## MONTHLY ECONOMIC INDICATORS

Planning and Regional Development Department

### July 2013

UNEMPLOYMENT RATE (percent of labor force)	JUN 2013	PREVIOUS 3 MONTHS AVERAGE	JUN 2012
U.S. (seasonally adjusted) U.S. (not seasonally adjusted)	7.6	7.6	8.2
REGION (not seasonally adjusted)	<b>7.8</b> 8.1	<b>7.3</b> 7.8	<b>8.4</b> 9.2
NON-FARM EMPLOYMENT (thousands)	JUN 2013	PREVIOUS 3 MONTHS AVERAGE	% CHANGE JUN 2013 / JUN 2012
u.s.	135,902	135,471	0.1
REGION	8,509	8,214	2.1
Construction and Manufacturing	650	627	0.7
FIRE / Professional / Business Government	2,100 1,199	2,022 1,171	2.1
All Others	4,559	4,394	2.2
REAL GDP (percentage change)	2013Q2	2013Q1	2012Q4
U.S. (seasonally adjusted at annual rates)	1.7	1.1	0.1
REGION (Oxford Economics Estimate)	2.9	1.8	0.3
CONSUMER PRICE INDEX	JUN '13 /	JUN '13 /	MAY '13 /
(percentage change)	JUN '12	MAY '13	MAY '12
U. S.	1.8	0.5	1.4
Core	1.6	0.2	1.7
REGION	1.8	0.3	1.4
Core Food & Beverages	1.8 1.6	0.1	1.9 0.8
Housing	1.8	0.6	2.0
Transportation	2.0	0.1	0.7
Energy	1.4	1.2	-1.5
CONSTRUCTION COST INDEX (percentage change)	JUN '13 / JUN '12	JUN '13 / MAY'13	MAY '13 / MAY '12
U.S. 20-CITY	2.7	0.3	2.4
NIV DECICNI			
NY REGION	5.0	0.0	5.0
GASOLINE PRICES			
GASOLINE PRICES (US dollars per gallon)	JUN 2013	A month ago	A year ago
GASOLINE PRICES (US dollars per gallon) U.S. (all types NSA)	<b>JUN 2013</b> \$3.79	A month ago \$3.66	A year ago \$3.64
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GASOLINE PRICES (US dollars per gallon) U.S. (all types NSA) New York City (all types NSA)	JUN 2013 \$3.79 \$4.18 \$3.74 MAY '13 /	A month ago \$3.66 \$4.00 \$3.57 APR '13 /	A year ago \$3.64 \$4.04 \$3.66 MAR '13/
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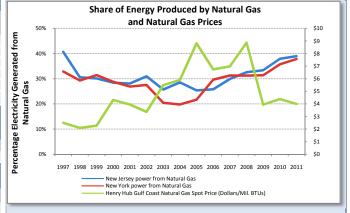
The views expressed herein are solely those of the authors and do not reflect the official positions of PANYNJ or its leadership.

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## SPECIAL FOCUS

# **Natural Gas: The Future of Energy?**

In March 2012, Monthly Economic Indicators discussed the drivers and implications of the volatile market for oil and gasoline. This month we return to analysis of the energy market with a focus on natural gas. For the last several years, the growing role of natural gas has been the biggest story in domestic energy. The explosive growth in natural gas production is driven by the development of hydraulic fracturing technology, commonly known as "fracking", where millions of gallons of water, sand, and chemicals are injected underground to break up rock formations and release the gas and oil trapped therein. Growth in production from fracking has averaged over 40 percent *per year* from 2007 to 2011 and fracking is now responsible for nearly 30 percent of domestic natural gas production. While total production of natural gas has grown 15 percent since 2007, production from fracking has more than tripled. The United States still consumes more natural gas than it produces, though exports are expected to surpass imports by 2020.



Plunging prices from increased supply are already having local impacts. Combined with the growing transportation cost of coal, cheap natural gas is driving many power companies to switch to gas as their main input. Although natural gas is not predicted to overtake coal as the nation's primary source of power generation until 2030, natural gas claimed the top spot in New York in four of the last five years and may pass nuclear as New Jersey's top power source by 2018. Natural gas has also been highlighted in President Barack Obama's recent Climate Action Plan as a "bridge fuel" to help America transition away from fossil fuels as energy generated with natural gas emits half the carbon dioxide of power from coal.

While electricity providers have been able to quickly transition from coal to natural gas, industry is actually the single largest consumer of natural gas in America, where natural gas is used both as a low-cost base ingredient for products such as plastics and anti-freeze, and as an input for various industrial processes. Industry supporters claim that manufacturers for whom natural gas is a major processing component may in fact relocate facilities back to the U.S. to take advantage of low natural gas prices.

Natural gas has its detractors as well. Estimated employment benefits vary widely and potential long-term health impacts of drinking water contaminated by fracking chemicals are still unknown. However, methane, the main ingredient of natural gas, traps over 20 times the amount of heat in the atmosphere as carbon dioxide. Depending on how much methane escapes during production, natural gas's greenhouse effect may be larger than that of coal. Critics also argue that investment to increase the capacity for energy generation from natural gas is crowding out development of renewable energy resources such as wind and solar.

While natural gas production will undoubtedly play a major role in the region's energy picture, the extent to which natural gas will act as a catalyst for the region's economy remains to be seen.

Planning and Regional Development Department

#### July 2013

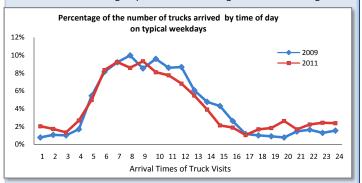
July 2013			
AVIATION	May '13	May '12	Change
Revenue Passengers (000's)	9,792.7	9,533.8	2.7%
John F. Kennedy International Airport (JFK)	4,323.3	4,196.9	3.0%
LaGuardia Airport (LGA)	2,371.8	2,302.7	3.0%
Newark Liberty International Airport (EWR)	3,071.9	3,002.9	2.3%
Stewart International Airport (SWF)	25.7	31.4	-18.3%
Revenue Freight (Short Tons)	168,266	177,182	-5.0%
Domestic	61,067	68,461	-10.8%
International	107,199	108,721	-1.4%
Flights	105,228	104,106	1.1%
Domestic Air Carrier	75,707	76,181	-0.6%
International Air Carrier	23,932	22,862	4.7%
General Aviation	5,589	5,063	10.4%
Paid Parked Cars	745,077	748,614	-0.5%
Revenue AirTrain Passengers	752,664	735,742	2.3%
FERRY OPERATIONS	May '13	May '12	Change
Passengers (000's)			
New Jersey Ferries	668.2	700.0	-4.5%
			Change
PATH Passengers (000's)	May '13 6,390.0	May '12 6,753.0	-5.4%
	249.2	261.1	- <b>5.4</b> %
Average Weekday  Average Saturday	111.0		
,	92.7	129.3	-14.1% -6.8%
Average Sunday	92.7	99.6	-0.6%
PORT COMMERCE	May '13	May '12	Change
Port Trade			
Container Imports (TEUs)	244,785	239,283	2.3%
Container Exports (TEUs)	129,160	140,629	-8.2%
Containers lifted on/off Express Rail	34,512	40,194	-14.1%
TUNNELS, BRIDGES & TERMINALS	May '13	May '12	Change
Eastbound Vehicle Volumes (000's)	10,139	10,231	-0.9%
George Washington Bridge	4,344	4,349	-0.1%
Lincoln Tunnel	1,635	1,653	-1.1%
Holland Tunnel	1,410	1,441	-2.2%
Bayonne Bridge	303	309	-1.9%
Goethals Bridge	1,183	1,217	-2.8%
Outerbridge Crossing	1,264	1,262	0.2%
Eastbound Volumes by Vehicle Type (000's)			
Autos	9,227	9,309	-0.9%
Trucks	650	658	-1.2%
Buses	260	262	-0.6%
PORT AUTHORITY PULSE			
(Seasonally Adjusted, 2010=100)	May '13	Apr '13	Change
PA Pulse (Transportation Activity Index)	95.7	96.4	-0.8%
PA Presented Pulse	93.9	93.9	0.0%
PA Passenger Pulse	97.4	98.9	-1.5%
U.S. TRANSPORT. SERVICES INDEX (Prelim., Seasonally Adj., 2000=100)	May '13	Apr '13	Change
TSI - Combined Index	114.8	113.8	0.9%
TSI - Freight	114.3	112.9	1.2%
TSI - Passenger	116.2	116.2	0.0%
			0.070

TRANSPORTATION FOCUS

## **Off-Peak Hour Trucking in Manhanttan**

For trucking service providers, Manhattan is a rich source of clients, but poses significant operational challenges. Manhattan's congested, narrow streets and high parking fines take a toll both on the cost of doing business and on the environment, especially during peak hours. Shifting trucking operations to off-peak hours (e.g., 8PM to 4AM) can help reduce shipping costs and reduce the impacts of trucks on city traffic. The analysis of Manhattan truck movements data from the American Truck Research Institute (ATRI) database presented below suggests that a higher percentage of trucks serving Manhattan are shifting to off-peak hours, though the sample data used in this analysis may not be representative of all the trucks serving Manhattan.

The figure below is based on the GPS data collected from the trucks making visits (delivery or pick up) in Manhattan for one week (Monday to Friday) in the months of October, 2009 and October, 2011. The data sample captured 295 distinct trucks making 1276 customer visits (or trips) in Manhattan in the week of 2009 and 397 trucks making 2028 customer visits in the week of 2011. The analysis is limited to estimated customer visits—trucks that stopped for a continuous 15 minutes at a given location—in order to avoid including stops due to severe congestion and traffic signals.



The figure shows that on a typical weekday, the shares of visits made during regular business hours from 7AM to 5PM were consistently lower in 2011 than in 2009, with the exception of 9AM where 2011 was slightly higher. On the other hand, the shares of visits made during non-regular business hours were consistently equal or higher in 2011 than in 2009. From 2009 to 2011, the periods of late morning and early afternoon showed the greatest declines, while the greatest increases occurred in the periods of evening and midnight. The shares of visits made in the early morning hours of 5AM to 7AM barely changed, likely because, for many companies, taking deliveries during this period are critical for their operations—in particular, for firms receiving shipments of perishable goods.

The success of the off-peak strategy largely depends on the participation of the shippers and receivers. For many of them, operating outside their regular business hours means increased labor and inventory costs. New York and many other cities are exploring policies and technologies to promote off-peak deliveries, such as financial incentives, reform of ordinances restricting operating hours, recognition programs for businesses adopting neighbor-friendly practices, and unassisted delivery systems. Statistical analysis of GPS data provides a potential tool for tracking trends and measuring the impact of these policies.

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