2015 Economic Outlook

Look out the Windshield ...

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Sr. VP of REVAL | Economist | Counselor of Real Estate

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What you don’t know about K.C. Conway 😊

“Green” 2nd – Generation MAI / Briefed Bernanke / Economist / Futurist 😊

“K.C.” Conway is a 3-part Economist:

• 1 Part Client Eastwood Economist
  Man has to know his limits! – Know what you don’t know!

• 1 Part David Allen Coe Economist
  I’ll Hang Around Just as Long as You will let me.

• 1 Part Billy Beane (Money Ball/Oakland A’s) Economist
  Know Your Metrics – 3M approach to CRE management
  3M = Measure … Monitor … Manage
The Land Use and Real Estate Trends K.C. won’t Forecast
“A man/economist has got to know his limits” - Clint Eastwood

“A” – What is the value of Real Estate priced in Bitcoin?

Bitcoin all-time high
$1,126 Nov 30 2013

http://bitcoincharts.com/charts/

“B” – Anything about Cannabis Real Estate – Talk about HIGH Volatility CRE
1. Cannabis is now legal for Medical Use in 23 states.
2. Cannabis does have R.E. impact.
3. What happens in NC & SC if GA & FL legalize?

Update: Oregon, Alaska & DC vote Yes ...
FL misses by a Cannabis Leaf (57% yes, 60% rqd)
23 States now have legal medical Marijuana

Pay attn to the FED and 10-Yr Tr.
10-Yr <2% Jan ’15 … was 3% start of 2014

I will not do Green Cannabis & Ham – Dr Seuss”
2014 is behind us. The past is in the Rear View Mirror.

2015 is ahead of you. Look through the Windshield.
The Rear-View is our *reference point* to move forward.

The Rear-View helps you establish by market and property type where you are in the Real Estate Life Cycle.

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Q. Where is AZ Eco and R.E. in the Market Cycle for 2015?

A. Hint ... #7 state and #9 MSA rankings in job growth are indicative of Expansion. Those growth rates tend to attract more competition and move us into Over-Supply?

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Once we have our reference point, we can move forward
Congratulations 2014!

- **Fewest Job cuts** since 1997
- **Most Job creation** since 1999 (+2.952 million – BLS Jan 9th)
- **Maybe 1st year with** 3 consecutive quarters of 3.5%+ GDP since 2004 (Q2: 4.6% / Q3: 5.0% / Q4:?)
- **Phoenix in Top-10 in Job Growth in 2014** – 54,700 jobs😊
Let’s Look out the Windshield toward 2015 ... 

What to expect in 2015?

- **Energy Impact:** 30%+ of 2014 Capex was energy
  How do you think about TX, CO, & other “shale” states?
  Like PA and Ohio

- **West-coast Ports** impact on GDP and SE
  How do you think about SoCAL and Pacific NW?

- **Job Growth choppy:** Shed holiday hires in Jan and then annual Feb “Benchmark” revisions.
  Focus on ADP, Challenger Job Cuts & Revisions

- The sequel to “**Frozenomics 2014?**”
  What was Q1 ‘14 GDP with Frozenomics? (-2.1%)

- **Fundamentals are still good!**
  GDP should remain 3% range
  Jobs – expect monthly avg of **225k**
Historic High 1950 was +17% in 1950

Long-Term annual avg. is +3.25%

2014 Trend:
Q1: -2.1% / Q2: +4.6% / Q3: +5%

Note: In order for 2014 to turn in a +3% overall GDP, Q4 GDP will need to be +4.5%. Won’t know until March.

KC’s Forecast: +3% (Q1 weak again)

Energy CapEx decline coming Q1-Q2

West-coast ports impact on Exports to show up in Q4 GDP (Q4 ≠ 4.5% to 5%)
Job Growth – Macro View

ADP: Private Payrolls Vs. BLS: A Government Survey

**ADP:** 241k for Dec
- 211k avg for 2014
- Q4 avg = 233k
- 5 mos had <200k

**BLS:** +252k for Dec 2014
- + 84k for Dec 2013
- +246k avg for 2014
- +194k avg for 2013 Vs. +289k avg for Q4 ’14

- U-3: 5.6% Dec ‘14 (5.8%)
- U-6: 11.2% Dec ‘14 Vs 13.0% Dec ’13

- Why might unemployment rise?
- Why is Labor Part Rate falling (62.7%)
### Job Growth State & MSA View – Housing follows the Jobs

**State & MSA Job Growth (Nov ‘13 to Nov ‘14)**

#### Top 10 MSAs & Phoenix

<table>
<thead>
<tr>
<th>Rank</th>
<th>MSA</th>
<th>Tr-12 Jobs</th>
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<tbody>
<tr>
<td>1</td>
<td>HOU</td>
<td>125,000</td>
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<tr>
<td>2</td>
<td>DFW</td>
<td>111,000</td>
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<tr>
<td>3</td>
<td>NY/NJ/LI</td>
<td>108,000</td>
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<tr>
<td>4</td>
<td>LA</td>
<td>92,000</td>
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<td>5</td>
<td>Miami/FL</td>
<td>81,000</td>
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<td>6</td>
<td>San Fran</td>
<td>69,000</td>
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<tr>
<td>7</td>
<td>Seattle</td>
<td>60,000</td>
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<tr>
<td>8</td>
<td>Atlanta</td>
<td>59,000</td>
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<tr>
<td>9</td>
<td>Phoenix</td>
<td>55,000</td>
</tr>
<tr>
<td>10</td>
<td>Boston</td>
<td>53,000</td>
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</tbody>
</table>

#### Top 10 States Job Gr Nov ‘13 – Nov ‘14

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Tr-12 Jobs</th>
<th>% Gr</th>
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<tbody>
<tr>
<td>1</td>
<td>TX</td>
<td>448,000</td>
<td>+3.9%</td>
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<tr>
<td>2</td>
<td>CA</td>
<td>351,000</td>
<td>+2.3</td>
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<tr>
<td>3</td>
<td>FL</td>
<td>223,000</td>
<td>+2.9</td>
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<td>4</td>
<td>NC</td>
<td>105,000</td>
<td>+2.5</td>
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<tr>
<td>5</td>
<td>GA</td>
<td>99,000</td>
<td>+2.4</td>
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<tr>
<td>6</td>
<td>NY</td>
<td>89,000</td>
<td>+1.0</td>
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<td>AZ</td>
<td>66,900</td>
<td>+2.6%</td>
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<tr>
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<td>OH</td>
<td>59,000</td>
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<tr>
<td>10</td>
<td>TN</td>
<td>55,000</td>
<td>+2.0</td>
</tr>
<tr>
<td>11</td>
<td>SC, CO, MN</td>
<td>51,000</td>
<td>+2.6 SC</td>
</tr>
</tbody>
</table>

**TX** Surpassed CA, but don’t expect a repeat of 450k jobs in 2015.

**NC** Breaks into Top-5. 1 of only 4 states with > 100k job gr.

**PHX** breaks into Top 10 again in between Atlanta and Boston.
Texas, Florida, North Carolina lead IT job growth in first half of 2014, study finds


PC World – Aug 14, 2014 By: Fred O’Connor, IDG News Service

U.S. technology professionals searching for jobs may want to look in states not normally considered IT hot spots.

The three states with the highest percentage of IT job growth for the first half of 2014 were Texas at 5.99 percent, Florida at 5.64 percent and North Carolina at 3.8 percent, according to a report from IT job site Dice.

State governments realize the value of IT jobs, said Goli, and are attempting to bolster technology employment. “They are creating incentives and programs to not only attract companies but also create a pipeline of technology professionals,” he said. For instance, some state universities in Florida have developed technology camps to train teachers how to teach the subject to students. “Florida [is] investing early by getting sort of coding camps and other types of training programs into middle school and high school,” said Goli. “They are thinking ahead.”

Florida added 4,100 IT jobs in the first half of the year, nearly matching the 4,500 IT positions it created in 2013.
Job Cuts – A good LEI

Challenger-Gray

• Fewest cuts in 2014 since 1997 (483k)
• 32,640 cuts in Dec (down 9% from Nov)
• Average >50k cuts Q1 ’14
• Average <40k cuts Q4 ’14

Stratification of Cuts:

By State:
• California & New York still #1 & 2
• Texas & Colorado rising in cuts

By Industry:
• Computer, Retail, Health Care (Tops in cuts: #1,2,3)
• Construction, Real Estate and Legal (Fewest cuts <1k in 2014)

Labor Cost risk to R.E. constr. in 2015
Oilpro.com, Dallas FED & WFC:

• 240 rigs shut down since Sept 14 – 60 of those in the last 30 days
• Each rig has an average of 50 employees – that is 12,000 jobs just on the rigs.
• Over 20,000 layoffs have been announced since Dec 1 in Energy States.
• Dallas Fed estimates that Texas will lose 140,000 jobs because of the oil price drop
• What state was #1 in seismic activity (quakes) in 2014? Not CA or TX – Oklahoma

BHP Management Comments On US Shale
“...In Petroleum, we have moved quickly in response to lower prices and will reduce the number of rigs we operate in our Onshore US business by approximately 40% by the end of 2015 financial year.

• Total Scales Back US Shale Operations On the same day that BHP Billiton announced the scaling back of its US shale operations, French major Total revealed a similar move...
Let’s look ahead for 2015 by Property Type…

Housing
(Single Family & Multi-Family)

• Total Units 1.0 to 1.1 million
• SF: 700k to 750k (not 1.0mm+)
  1. Millennials not buyers yet
     Reverse mortgages trigger Euthanasia
  2. 225k.mo jobs = 1.0mm demand
• MF: 350k +/- 25k  Why?
• Land hard to get and entitle
• Urban infill slower & harder to Dev.

• Metrics to Monitor re Housing
• HPA: Forget C-Shiller look at
  Housing Opportunity Index (HOI)
  (% of Homes affordable to Median $)
  AZ MSAs rank well (68%-76%)
  SF, LA NY, DC, MIA worst (10% <45%)
• Ratio of Jobs to MF permits (8:1 test)
• Watch Unit Mix (90%+ vacancy in 1 Bdrm)
• Early run-off (<35% leased selling at Full $)
Let’s look ahead for 2015 by Property Type...

Housing
(Housing Opportunity Index)

Most & Least Affordable Housing MSAs in US

Most Affordable:
• Kokomo, IN 95% HOI ratio

AZ Vs. SE:
• Winston-Salem NC: 80% HOI ranks #54
• Tucson AZ 76% / 85th
• Greenville SC: 75% / 95th
• Durham, NC 71% / 115th
• Atlanta 70% / 123rd
• Raleigh 69% / 126th
• Phoenix 68% / 137th
• Charlotte, NC 67% / 142nd

Least Affordable: The bottom to an HOI <50%
• Napa, CA 10%
• San Francisco 11%
• Most of SoCAL 12%-35%
• Honolulu 38%
• Boston 46%
• Miami, FL 47%
• Seattle 49%
Let’s look ahead for 2015 by Property Type...

**Office**

- **Densification** Trend (300 to 180)
- Nat’l *vacancy slow to decline* (16%)
- 27msf added supply in 2014 (>25msf in 2013 & 23msf in 2010)
- 4.1bsf US inventory
- **Core MSA & Urban CBD** is the play
- Suburban & Spec not the play
- **Absorption to New Supply** is <1.0
- Creative space Tis >$100.sf
- **Energy & West-coast port MSAs** not the play in 2015.
- **Know your ReFi risk!**
- 2016 & 2017 peak of CMBS ReFi II
- **Tenant Turnover** in 1st 3yrs of DCF (if >34-40%, high ReFi risk)
- **PV of Reversion** (>50% know why)
Industrial

- Still a Star
- Absorp > Supply
- Modern not pre-1990 vintage
- New Supply up (60msf in 2014)
- Absorption to New Supply % down from 2:1 to <1.25:1
- GA, SC & FL Port markets & Intermodal are the play ... like
  - CerterPoint
  - Winterhaven
  - CHI, Atl & KC
But what about Retail?

- You can’t generalize with retail – not on vacancy, not on rents, certainly not on Cap Rates

- High-Street Urban Infill Vs Suburban Malls and “un-anchoring” neighborhood centers?

- Dec 2013 Gwinnett place Mall example ($135mm CMBS debt sells for $15 million)

- More store closings ahead in 2015 (Office Supply, JC Penney’s, Sears, Pet Supply retailers)

- How do you Underwrite with >50% “Services” Vs Goods Selling? What is the Cap Rate?

- Alternate Use of Branch Banks in good retail locations?
“FREIGHTWAYS” Define the 2015-2020 Outlook
They are the CORRIDORS by which our economy grows - via sea-land-air.

Where is the RR, Intermodal, e-Commerce fulfillment infrastructure in the West?
Why do you think the KeyStone Pipeline is such a big-deal?

70% of Population
East of MS

America’s 4th Coast
28% of GDP

Who will be East-coast’s LA & LB?

The Gulf-coast:
Houston & Mobile

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Manufacturing, Trade, Jobs, CRE construction will follow the Class 1 RRs & Intermodal Facilities?

Mexico wage rate is now competitive with China – a big deal! KCS & CN Railroads – Follow the Containers

The 7- Class I RRs (Note CN (red) & KCS (brown)

http://www.intermodal.org/

“All that happens on the ports, doesn’t stay on the ports.” – Rail, Intermodal!
Note: 2014 Intermodal activity (moving a truck trailer or ship container) broke all records in 2014. Why? More efficient to move cargo by train than truck. AAR.org
OSCAR – Where are the Containers?
Redefining “Core Industrial” - Ocean Shipping Container Availability Report

The OSCAR goes to 18 US Markets with the Logistics Data

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<th>Region</th>
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<td>Long Beach, CA</td>
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<td>Oakland, CA</td>
<td>Chicago, IL</td>
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<td>Seattle, WA</td>
<td>Cincinnati, OH</td>
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<td></td>
<td>Tacoma, WA</td>
<td>Columbus, OH</td>
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<td>East Coast:</td>
<td>New York</td>
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<td></td>
<td>Norfolk, VA</td>
<td>Denver, CO</td>
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<td></td>
<td>Charleston, SC</td>
<td>Kansas City, MO</td>
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<td></td>
<td>Savannah, GA</td>
<td>Memphis, TN</td>
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<tr>
<td>Gulf Coast:</td>
<td>Houston, TX</td>
<td>Minneapolis, MN</td>
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<tr>
<td></td>
<td>New Orleans, LA</td>
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</tbody>
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Omissions: Florida/Jacksonville, Indianapolis

OSCAR: Ocean Shipping Container Availability Report

Average Weekly Availability for 40ft Refrigerated Containers

W1 = Week 1 (current week)
W2 = Week 2 (projection two weeks out)
W3 = Week 3 (projection three weeks out)
The 3D Windshield

3D Print Manufacturing will Revolutionize Real Estate!

Global Influencers

“3D printing will be bigger than the internet.” - Chris Anderson, Former Managing Editor, WIRED Magazine
3D Printers: What are they and what can they do?

They can print KC a new set of RIMS for his Classic 1967 Mustang for less than $50 😊
3D Printers: Small enough to be a kitchen appliance

Source: DaVinci Institute
http://www.thefiscaltimes.com/Articles/2014/02/17/These-Shoes-Were-Made-3-D-Printing#sthash.7rJwHKQQ.dpuf
3D Food Printers

Will Dominos & PaPa Johns even exist in 10 years when we can 3D-Print a pizza at home?
For those of you that have heard me speak in 1H2014, you know my thoughts and prognostications on 3-D printing. **It is not a fad and it will revolutionize how we manufacture, warehouse and shop in ways that we could never have imagined.** When we start to absorb all the ways 3-D printing technology is being applied today by real-world businesses, we start to realize this technology is very real and applicable to every industry sector and far beyond plastic trinkets sold in a Dollar-Discount store.

**Feetz** – a company in southern California – is making custom orthotics using 3-D printing technology. Another California company is manufacturing AK-47 automatic weapons using graphite. Leading medical research university after university is developing the technology further to synthetically manufacture medicines and pharmacy items and human tissue ranging from skin grafts to even organs. **But this may be the “disbeliever’s” breakthrough – MINK.**

MINK is the genius of a Harvard Business School graduate that has figure out how to 3-D print any shade of lipstick a woman could desire from home at a cost of $300. Imagine a 3-D Lipstick printer as a bathroom accessory for about the cost of the 3-D color printer in your office. It is reality by the end of this year!

3-D printing is going to turn upside down how we manufacture, warehouse and retail. **It is another accelerant to the e-commerce revolution already underway in retail.** How does a drug-store look without a cosmetics section because it all can be 3-D printed from home?
3D Printing & TSA technology at the airport.
Finally something good about the screening at airport

Clothing: Full body scanners in use at airports today can be modified to 3D Print clothing to exact size and style. What is the future for Jos A Banks?

Body Scanners for the Perfect Fit
My Best Fit, Inc.
3D Printing is not Science-Fiction.
The medical, pharmacy & vaccination implications are HUGE!

Broken limbs set & casted on-site by paramedics!

Prosthetics for hundreds of dollars not tens-of-thousands (Vornado @ Crystal City in DC).
3D Printing – It is so much more!
Think about 3D and new Home Construction.

Affordable housing & rebuilding post natural disasters?
3D Printing – From trinkets to Aviation ...
It is in the SE Region. Who will get these 3D Mfg Plants?

GE Aviation plans $50 million 3-D printing facility in Auburn to make jet engine parts


By Dawn Kent Azok | dazok@ai.com
July 15, 2014

GE Aviation's Auburn facility will be the site of a new 3-D printing initiative

AUBURN, Alabama -- GE Aviation said today that it will spend $50 million on a new 3-D printing initiative at its existing operations in Auburn, a first-of-its-kind project that will mass produce fuel nozzles for jet engines and help raise employment here to more than 300 people later this decade.
Conclusion – Look out the Windshield with 3D vision
3D will add more than a new dimension to our economy...

- With a Labor Participation of 62.7% & falling, what jobs might come from 3D?
- What problems could be eradicated (hunger, disease, lack of shelter, etc.?)
- What happens to local tax revenue when we 3D at home Vs. buy in a store?
- How does demand for real estate change (retail ... housing ... medical ...?)

Jobs that didn’t exist 5 years ago!

- 3D print designer training center
- Crowdfunding certification academy
- Drone pilot school
- Data visualization and analytics school
- Aquaponics farmers institute
- Urban agriculture academy