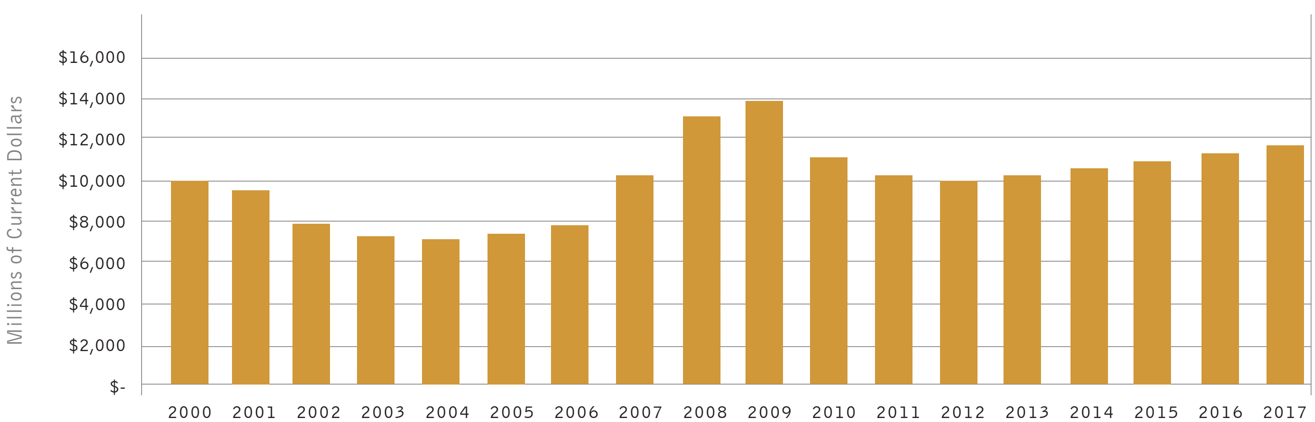
- The Pentagon is seeking "$150 million overhaul of the U.S. detention facility at Guantanamo Bay, Cuba," according to a report at WorldNews on NBC News's website.
- Adult correctional facilities' population decreased 1.3% in 2010.
- Privately managed secure facilities are increasing.
- Private corporations now operate 5% of the 5,000 prisons and jails in the U.S. The private prison industry is growing at a rate of 30% per year.
- Government appointed its first chief greening officer (under GSA) to oversee aggressive pursuit of sustainable practices in government buildings.
- CM-at-risk or design-build arrangements will increase.
- P3s overcome shortfalls in public financing.

DRIVERS:

- ↑ Population
- ↓ Government spending
- ↑ Incarceration rate
- ↑ Nonresidential structure investment

Public Safety Construction Put in Place

Forecast as of Q1 2013



Amusement and Recreation

Our forecast calls for a modest increase of 3% for 2013 in amusement and recreation construction markets. There are a few large projects on the horizon, like the new Vikings stadium and the proposed domed stadium on the campus of UNLV, but lack of funding and support across the country will keep growth down in the near term until another round of renewal and venue competition starts in a few years. The casino and gambling industry has been hit hard since the recession, but some properties may begin to work their way out of financial difficulties and either be completed or shut down.

TRENDS:

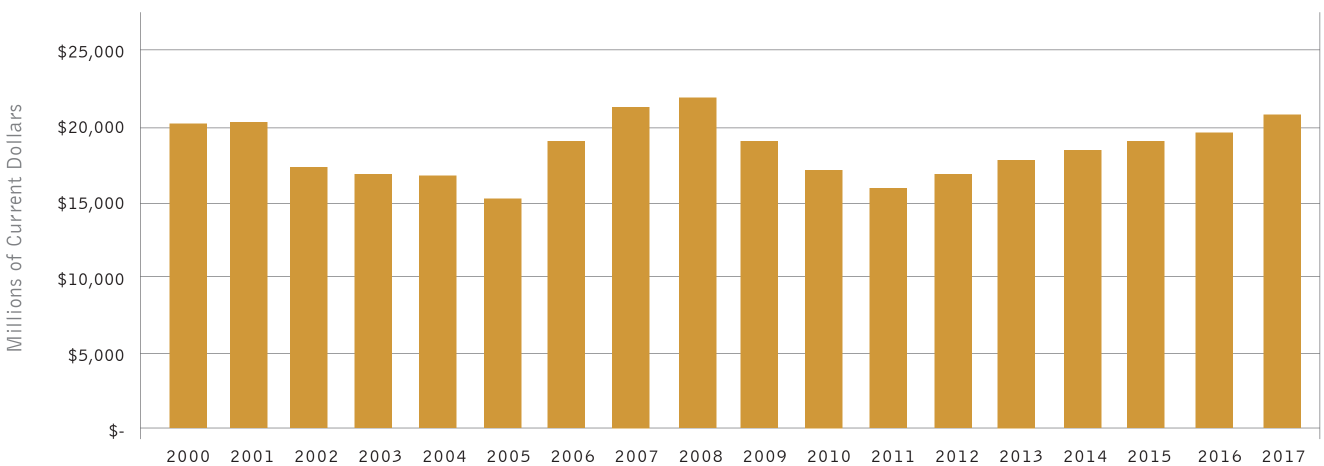
- The San Francisco 49ers have recently broken ground on their new $850 million stadium.
- Minnesota Vikings $1.1 billion project has been approved by the state senate.
- Casino plans are under way in a number of states, including New York, Pennsylvania, Maryland, Florida and Ohio, with some investors coming from offshore.
- Public/private venture planned for the campus of UNLV includes a 50,000-seat domed stadium but still waiting approvals and taxpayer votes on plan to allow the project to be tax-free.
- Competition in the gaming sector will draw business away from some existing gambling centers, such as Atlantic City, as well as other public arenas.

DRIVERS:

- Income up (slightly up)
- Personal savings rate
- Unemployment rate

Amusement and Recreation Construction Put in Place

Forecast as of Q1 2013



Transportation

Transportation construction grew 8% in 2012 and will continue to show relative strength in 2013, growing another 8% to $39.6 billion dollars. With the passage of MAP-21 and the expanded federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan program, the transportation market finally has some degree of certainty for its funding in the near term. According to a new report by the American Road and Transportation Builders Association, (ARTBA), the "U.S. Transportation Construction Market Forecast 2013" calls for sluggish growth in highway and bridge construction due to reduced federal and state budgets, but rail—especially private freight lines—and ports will continue a slow expansion in the forecast period through 2017.

TRENDS:

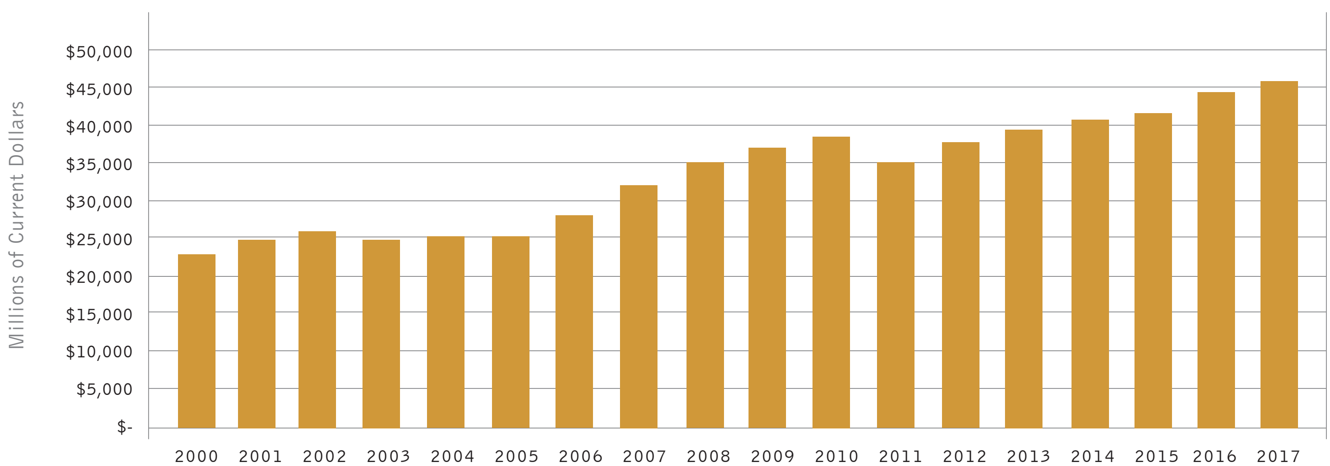
- According to the American Association of Railroads, "Excluding coal, U.S. carloads were up 3.4% (22,121 carloads) in September 2012, their biggest percentage increase in four months and their 34th straight year-over-year monthly increase." (Rail Time Indicators, Association of American Railroads, October 5, 2012)
- The FAA Modernization and Reform Act will provide $63.6 billion for the agency's programs between 2012-2015.
- By 2021, more than one billion people a year will take to the air.
- High-speed rail is slow to get projects off the ground due to state funding and political resistance.
- Growth in container ports is recovering from the recession.
- Intermodal transportation will be the focus of new projects.

DRIVERS:

- ↑ Population
- ↓ Government spending
- ↓ Transportation funding

Transportation Construction Put in Place

Forecast as of Q1 2013



Communication

After a 2 percent drop in 2012, communication construction will start a steady comeback in 2013, with construction CPIP up 4 percent to $17.8 billion and growing 6 to 7 percent through 2017. As data centers continue to proliferate, there has been more attention on their insatiable need for energy. That will stimulate more energy-conscious faculties in the future. Communications security, especially over the Web, is a growing concern for businesses as well as for government, with the focus being on an increasing likelihood of attacks by terrorists and foreign governments. While one might think we are approaching market saturation for smart phones and wireless communications, the market keeps going up as more consumers hook up several devices and look for constant, high-speed connectivity.

TRENDS:

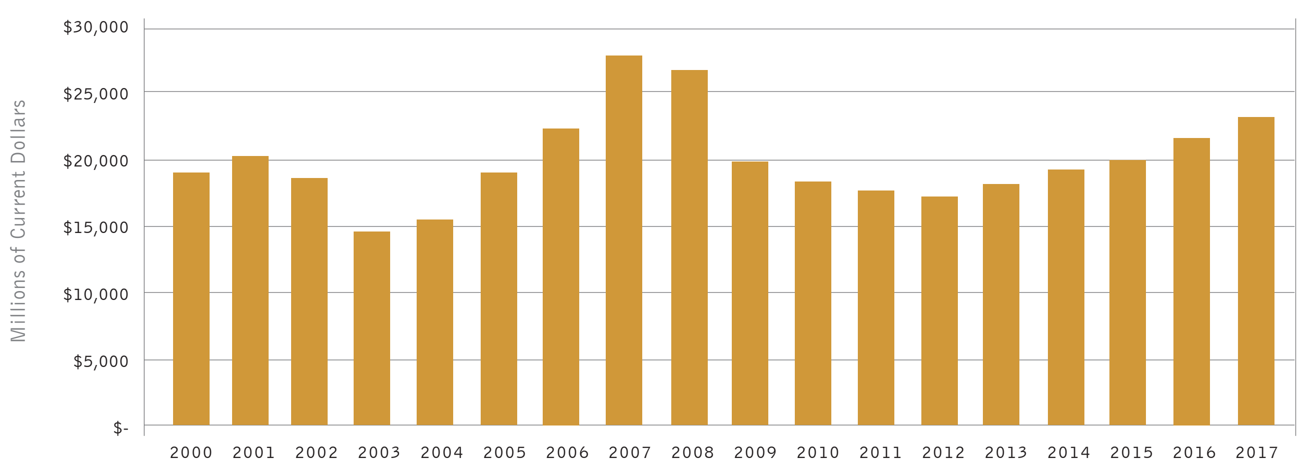
- "Mini towers" for increasing coverage and spectrum will increase rapidly in the next five years.
- Wireless technology is fastest area for growth as telecoms roll out more 4G technology with smartphones and tablets.
- Data security is critical for large businesses and governments in the face of potential disasters and threats from hackers and foreign enemies.

DRIVERS:

- Innovation/technology
- Global mobility
- Population
- Security/regulatory standards
- Private investment

Communication Construction Put in Place

Forecast as of Q1 2013



Manufacturing

Manufacturing construction increased 17% in 2012 and will continue with another 6% for 2013 through 2014. Due to reduction in energy costs in the U.S. relative to other countries around the globe and the increase in transportation costs, manufacturing will continue to reconsider operations in the U.S. or returning to the U.S. The resurgence of the automotive industry is a big boost to manufacturing as is the continuing exploration and mining for shale oil and gas.

TRENDS:

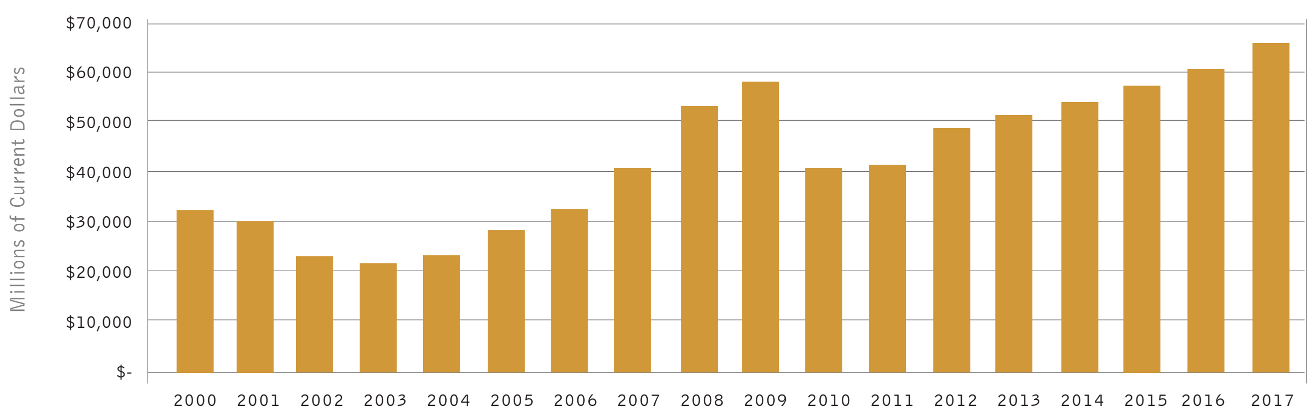
- "New orders for manufactured durable goods in February increased $12.4 billion or 5.7 percent to $232.1 billion . . .This increase, up five of the last six months, followed a 3.8 percent January decrease. Excluding transportation, new orders decreased 0.5 percent. Excluding defense, new orders increased 4.5 percent." (U.S. Department of Commerce, March 26, 2013)
- "Capacity utilization rate for total industry increased to 79.6 percent, a rate that is 0.6 percentage point below its long-run (1972--2012) average. September output of durable goods dropped 1.7 percent." (Board of Governors, Federal Reserve, March 15, 2013)
- "Reshoring of manufacturing" is happening slowly, in part due to availability of lower energy costs.

DRIVERS:

- ↑ PMI
- ↑ Industrial production (slightly up)
- ↑ Capacity utilization (slightly up)
- ↑ Factory orders
- ↓ Durable goods orders
- ↑ Manufacturing inventories (slightly up)

Manufacturing Construction Put in Place

Forecast as of Q1 2013



NONBUILDING STRUCTURES

Power

Construction for the power market grew 9% in 2012 and will continue to grow between 8 and 9% through 2017. It is being called a boom or new energy revolution in the U.S. as more domestic oil is pulled from the ground and the shale gas and oil boom continues despite being fought in several states. Extracting methodologies are becoming more environmentally acceptable and efficient, but the boom is also bringing on the need for housing for workers, better roads and transportation, and lower natural gas prices. Lower prices and labor shortages may slow the rate of growth, but most expect lower energy costs for the U.S. to continue for the foreseeable future. That also means more power companies are switching to gas rather than the dirtier coal, which is changing the balance of energy sources in the U.S. as some companies continue to pursue "clean coal" technologies. Another outcome of the boom is the increasing need for pipelines in both the U.S. and Canada to transport the gas to end users.

TRENDS:

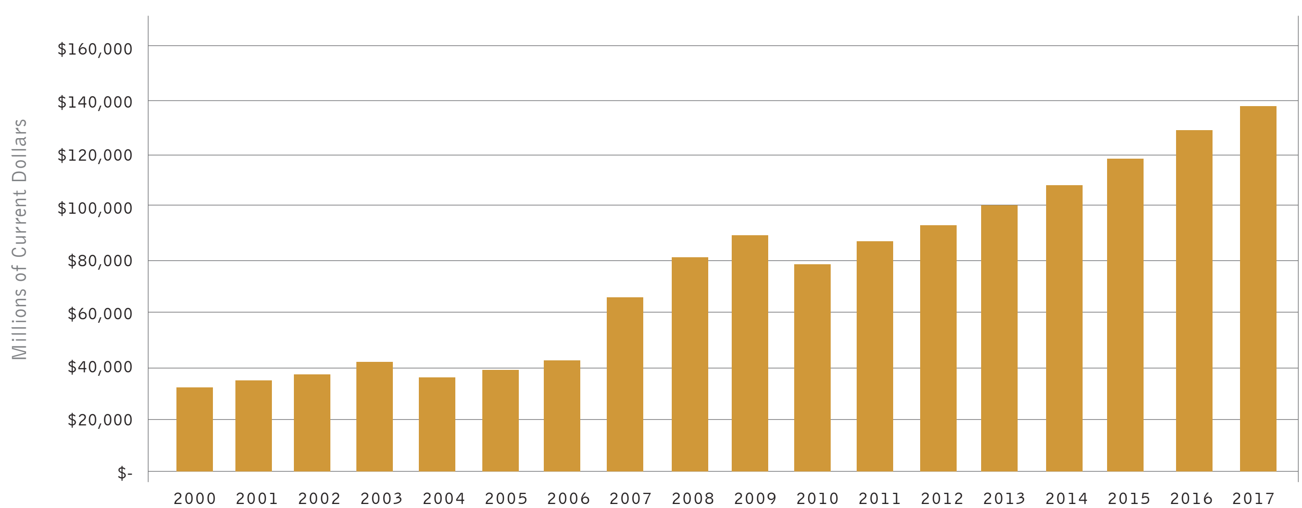
- According to the "Annual Energy Outlook 2013" from the U.S. Energy Information Administration, "The advent and continuing improvement of advanced crude oil production technologies continue to lift projected domestic supply. Domestic production of crude oil increases sharply in AEO2013, with annual growth averaging 234 thousand barrels per day (bpd) through 2019, when production reaches 7.5 million bpd."
- U.S. Army Corps of Engineers has a proposal out for $7 billion in locally generated renewable energy through power purchase agreements. The $7 billion capacity would be expended for the purchase of energy over a period of 30 years or less from renewable energy plants that are constructed and operated by contractors using private-sector financing." (Renewablesbiz.com, Bill Opalka, Aug. 15, 2012)
- Following the recent rapid decline of natural gas prices, real average delivered electricity prices in the AEO2013 Reference case fall from 9.9 cents per kilowatt-thour in 2011 to as low as 9.2 cents per kilowatt-hour in 2015, as natural gas prices remain relatively low. (U.S. Energy Information Administration).
- Electricity demand slowing due to appliances that are more efficient.

DRIVERS:

- Industrial Production
- Population
- Nonresidential Structure Investment

Power Construction Put in Place

Forecast as of Q1 2013



Highway and Street

Funds from the MAP-21 and TIGER grants make up a large percentage of construction put in place included in FMI's 2013 forecast of $82.6 billion for highways and streets, and increase of 3% for the year. The federal funds will also bolster transportation spending from state and private sources. While the new transportation bill encourages funding from public-private partnerships (P3), the concept of P3 projects continues to generate more talk than action, although six projects totaling $8.6 billion appear ready to reach financial close in 2012. One potential fly in the ointment is that repeatedly needing to continually pass continuing resolutions to keep the government in operation is expected to reduce funding for the new transportation program. The new program is in effect for only three years, so we expect the battle for funding to return.

TRENDS:

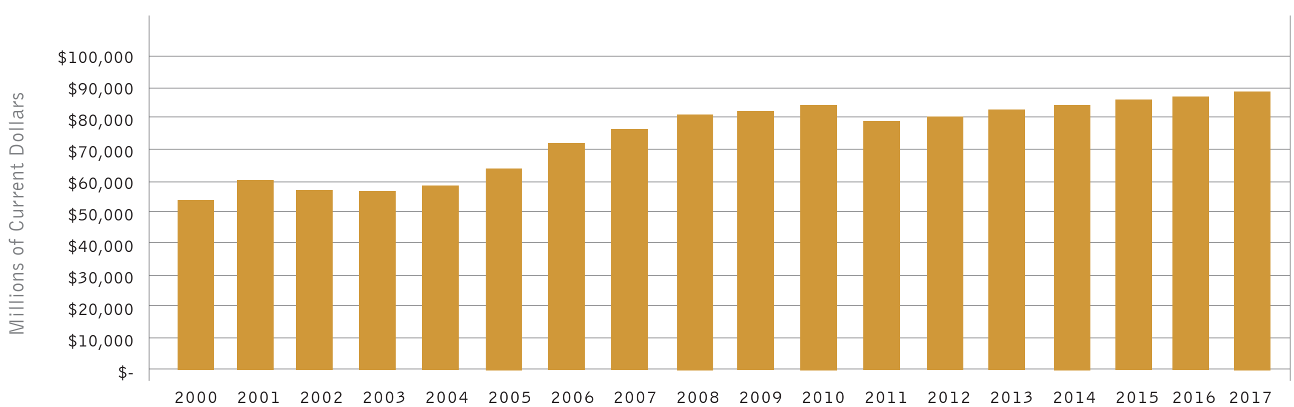
- Passage of MAP-21calls for $37,476,819,674 for fiscal year 2013 and $37,798,000,000 for fiscal year 2014 for the Federal-Aid Highway Program. It also calls for $750 million for fiscal year 2013 and $1 billion for fiscal year 2014 under the Transportation Infrastructure Finance and Innovation Program (TIFIA loans).
- State budgets will continue to be strained, and it will be difficult to get larger projects off the ground.
- According to ARTBA, "Since 1989, 24 states and D.C. have used P3s to build or finance 96 transportation projects valued at $54.3 billion. Over half of the projects, 65%, have occurred in eight states. Traditionally P3s have accounted for two to five percent of annual market activity." ("U.S. Transportation Construction Market Forecast 2013")

DRIVERS:

- Population
- Government spending
- Nonresidential structure investment

Highway and Street Construction Put in Place

Forecast as of Q1 2013



Sewage and Waste Disposal

Construction for sewage and waste disposal was off 2% in 2012 and will regain that 2% in 2013 to around $22.6 billion. Waste-to-energy may be one of the best bets for future work in this sector if more municipalities can find ways to work with private investors. Turning waste into an investment will take some time, while, in the meantime, municipalities must act to prevent waste systems from deteriorating further. Over the last decade, a number of municipalities have operated their water and waste systems under court-order consent decrees, requiring large investments to repair and update their systems to assure safe drinking water supplies.

TRENDS:

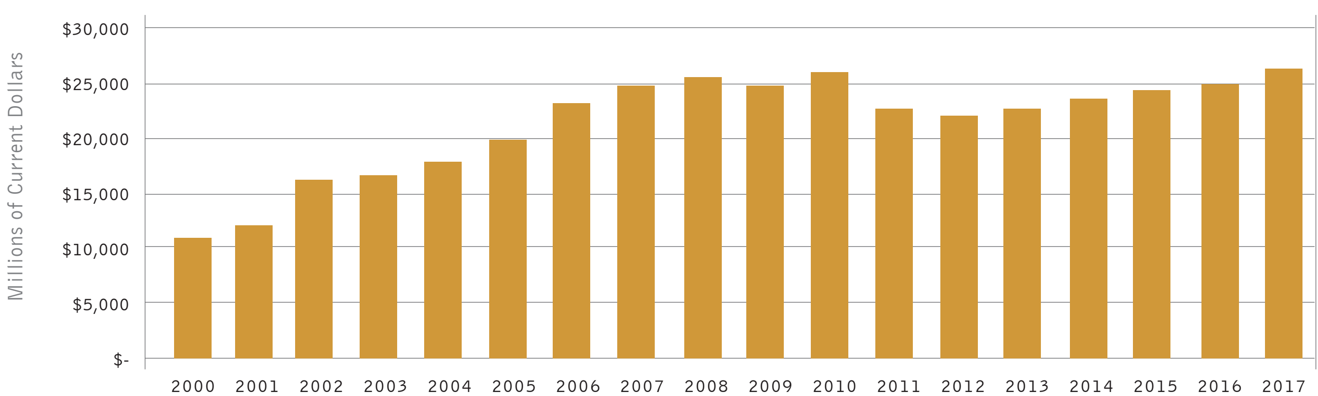
- Growth, driven by aging infrastructure and regulation, is on the horizon, but the length of the horizon is still unknown. Slow water infrastructure markets in the aftermath of the recession continue to build the backlog of necessary work as existing infrastructure ages.
- In need of replacement and upgrades, the 16,000 wastewater systems nationwide discharge more than 850 billion gallons of untreated sewage into surface waters each year.
- Combined sewer systems (stormwater and sewage) serve roughly 950 communities with about 40 million people. Most communities with CSOs are located in the Northeast and Great Lakes regions.
- The Clean Water State Revolving Fund (CWSRF) programs have provided more than $5 billion annually in recent years to fund water quality protection projects.

DRIVERS:

- ↑ Population
- ↑ Industrial production
- ↓ Government spending

Sewage and Waste Construction Put in Place

Forecast as of Q1 2013



Water Supply

Construction for water supply projects will grow a paltry 1% in 2013 after dropping 7% in 2012. Most experts agree that this is an area of the nation's infrastructure that is not getting enough attention and, more importantly, funding. To highlight the problem of aging water infrastructure in major U.S. cities, a 2012 report from the Center for American Progress, pointed out:

> In Baltimore aging pipes now burst approximately 1,000 times per year, and every day an incredible 20% of the water drawn from nearby reservoirs is simply lost in transmission before ever making it to homes and businesses. In Houston an estimated 40 percent of the city's water pipes have already reached the end of their intended operational lives, and last summer's heat wave and drought conditions caused the city's aging water system to sprout an overwhelming 11,000 leaks, resulting in a quarter of the city's water being lost or unaccounted for in September and October 2011. ("How to Upgrade and Maintain Our Nation's Wastewater and Drinking-Water Infrastructure" Keith Miller, Kristina Costa and Donna Cooper, October 2012.)

One proposal to increase funding for water projects is the Water Infrastructure Finance and Innovation Act (WIFIA). The act would work similarly to the TIFIA program for transportation investment by making available direct loans and loan guarantees to municipalities for the most significant water and wastewater projects.

TRENDS:

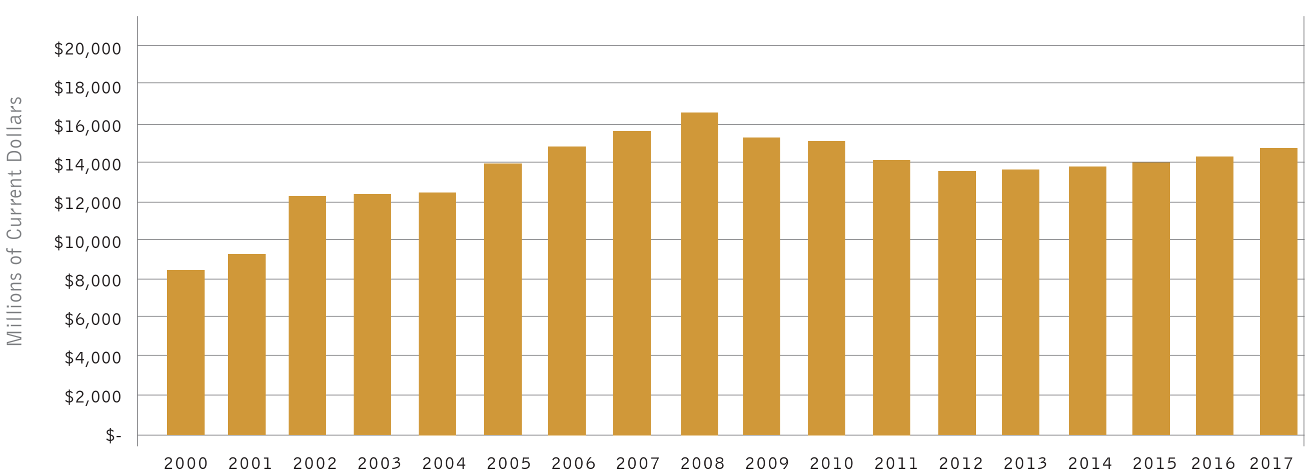
- Strength in the mining sector creates a tremendous amount of water infrastructure work throughout North America and abroad. Strength in commodity markets continues to drive increased levels of mining activity through the development of new mines and redevelopment of existing mining assets. Heightened mining activity leads to increased demand for related infrastructure, including water.
- Federal assistance for the safe drinking water State Revolving Fund (SRF) in the 11-year period between 1997 and 2008 totaled $9.5 billion, just slightly more than the investment gap for each of those years.
- Green construction practices, such as controlling runoff to help increase groundwater, will become the norm for improvements and new construction.
- Water for shale oil and gas mining will increase demand in selected areas of the country.

DRIVERS:

- ↑ Population
- ↑ Industrial Production
- ↓ Government Spending

Water Supply Construction Put in Place

Forecast as of Q1 2013



Conservation and Development

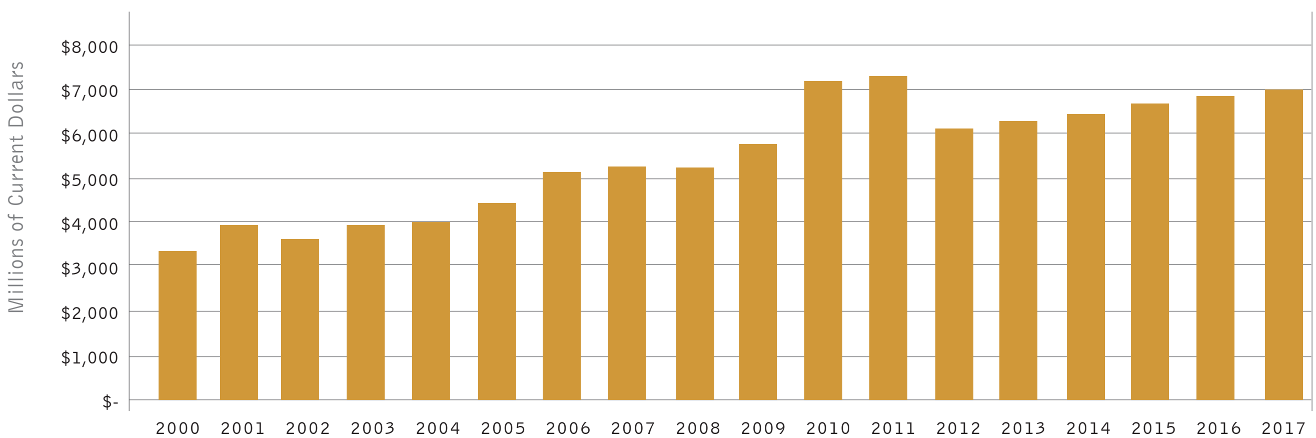
After dropping sharply in 2012 by 17%, conservation and development construction will improve just 2% in 2013 to $6.2 billion. The Army Corps of Engineers Civil Works program budget for 2013 includes $1.471 billion for construction and $234 million for Mississippi River and Tributaries.

DRIVERS:

- ↑ Population
- ↓ Government spending

Conservation and Development Construction Put in Place

Forecast as of Q1 2013



Construction Put in Place

Millions of Current Dollars

1st Quarter 2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
RESIDENTIAL BUILDINGS													
Single Family	434,912	417,518	306,990	187,648	106,960	113,874	110,110	130,762	161,017	187,780	218,329	252,091	282,898
Multifamily	48,699	54,324	52,570	48,083	32,231	17,448	17,400	25,531	33,322	42,288	46,443	51,012	54,213
Improvements*	133,896	147,973	140,909	122,016	114,738	118,038	119,557	124,550	128,121	133,686	139,477	144,736	148,540
Total Residential	617,507	619,814	500,468	357,747	253,928	249,360	247,066	280,844	322,460	363,754	404,249	447,838	485,651
NONRESIDENTIAL BUILDINGS													
Lodging	12,840	18,139	28,706	35,806	25,499	11,635	8,880	11,075	12,231	13,268	14,049	14,848	15,635
Office	45,763	54,187	65,259	68,563	51,908	37,850	34,647	36,456	38,358	40,547	42,630	44,701	46,359
Commercial	70,242	76,713	89,684	86,212	54,069	39,450	43,571	47,153	50,326	54,385	58,624	62,512	66,885
Health Care	34,430	38,472	43,766	46,902	44,845	39,344	39,713	41,100	44,248	47,732	52,525	58,026	63,271
Educational	79,687	84,928	96,758	104,890	103,202	88,405	84,320	84,961	87,228	90,170	95,793	102,958	110,220
Religious	7,735	7,749	7,540	7,225	6,192	5,288	4,224	3,894	3,973	4,086	4,212	4,435	4,656
Public Safety	7,314	7,768	10,201	13,083	13,787	11,153	10,236	10,122	10,140	10,370	10,688	11,055	11,467
Amusement and Recreation	15,236	19,033	21,212	21,829	19,404	16,943	16,174	16,052	16,466	17,122	18,166	19,494	20,893
Transportation	25,052	27,964	31,877	35,471	36,701	38,340	34,867	37,632	39,642	40,748	42,258	43,966	46,291
Communication	18,906	22,219	27,580	26,487	19,753	17,730	17,533	17,101	17,810	18,913	20,049	21,422	22,985
Manufacturing	28,568	32,677	40,633	53,234	56,836	40,350	41,382	48,505	51,468	54,412	57,364	60,913	65,304
Total Nonresidential Buildings	345,773	389,849	463,216	499,702	432,196	346,488	335,547	354,051	371,890	391,752	416,357	444,330	473,967
NONBUILDING STRUCTURES													
Power	38,371	42,244	66,055	81,075	88,861	77,945	85,043	92,390	99,919	109,024	118,350	128,629	138,822
Highway and Street	64,139	72,040	76,682	81,361	82,166	82,529	78,896	80,077	82,637	83,139	84,560	85,852	88,545
Sewage and Waste Disposal	19,867	23,186	24,872	25,696	24,830	25,991	22,606	22,087	22,554	23,136	24,040	25,018	26,112
Water Supply	14,028	14,960	15,798	16,752	15,471	15,322	14,169	13,155	13,235	13,453	13,921	14,315	14,730
Conservation and Development	4,453	5,130	5,260	5,234	5,750	7,172	7,371	6,094	6,202	6,297	6,507	6,733	6,965
Total Nonbuilding Structures	140,858	157,560	188,667	210,118	217,078	208,959	208,085	213,803	224,546	235,048	247,379	260,547	275,174
Total Put in Place	1,104,138	1,167,223	1,152,351	1,067,567	903,202	804,807	790,698	848,698	918,897	990,555	1,067,985	1,152,715	1,234,792

*Improvements include additions, alterations and major replacements. It does not include maintenance and repairs.

Change From Prior Year - Current Dollar Basis

1st Quarter 2013 Forecast, Based on 3rd Quarter 2012

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
RESIDENTIAL BUILDINGS													
Single Family	15%	-4%	-26%	-39%	-43%	6%	-3%	19%	23%	17%	16%	15%	12%
Multifamily	18%	12%	-3%	-9%	-33%	-46%	0%	47%	31%	27%	10%	10%	6%
Improvements*	13%	11%	-5%	-13%	-6%	3%	1%	4%	3%	4%	4%	4%	3%
Total Residential	15%	0%	-19%	-29%	-29%	-2%	-1%	14%	15%	13%	11%	11%	8%
NONRESIDENTIAL BUILDINGS													
Lodging	4%	41%	58%	25%	-29%	-54%	-24%	25%	10%	8%	6%	6%	5%
Office	8%	18%	20%	5%	-24%	-27%	-8%	5%	5%	6%	5%	5%	4%
Commercial	5%	9%	17%	-4%	-37%	-27%	10%	8%	7%	8%	8%	7%	7%
Health Care	7%	12%	14%	7%	-4%	-12%	1%	3%	8%	8%	10%	10%	9%
Educational	7%	7%	14%	8%	-2%	-14%	-5%	1%	3%	3%	6%	7%	7%
Religious	-5%	0%	-3%	-4%	-14%	-15%	-20%	-8%	2%	3%	3%	5%	5%
Public Safety	4%	6%	31%	28%	5%	-19%	-8%	-1%	0%	2%	3%	3%	4%
Amusement and Recreation	-9%	25%	11%	3%	-11%	-13%	-5%	-1%	3%	4%	6%	7%	7%
Transportation	0%	12%	14%	11%	3%	4%	-9%	8%	5%	3%	4%	4%	5%
Communication	22%	18%	24%	-4%	-25%	-10%	-1%	-2%	4%	6%	6%	7%	7%
Manufacturing	22%	14%	24%	31%	7%	-29%	3%	17%	6%	6%	5%	6%	7%
Total Nonresidential Buildings	7%	13%	19%	8%	-14%	-20%	-3%	6%	5%	5%	6%	7%	7%
NONBUILDING STRUCTURES													
Power	8%	10%	56%	23%	10%	-12%	9%	9%	8%	9%	9%	9%	8%
Highway and Street	9%	12%	6%	6%	1%	0%	-4%	1%	3%	1%	2%	2%	3%
Sewage and Waste Disposal	11%	17%	7%	3%	-3%	5%	-13%	-2%	2%	3%	4%	4%	4%
Water Supply	11%	7%	6%	6%	-8%	-1%	-8%	-7%	1%	2%	3%	3%	3%
Conservation and Development	10%	15%	3%	0%	10%	25%	3%	-17%	2%	2%	3%	3%	3%
Total Nonbuilding Structures	9%	12%	20%	11%	3%	-4%	0%	3%	5%	5%	5%	5%	6%
Total Put in Place	11%	6%	-1%	-7%	-15%	-11%	-2%	7%	8%	8%	8%	8%	7%

Benefits

A Construction Market Forecast from FMI's Research Services Group can:

- Supply the market-oriented, economy-driven dimension essential for preparing, implementing and monitoring strategic plans.
- Be a significant aid in defining, targeting, implementing and monitoring other critical corporate decisions, such as long- and short-term sales goals, or redirecting resources (i.e., on a geographic or a product-line basis).
- Provide the basis for estimating submarkets.
- Provide the basis for comparing performance among markets.
- Provide the basis for identifying activities that are beneficial or detrimental to performance.

Features

Each Standard Construction Market Forecast:

- Details construction put in place in three residential building, 11 nonresidential building and five nonbuilding structure categories. It covers the current year, eight previous years and five forecast years. It is available for any county in the U.S. or any combination of counties, metropolitan statistical areas, states, regions, etc.
- Includes both construction values and annual percentage changes. Delivery time depends on the size of the request but is usually only a few days. It can be delivered in printed or electronic form and in most major text or spreadsheet formats. Graphs can be provided at additional cost.

Basis

- Historical information in FMI's standard Construction Market Forecast is based on building permits and construction-put-in-place data as provided by the U.S. Commerce Department. Forecasts are based on econometric and demographic relationships developed by FMI, on information from specific projects gathered from trade sources, and on FMI's analysis and interpretation of current and expected social and economic conditions.

Other Reports

- Reports on state and federally financed highway construction are available for most counties or combinations of counties.
- Custom reports on a wide variety of construction related topics can be prepared by FMI.
- Reports are based on multiple sources and are appropriate for preliminary analytical and planning purposes but contain little or no direct observation of the area described and are not guaranteed by FMI to be accurate.

For more information, call 919.785.9268

About FMI's Research Services Group

As the construction industry becomes increasingly competitive, market intelligence becomes an important tool for the building industry. A more complete understanding of the market, market trends, customer perceptions, buying practices, competitor profiles and other market influencers will enhance craft labor studies.

Since 1953 FMI has provided consulting and training services specialized for the construction industry. FMI's market research includes both secondary and primary research designed to meet clients' specific needs. Both types of research are used to provide accurate assessments in a timely, efficient and concise manner for clients.

Typical project work performed includes customer buying practices, competitive analyses, market-size modeling, market forecasts and trends, channel performance analyses, customer satisfaction surveys and sales performance evaluations.

J. Randall (Randy) Giggard
Managing Director
Research Services

Randy Giggard is responsible for design, management and performance of primary and secondary market research projects and related research activities, including economic analysis and modeling, construction market forecasting and database management. Randy's particular expertise is in the areas of market sizing and modeling, competitive analysis, sales and market performance evaluations, buying practices and trends analysis.

Randy holds undergraduate degrees in mechanical engineering from Southern Illinois University and English from Illinois State University and a master of marketing and management policy degree from Northwestern University.

T 919.785.9268
F 919.785.9320
Email: rgiggard@fminet.com
www.fminet.com

About FMI

FMI is the largest provider of management consulting, investment banking and research to the engineering and construction industry. We work in all segments of the industry providing clients with value-added business solutions, including:

- Strategic Advisory
- Market Research and Business Development
- Leadership and Talent Development
- Project and Process Improvement
- Mergers, Acquisitions and Financial Consulting
- Compensation Benchmarking and Consulting
- Risk Management Consulting

Founded by Dr. Emol A. Fails in 1953, FMI has professionals in offices across the U.S. FMI delivers innovative, customized solutions to contractors; construction materials producers, manufacturers and suppliers of building materials and equipment, owners and developers, engineers and architects, utilities, and construction industry trade associations. FMI is an advisor you can count on to build and maintain a successful business, from your leadership to your site managers.

Raleigh — Headquarters
5171 Glenwood Avenue
Suite 200
Raleigh, NC 27612
T 919.787.8400
F 919.785.9320

Denver
210 University Boulevard
Suite 800
Denver, CO 80206
T 303.377.4740
F 303.398.7291

Scottsdale
14500 N. Northsight Boulevard
Suite 313
Scottsdale, AZ 85260
T 602.381.8108
F 602.381.8228

Tampa
308 South Boulevard
Tampa, FL 33606
T 813.636.1364
F 813.636.9601

FMI

MANAGEMENT CONSULTING • INVESTMENT BANKING
for the ENGINEERING and CONSTRUCTION INDUSTRY

www.fminet.com