Members Present:
Dan Anderson, Arizona Board of Regents
Jay Butler, Arizona State University
Brian Cary, Salt River Project
Dean Martin, State Treasurer
Georganna Meyer, Department of Revenue
Elliott Pollack, Elliott D. Pollack and Co.
Marty Shultz, Arizona Public Service
Randie Stein, Stone & Youngberg
Marshall Vest, University of Arizona
Don Wehbey, Department of Economic Security Research Administration

Mr. Richard Stavneak, Director, JLBC Staff, opened the meeting at 9:35 a.m. and welcomed everyone to the Finance Advisory Committee (FAC) meeting. The panel meets 3 times a year to discuss the economy and to provide the Legislature with guidance on state revenue projections.

Mr. Stavneak started the JLBC Staff presentation with an overview of state revenues. (Click here to view.)

Mr. Eric Jorgensen, Mr. Hans Olofsson, and Ms. Leah Ruggieri, JLBC Staff, continued the presentation on Sales Tax Collections, Individual Income Tax, and Corporate Income Tax.

Mr. Elliott Pollack gave a slide presentation on the national economy. (Click here to view.)

Senator Carolyn Allen asked if oil prices are a factor in the economy. Mr. Pollack replied that oil is a factor, however, it is unpredictable. It is based on uncontrollable events, such as conflict in the Middle East and other political events.

Representative Andrew Tobin asked if Arizona’s population is still growing by 20,000 to 25,000 people per month. Mr. Pollack replied that the problem is that population is known only after the census every decade. He added that if there are difficulties selling homes in other states where people moving to Arizona come from, then the logical conclusion is the population flows have to be smaller.

Representative Tobin asked if retirees are taken into consideration. Mr. Pollack said that there are people still retiring to Arizona, however, they still need to be able to sell their home in order to move here. There are probably fewer of those retirees than there otherwise would be.
Mr. Stavneak asked Mr. Pollack’s perspective relative to the growth rate of 1% to 1.5% over the next 18 months.

Mr. Pollack said that the next year will be difficult; the range of 1% to 1.5% is reasonable. The risks are on the downside.

Mr. Jay Butler gave a presentation on the real estate market. (Click here to view.)

Mr. Stavneak asked what the best measure is in gauging the housing market. Mr. Butler replied that the best measure is the rate of appreciation. It is hampered by the fact that it only measures the rate of appreciation of homes sold. There is a small percentage of the market in active play; there are some homes that cannot be sold. The majority of people are in “dream” homes, they are bigger and have better locations and they have traditional interest rates; these people are not going to move. There is no push for people to want to move to a better home because they are already in a better home. Remodeling has also picked up. It is hard to measure where the market is standing. The gigantic proportion of the housing market is staying reasonably happy in their respective houses.

State Treasurer Dean Martin gave a slide presentation of the Office of the State Treasurer’s Operating Account Balance. (Click here to view.) In response to the revenue growth path, Mr. Martin stated that in September, he thought that 2009 would be better than 2008. He now believes that potentially the worst is yet to come with a negative 2008 and flat or mixed in 2009. Things will not get better until 2010 or 2011.

Mr. Brian Cary said that the formation of new residential accounts at SRP is still positive but down from a year ago. New construction activity has dropped, which is not a surprise. It had been running double the level necessary to accommodate new homes on a real-time basis. Commercial customer growth continues to be strong. Overall energy sales have continued to be positive. The residential weakness is most represented in the overall picture of the economy. Most other segments of the economy are in reasonably good shape. Long-term fundamentals of the area continue to see positive growth, although, at significantly lower levels than what has been accustomed to over the past few years. Corporate revenue is a relatively small share of the total revenue and will probably fall faster than predicted in the forecasts. Sales tax revenues that have been negative will continue to slump, however, it will move back to the positive range before this fiscal year is over. Income tax revenue has been soft in the past few years, but will also move back into the positive range for the duration of the forecast period. We are in a soft period of the business cycle and it will look and feel similar to what was seen in the early part of this decade. He agrees with Mr. Pollack that it does not matter if we are technically in a recession; it feels like it regardless.

Mr. Stavneak noted that in regard to Mr. Pollack’s comment regarding the lack of good census data between every 10-year cycle, utility hookups are looked at as a proxy. He asked if utility hookups are half of what they were a year ago.

Mr. Cary replied that while hookups have not been growing as rapidly as a year or two ago, they are still growing at a reasonably positive rate. It is not down by one-half.

Mr. Marshall Vest said the forecast he recently issued stated that Arizona’s economy is in a recession. Given the data for Arizona, the case has been that Arizona has been in a recession as early as the 2nd quarter. Once there has been enough revised data a year down the road, it will show that the peak will be in the 3rd quarter and punctuated by the layoffs amongst mortgage lenders. It feels like a recession and the economy is close to retracting/contracting. The focus should now be on how long or how bad things are going to be. This recession should be short and mild. FY 2009 is weaker than FY 2008. There will not be a v-shape recovery. It has to do with housing, there are a lot of houses with few buyers and there are credit restraints. Significant growth will not start again until 2010.
Ms. Georganna Meyer stated that the final November corporate numbers were down (151.2)% due to the impact of consolidated credit refunds; however, taking out consolidated refunds, they were up 139%. Out of the $23 million in refunds sent out in November, about $15 million was for consolidated credit. Fiscal year to date numbers without consolidated credit refunds shows (2.6)% compared to (8.5)% with consolidated.

Mr. Stavneak explained that the consolidated credit was granted about 10 years ago. Companies were able to take the credit against their liability; ultimately, there was not enough liability and the state still owed them the credit. The companies were able to take the remaining credit in FY 2008.

Mr. Dan Anderson said that he generally is more optimistic than the consensus of 1.5% in FY 2008 and the 1% in FY 2009.

Ms. Randie Stein said that the General Fund did better in the prior couple of years, there was more concern in the underlying economic factors at the same time. The hyper-growth and the raw percentage changes in the General Fund revenue categories will take a while to work through. There will continue to be underlying economic concern.

Mr. Stavneak asked Ms. Meyer if there were more individuals filing for tax extensions. Ms. Meyer replied that she has not looked into the numbers but would follow up.

Mr. Don Wehby provided an explanation on his handouts illustrating the total state economy and the private sector. (Click here to view.) There was a strong economy that has now slowed down. Part of that was the economic activity generating sales and growth. For 3 consecutive quarters there has been a slowdown in wages. Businesses have had reasonably good growth. The key with employment is a lean and mean scenario. Companies are cautious and in turn cut back. Retail growth was off by two-thirds of what was expected for this time of year. The quarterly census of employment wages (QCEW) comes 6-months behind and will help corroborate where the ground is for employment.

Mr. Stavneak said that numbers of the month-over-month job growth data compared to the prior year are higher than the 1%, which seems like the data is catching up. Mr. Wehby replied that Mr. Stavneak is correct, and QCEW is expected to continue to slow through this year.

The meeting adjourned at 11:00 a.m.

Yvette Medina, Secretary

Tim Everill, Assistant Director

NOTE: A full audio recording of this meeting is available at the JLBC Staff Office, 1716 W. Adams. A full video recording of this meeting is available at http://www.azleg.gov/jlbc/meeting.htm.
Finance Advisory Committee

December 10, 2007

JLBC
Current Economic Conditions Have Had Widespread Impact on Revenue Collections

- Through November, collections are down (0.6)%
- General Fund revenues are $(310) million below forecast
  - Sales tax: (0.2)%.
  - Individual income tax: (1.0)%
  - Corporate income tax: (2.4)%. 
3 Main Problems

• Housing Market
  – Imbalance in supply and demand.
  – Mortgage financing.

• Inflated Revenue Base
  – Revenues grew 38% in ’05 and ’06 compared to 19% personal income growth.

• “Wealth effect”
  – Declining housing values affect consumer psyche.
2 of 3 Real-Time Indicators Have Dropped This Fiscal Year

- Retail spending – down (1.7) %.
- Jobs – 45,000 jobs created compared to 135,000 a year ago.
- Withholding – up 6%.
Overall Revenue Forecast
Where Are We Headed Over the Next Few Years?
- Four-Sector Consensus Forecast Incorporates Different Economic Views, Including the FAC

4-sector forecast equally weights:

- FAC average
- UofA model - base
- UofA model - low
- JLBC Staff forecast
- Remaining revenues (4% of total) are staff forecast

* Includes Big 3 categories of sales tax, individual income and corporate income taxes.
New FY ‘08 4-Sector Growth Forecast is 1.5%

- Compares to 3.5% in September and a Budgeted Rate of 8.4%

**FY ’08 Base Revenue Growth**

- UA-Base: 4.2%
- UA-Low: 2.3%
- FAC: 3.6%
- JLBC: 5.0%

**Weighted Big 3 Average**

Prior to Tax Law Changes
New FY ’09 4-Sector Growth Drops from 1.5% in ’08 to 1.0% in ‘09

- In September, ’09 Growth Was 2.6%

FY ’09 Base Revenue Growth

-0.5% 1.4% 2.8% 2.3% 0.7% 2.6% 3.8%

FAC UA-Low UA-Base JLBC

FY 2008 FY 2009

Weighted Big 3 Average
Prior to Tax Law Changes
Revenue Forecast by Category
Sales Tax Growth Flat in ’08 and ‘09

FY 2007 Actual = $4.5 Billion
FY 2008 YTD = (0.2)%

* 5.6% without the $(55.2) million estimated payment threshold change.
Construction and Vehicles Constitute 39% of Sales Tax Collections

% of Total

- Retail-Home: 7%
- Retail-Auto: 11%
- Retail-Other: 27%
- Contracting: 22%
- Utilities: 8%
- Rest/Bars: 8%
- Use: 7%
- Other: 10%

JLBC
The Decline in Construction and Vehicle Spending Are Offsetting Gains Elsewhere

FY 2008 Year to Date – (Through October)
Falling Home Prices Affecting Consumer Spending
The “Wealth Affect”

• Even if consumers are not selling their homes, declining housing values are thought to reduce their spending habits.

• National studies estimate that consumers reduce spending by 4-9¢ for every $1 decline in house value.

• With a 10% decline in housing prices, Arizona sales tax would decline $50 million, or (1)%.
Will Mortgage Proposals Help?

• Proposal only affects 11% of subprime loans.
• For owner occupied homes, the Feds are proposing a 5 year rate freeze and refinancing assistance.
• Arizona has the 3rd highest rate of subprime loans, including 132,000 subprime ARMS.
• Feds’ mortgage relief plan could affect an estimated 6,500 – 54,000 owner-occupied homes in the state.
Individual Income Tax Forecast
- Falls (2.0)% in ’08 With A Slow ’09 Recovery

FY 2008 YTD = (1.0)%
FY 2007 Actual = $3.7 Billion

JLBC

* Includes reduction for tax law changes.
Individual Income Tax 5-Month Collections Down (1.0)%

• Refunds have increased over 60%
  – May be “hangover” effect – April extensions resulted in refunds paid out in last 2 months.
• Final payments are down (2)% YTD.
• Positive sign: withholding has maintained 6% growth for the first 5 months.
Job Losses May Moderate Further Withholding Growth
- Construction Sector Has Experienced Largest Job Loss

Oct 07/Oct 06 Growth = 1.7%
Corporate Income Tax Projected to Decline in Both FY ’08 and FY ‘09

FY 2007 Actual = $986 Million

FY 2008 YTD = (2.4)%

* Includes reduction for tax law changes.
U.S. Corporate Profits are Expected to Slow
- National Forecasts Generally Support
4-Sector Revenue Projection

Fiscal Year

Year Over Year Percentage Change

- 0.8%
- 2.9%
- 1.7%
- 1.2%
- 0.5%
- -1.6%
- -3.3%
- -5.2%
- -10%

U.S. Corporate Profits are Expected to Slow
- National Forecasts Generally Support
4-Sector Revenue Projection

- ▲ - Global Insight Forecast
- ■ - CIT Revenue
Growth Remains Slow Until FY 2011
- September Forecast Had Similar “U” Shaped Curve

* 4-sector forecast weighted average growth.
4-Sector Projections Further Increase Budget Shortfall

• FY ’08 budget shortfall is projected to be $970 million.

• If none of FY ’08 solutions are on-going, FY ’09 budget shortfall is $1.8 billion.
## FY 2008-FY 2011 Quartile Forecast Worksheet

<table>
<thead>
<tr>
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Forecast percentages are prior to tax law changes.
National Economic Outlook

Presented by:
Elliott D. Pollack

Presented for:
Finance Advisory Committee
December 10th, 2007

What causes economies to slow and where do we stand?
United States Real Gross Domestic Product*  
Annual Growth 1970 - 2008**  
Source: U.S. Bureau of Economic Analysis & Blue Chip Economic Indicators

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* Based on chained 2000 dollars.
** 2007 - 2008 are forecasts from the Blue Chip Economic Indicators, November 2007

Odds of A RECESSION  
Source: National Blue Chip Panel

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<td>2000</td>
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Odds of a recession survey question was not asked in October 2007  
November’s survey was conducted November 5th and 6th, 2007
Is a RECESSION Imminent?

Economic expansions do not die of old age. They die from:

1. Structural imbalances
2. Fiscal and monetary policy errors

...Combined with unusual shocks

TYPICAL IMBALANCES

• Consumers holding too much debt
• Real incomes decline
• Excess capacity
• Business has too much debt
• Too much inventory
• Employment markets too tight
• Inflation
• Bad tax policy
• Bad monetary policy
Few of these imbalances presently exist to any significant degree.

PRESENTLY

• Employment still growing
• Real incomes growing
• Business awash in cash
• Capacity utilization at a level associated with increases in plant spending
• Employment markets do not appear to be tight
• Inflation still appears under control
• Exports booming
• Fed has reacted well
The economy is no longer running on 8 cylinders; more like 3 or 4, but still driving forward….

…Slowly.
...hopefully.

LAST YEAR
WE SAID:
Weakening economies are more sensitive to shocks.

Examples of Direct Shocks:

- Unexpected oil supply disruption.
- Unexpected oil price escalation.
- Terrorist event (especially to financial or commerce infrastructure).
- Decline in housing prices.
THIS YEAR’S SHOCK:

- Housing prices
- Mortgage backed securities

Liquidity dried up…
Market re-prices risk.

High Yield Credit Spread
2004 – 2007
Source: Bespoke Investment Group; Merrill Lynch

*Data through August 2007.
** The spread between high yield corporate bonds (non investment grade/below bbb rated) and comparable Treasuries.
Credit Crunch

Banks and others significantly curtail their lending to all sectors.
Problem Areas Linked to Most Leveraged Sectors

- Mortgage Backed Bonds
- Leveraged Buyout Loans
- Junk Bonds

To Get a Full Blown Credit Crunch you need:

1. FEAR –
   Of big losses on current & future loans.

2. UNCERTAINTY –
   How big will the losses be?
   When will the market stabilize?
   At what price will it stabilize?
NOW – A *Limited* Credit Crunch

The crunch has not yet spread to the general economy.

**Characteristics of a *Limited* Credit Crunch:**

- Banks are still lending to consumers & businesses.
- Credit card agencies are still issuing credit.
- Mortgage lenders are still lending to qualified borrowers.
Net Percentage of Large U.S. Banks Reporting Tougher Standards on Residential Loans

2007

Source: Federal Reserve, Board of Governors

Net Percentage of Large U.S. Banks Reporting Tougher Standards on Business Loans

1991 – 2007*

Source: Federal Reserve, Board of Governors

Data as of October 2007 survey.
Net Percentage of Large U.S. Banks Reporting Tougher Standards on Consumer Loans
1997 – 2007*
Source: Federal Reserve, Board of Governors

Data as of October 2007 survey.

Recession Periods

ACTIONS OF THE FED
Common Themes of Manias

- Extreme speculative hype.
- Frenzy by all levels of investors.
- Severe departure from the investments “intrinsic value.”
- Huge flows of new credit – usually new types of instruments.
- No formidable barriers to entry.

The “Busting of the Bubble” shares similar features:

- Liquidity contracts
- Exogenous events may cause/exacerbate situation
- Prices decline, then plunge
The **Perfect Storm** in the Housing Market?

What Happened:

- Falling prices
- Fear
  - Tightening of credit
  - Less money to loan
Scheduled re-pricing of sub-prime loans pushes up delinquent and foreclosure rates, adding new supply that pushes down housing prices...

...which starts the process over again.

Danger Ahead – ARMS to Reset

$263 billion (Jan-07 to Aug-07) + $700 billion (Sep-07 to Dec-08)

Source: Banc of America Securities, Business Week, 9/17/07
The credit crunch ends when banks see stability.

Synopsis: Economy-Wide Negatives

- Credit crunch
- Housing market
- Consumer spending
- Inflation ??? (food & energy)
Synopsis: Economy-Wide Positives

- Employment still positive.
- Businesses lean and mean.
- Recession would be pointless, so Fed will try to avoid one.

Oil Prices
1972 – 2007*
Source: Federal Reserve Board of St. Louis

*Data through November 2007. December 4th was $88.32

Recession Periods
Real Oil Prices
(Adjusted with CPI – Energy)
1972 – 2007*
Source: Federal Reserve Board of St. Louis

$0
$10
$20
$30
$40
$50
$60
$70
$80
$90
$100
$110

Data through November 2007

Recession Periods

Consumer Energy Goods & Services Spending as a Percent of Personal Income
1971 – 2007*
Source: Bureau of Economic Analysis

*Data through third quarter 2007

Recession Periods
For perspective, if oil prices stabilize at around $100 per barrel, gas prices will escalate to about $4 per gallon.

National Perspective

Let’s look at some data.
CONSUMER SPENDING: Causes of Consumer Caution

- Reduced home-related spending on home improvement items such as furnishings, appliances, and building materials.
  (Look at completions not starts)
- Housing-related industries are now cutting jobs.
- Mortgage equity withdrawal slowing.

Mortgage Equity Withdrawal as a share of Disposable Income
U.S.: 1971 – 2007*

Source: Bureau of Economic Analysis

* Data through second quarter 2007
National Employment*
Annual Percent Change 1975–2007**

Source: Bureau of Labor Statistics

*Non-agricultural wage & salary employment. Changed from SIC to NAICS reporting in 1990.

**YTD October 07

U.S. Real Retail Sales
Percent Change Year Ago, 3-Month Moving Average
1972 – 2007*

Source: Federal Reserve Board of St. Louis

* Data through October 2007
The inflation threat goes away if the economy slows significantly.
U.S. Real Exports as a Percent of Real GDP
1971 – 2007*

*Data through third quarter 2007

Source: Bureau of Economic Analysis

Recession Periods
Total Plant Spending
Percent Change Year Ago
(Real Dollars)
1970 – 2007*
Source: Bureau of Economic Analysis

Unit Labor Costs*
Percent Change from Year Ago
1976 – 2007**
Source: Bureau of Labor Statistics

*Data through third quarter 2007
**Data through third quarter 2007

Recession Periods
Corporate Profit
(Billions of Dollars, SA)
1975-2007*
Source: Freelunch.com

*Data through third quarter 2007

Recession Periods

U.S. OUTLOOK - 2008

- Housing (-)
- Inflation (-)
- Productivity growth slowing (-)
- Consumer spending (-)
- Fiscal stimulus (+/-)
- Low interest rates (+)
- Business spending (+)
- Monetary stimulus (+)
- Real incomes (+)
- Businesses mean and lean (+)
- Job growth (+)
- Exports (+)
Joint Legislative Budget Committee
Finance Advisory Committee

December 10, 2007

CRUCIAL CONCEPTS

- Housing market has rebounded
- Over hang of homes for sale, vacant and foreclosed
- Geopolitical Risks
- Financing: Cost & Availability
- Recession
- Affordability
- Resource Cost & Availability: Energy, time and water
- Consumer confidence & net income
EXPECTATIONS

<table>
<thead>
<tr>
<th></th>
<th>PERMITS</th>
<th>RESALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>33,400</td>
<td>51,000</td>
</tr>
<tr>
<td>2008</td>
<td>37,500</td>
<td>59,000</td>
</tr>
<tr>
<td>2009</td>
<td>43,600</td>
<td>68,000</td>
</tr>
</tbody>
</table>

Note: Permits include Pinal; resales are just Maricopa

Arizona Single Family Construction Activity

<table>
<thead>
<tr>
<th>County</th>
<th>2002</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa</td>
<td>63 %</td>
<td>52 %</td>
<td>60%</td>
</tr>
<tr>
<td>Pinal</td>
<td>8</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Pima</td>
<td>12</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Coconino</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Yavapai</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
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</table>
### Arizona Single Family Average Permit Value

<table>
<thead>
<tr>
<th>County</th>
<th>2002</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa</td>
<td>$155,080</td>
<td>$184,025</td>
<td>$182,520</td>
</tr>
<tr>
<td>Pinal</td>
<td>$108,130</td>
<td>$125,090</td>
<td>82,445</td>
</tr>
<tr>
<td>Pima</td>
<td>$151,220</td>
<td>$168,725</td>
<td>$188,805</td>
</tr>
<tr>
<td>Coconino</td>
<td>$145,910</td>
<td>$200,835</td>
<td>$205,500</td>
</tr>
<tr>
<td>Yavapai</td>
<td>$136,725</td>
<td>$179,985</td>
<td>$194,190</td>
</tr>
</tbody>
</table>

### Arizona Commercial Construction Activity

**Share of State Commercial Activity**

<table>
<thead>
<tr>
<th>County</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa</td>
<td>75 percent</td>
<td>79 percent</td>
</tr>
<tr>
<td>Pinal</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Pima</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Coconino</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Yavapai</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### Arizona Commercial Construction Activity

**Share of County Total Construction Activity**

<table>
<thead>
<tr>
<th>County</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa</td>
<td>23 percent</td>
<td>37 percent</td>
</tr>
<tr>
<td>Pinal</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Pima</td>
<td>12</td>
<td>24</td>
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</tbody>
</table>

### NEW HOME MARKET

**PERMITS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Maricopa</th>
<th>Pinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 YTD</td>
<td>19,294</td>
<td>6,964</td>
</tr>
<tr>
<td>2006</td>
<td>27,976</td>
<td>10,788</td>
</tr>
<tr>
<td>2005</td>
<td>43,256</td>
<td>18,191</td>
</tr>
<tr>
<td>2004</td>
<td>48,136</td>
<td>11,495</td>
</tr>
<tr>
<td>2000s</td>
<td>293,046</td>
<td></td>
</tr>
<tr>
<td>1990s</td>
<td>242,161</td>
<td></td>
</tr>
<tr>
<td>1980s</td>
<td>151,796</td>
<td></td>
</tr>
<tr>
<td>1970s</td>
<td>171,406</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Third Qtr. 2006</td>
<td>Third Qtr. 2007</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Maricopa County</td>
<td>$273,665</td>
<td>$276,000</td>
</tr>
<tr>
<td>Maryvale</td>
<td>245,830</td>
<td>197,120</td>
</tr>
<tr>
<td>South Phoenix</td>
<td>272,500</td>
<td>256,735</td>
</tr>
<tr>
<td>Western Suburbs</td>
<td>294,000</td>
<td>247,825</td>
</tr>
<tr>
<td>Union Hills</td>
<td>781,630</td>
<td>347,715</td>
</tr>
<tr>
<td>Deer Valley</td>
<td>429,900</td>
<td>360,535</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Third Qtr. 2006</th>
<th>Third Qtr. 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinal County</td>
<td>$229,850</td>
<td>$196,180</td>
</tr>
<tr>
<td>Apache Junction</td>
<td>285,225</td>
<td>218,500</td>
</tr>
<tr>
<td>Casa Grande</td>
<td>232,875</td>
<td>198,000</td>
</tr>
<tr>
<td>Maricopa</td>
<td>251,010</td>
<td>197,555</td>
</tr>
<tr>
<td>Queen Creek</td>
<td>220,995</td>
<td>192,645</td>
</tr>
</tbody>
</table>
### Resale Median Sales Price

**Maricopa County**

<table>
<thead>
<tr>
<th>Area</th>
<th>Second Qtr. 2005</th>
<th>Second Qtr. 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maricopa County</td>
<td>$235,500</td>
<td>$265,000</td>
</tr>
<tr>
<td>Scottsdale</td>
<td>521,250</td>
<td>615,000</td>
</tr>
<tr>
<td>Phoenix</td>
<td>182,500</td>
<td>223,000</td>
</tr>
<tr>
<td>Mesa</td>
<td>210,000</td>
<td>248,000</td>
</tr>
<tr>
<td>Surprise</td>
<td>231,000</td>
<td>255,000</td>
</tr>
<tr>
<td>Glendale</td>
<td>215,000</td>
<td>250,000</td>
</tr>
</tbody>
</table>

### RESALE MEDIAN SALES PRICE

<table>
<thead>
<tr>
<th>Area</th>
<th>Third Qtr. 2006</th>
<th>Third Qtr. 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinal County</td>
<td>$199,900</td>
<td>$193,000</td>
</tr>
<tr>
<td>Apache Junction</td>
<td>224,000</td>
<td>218,500</td>
</tr>
<tr>
<td>Casa Grande</td>
<td>175,000</td>
<td>157,995</td>
</tr>
<tr>
<td>Maricopa</td>
<td>217,625</td>
<td>215,000</td>
</tr>
<tr>
<td>Queen Creek</td>
<td>220,000</td>
<td>193,050</td>
</tr>
</tbody>
</table>
## Housing Indicators
### Maricopa County

#### Affordability

<table>
<thead>
<tr>
<th>Year</th>
<th>Resale</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>124</td>
<td>108</td>
</tr>
<tr>
<td>2002</td>
<td>124</td>
<td>113</td>
</tr>
<tr>
<td>2003</td>
<td>126</td>
<td>113</td>
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<tr>
<td>2004</td>
<td>114</td>
<td>102</td>
</tr>
<tr>
<td>2005</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>2006</td>
<td>74</td>
<td>63</td>
</tr>
<tr>
<td>2007 3rd Qtr</td>
<td>75</td>
<td>70</td>
</tr>
</tbody>
</table>

---

## COMPARATIVE RESALE HOUSING PRICES

<table>
<thead>
<tr>
<th>Areas</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$219,000</td>
<td>222,200</td>
</tr>
<tr>
<td>Phoenix</td>
<td>247,400</td>
<td>268,200</td>
</tr>
<tr>
<td>San Diego</td>
<td>604,300</td>
<td>601,800</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>304,700</td>
<td>317,400</td>
</tr>
<tr>
<td>Dallas</td>
<td>147,600</td>
<td>149,500</td>
</tr>
<tr>
<td>Atlanta</td>
<td>167,200</td>
<td>171,800</td>
</tr>
</tbody>
</table>

Source: NAR
Median Rate of Appreciation
Maricopa County

- 2002: 6.0 percent
- 2003: 6.3 percent
- 2004: 8.4 percent
- 2005: 14.1 percent
- 2006: 16.2 percent
- 1981-2006: 4.6 percent

Housing Indicators
Maricopa County

Inventory Turnover

<table>
<thead>
<tr>
<th>Year</th>
<th>Resale</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>7 percent</td>
<td>3 percent</td>
</tr>
<tr>
<td>2003</td>
<td>8 percent</td>
<td>4 percent</td>
</tr>
<tr>
<td>2004</td>
<td>11 percent</td>
<td>5 percent</td>
</tr>
<tr>
<td>2005</td>
<td>11 percent</td>
<td>4 percent</td>
</tr>
<tr>
<td>2006</td>
<td>7 percent</td>
<td>4 percent</td>
</tr>
<tr>
<td>1982-2004</td>
<td>7 percent</td>
<td>3 percent</td>
</tr>
</tbody>
</table>
### Housing Indicators
#### Maricopa County

<table>
<thead>
<tr>
<th>Year</th>
<th>Jobs Resale</th>
<th>Jobs Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>26</td>
<td>44</td>
</tr>
<tr>
<td>2002</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>2003</td>
<td>22</td>
<td>35</td>
</tr>
<tr>
<td>2004</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>2005</td>
<td>15</td>
<td>29</td>
</tr>
<tr>
<td>2006</td>
<td>27</td>
<td>49</td>
</tr>
<tr>
<td>1982-2005</td>
<td>28</td>
<td>46</td>
</tr>
</tbody>
</table>

### CONDOMINIUM MARKET
#### NEW HOMES

- **Permits**
  - 2007 YTD: 5,831
  - 2006: 6,187
  - 2005: 4,526

- **Median New Unit Sales Price**
  - 2007: $245,155
  - 2006: 225,400
  - 2005: 214,615
CONDOMINIUM MARKET
RESALE HOMES

- **Sales Activity**
  - 2007 YTD: 9,530
  - 2006: 13,995
  - 2005: 21,290

- **Median Resale Home Price**
  - 2007 YTD: $180,000
  - 2006: 174,000
  - 2005: 150,000

APARTMENT MARKET

- **Units Authorized**
  - 2007 YTD: 5,647
  - 2006: 3,922
  - 2005: 3,250
  - 2004: 4,997
  - 1990s: 51,608
  - 1980s: 137,436
### RETAIL SQUARE FOOTAGE

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>13,172,016</td>
<td>14,713,507</td>
</tr>
<tr>
<td>Power</td>
<td>27,163,988</td>
<td>49,584,416</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>36,255,761</td>
<td>46,336,967</td>
</tr>
<tr>
<td>Strip</td>
<td>10,556,947</td>
<td>12,874,864</td>
</tr>
<tr>
<td>Total</td>
<td>87,238,712</td>
<td>123,509,854</td>
</tr>
</tbody>
</table>

### RETAIL MARKET

**Third Quarter 2007**

- Inventory: 123,509,854 sq.ft.
- Occupied Space: 111,531,020 sq.ft.
- Vacant Space: 12,675,765 sq.ft.
- Absorption: 2,823,131 sq.ft.
- New Space: 8,2155,551 sq.ft.
- Under Construction: 10,521,517 sq.ft.
- Planned: 11,611,486 sq.ft.
### OFFICE SQUARE FOOTAGE

<table>
<thead>
<tr>
<th>Location</th>
<th>2000</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown</td>
<td>5,147,967</td>
<td>6,184,767</td>
</tr>
<tr>
<td>Uptown</td>
<td>11,119,594</td>
<td>11,119,594</td>
</tr>
<tr>
<td>Camelback</td>
<td>6,778,534</td>
<td>7,570,108</td>
</tr>
<tr>
<td>Northeast</td>
<td>8,807,153</td>
<td>13,458,239</td>
</tr>
<tr>
<td>Northwest</td>
<td>4,802,079</td>
<td>8,084,145</td>
</tr>
<tr>
<td>Southeast</td>
<td>6,082,653</td>
<td>9,770,720</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47,511,703</strong></td>
<td><strong>61,368,368</strong></td>
</tr>
</tbody>
</table>

### OFFICE MARKET
Third Qtr. 2007

- **Inventory**: 61,368,368 sq.ft.
- **Occupied Space**: 51,226,345 sq.ft.
- **Vacant Space**: 10,142,023 sq.ft.
- **Absorption**: -5,357 sq.ft.
- **New Space**: 1,293,591 sq.ft.
- **Under Construction**: 7,296,440 sq.ft.
- **Planned**: 6,221,814 sq.ft.
Contact

- WWW.POLY.ASU.EDU/AREC
Finance Advisory Committee
December 10, 2007

Office of the Arizona State Treasurer
Treasurer Dean Martin

State Total Operating Account Average Monthly Balance
July 1990 to present
State of Arizona Operating Cash Balance On A Downward Trend

Percent Change in Operating Account Balance

July 1991 to present

Inverted vs. Normal Yield Curve

Copyright: Bloomberg 2007 L.P.
2 YR/10 YR Govt. Spread since 1977

US Treasury Yields vs. Fed Funds since 1977
US Treasury Yields vs. Fed Funds since 2003

Inflation: GDP Deflator consistently above other measures

PCE, PPI, CPI CORE, and GDP RATES Quarterly since 1977
Inflation: GDP Deflator consistently above other measures
PCE, PPI, CPI CORE, and GDP RATES monthly since 2001

Fed Fund Futures and Options trading through August 08
Where rates are expected to be tomorrow
Sept. 12, 2007 to Dec. 6, 2007

Expected Outcomes of the Fed Rate for FOMC Date 12/11/07
Target Rate as of 12/8/07: 4.80

<table>
<thead>
<tr>
<th>Fed Funds Target Rate</th>
<th>3.50</th>
<th>3.75</th>
<th>4.00</th>
<th>4.25</th>
<th>4.50</th>
<th>4.75</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/12/07</td>
<td>0.0%</td>
<td>6.9%</td>
<td>14.9%</td>
<td>31.1%</td>
<td>16.4%</td>
<td>7.7%</td>
</tr>
<tr>
<td>12/6/07</td>
<td>0.0%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: These probabilities were calculated using Fed Funds options and futures data.

Where rates are predicted to be next June
Sept. 12, 2007 vs. Dec. 6, 2007

Expected Outcomes of the Fed Rate for FOMC Date 12/25/08
Target Rate as of 12/6/07: 4.50

<table>
<thead>
<tr>
<th>Fed Funds Target Rate</th>
<th>3.00</th>
<th>3.25</th>
<th>3.50</th>
<th>3.75</th>
<th>4.00</th>
<th>4.25</th>
<th>4.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/10/07</td>
<td>5.3%</td>
<td>21.1%</td>
<td>43.1%</td>
<td>30.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>12/5/07</td>
<td>5.3%</td>
<td>21.1%</td>
<td>43.1%</td>
<td>30.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Note: These probabilities were calculated using Fed Funds options and futures data.
RJ/CRB Commodity Price Index weekly average since 1967
(Energy, Metals, Grains, Livestock, and Soft Commodities)

Value of U.S. Dollar vs. 6 major currencies for last 40 years
(Euro, Yen, Pound, Canadian Dollar, Swedish Krona, Swiss Franc)
## Sub-Prime In Arizona

<table>
<thead>
<tr>
<th></th>
<th>CY 2004</th>
<th>CY 2005</th>
<th>CY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of high rate loans</td>
<td>62,057</td>
<td>158,460</td>
<td>154,689</td>
</tr>
<tr>
<td>% of all mortgages</td>
<td>16</td>
<td>27.4</td>
<td>32.5</td>
</tr>
<tr>
<td>Volume in millions</td>
<td>$6,034</td>
<td>$21,934</td>
<td>$25,233</td>
</tr>
<tr>
<td>% of volume</td>
<td>10.7</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>State Rank</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>


## Sub-Prime In Phoenix

<table>
<thead>
<tr>
<th></th>
<th>CY 2004</th>
<th>CY 2005</th>
<th>CY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of high rate loans</td>
<td>47,388</td>
<td>126,295</td>
<td>121,133</td>
</tr>
<tr>
<td>% of all mortgages</td>
<td>16.6</td>
<td>28.7</td>
<td>34.1</td>
</tr>
<tr>
<td>% of all sales</td>
<td>29.2</td>
<td>70.8</td>
<td>95.7</td>
</tr>
<tr>
<td>Volume in millions</td>
<td>$4,660</td>
<td>$18,016</td>
<td>$20,422</td>
</tr>
<tr>
<td>% of volume</td>
<td>10.9</td>
<td>22.2</td>
<td>28.1</td>
</tr>
<tr>
<td>Metro Rank</td>
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<td>4</td>
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</tr>
</tbody>
</table>

Arizona's Economic Trends by Quarter
QCEW Data
Over-the-Year % Change 2000.1 to 2007.2
Source: AZ DES, Research Administration & BLS, Run 12.06.07
Graph Prepared by AZDES, Research Administration, Economic Analysis 12.06.07

-5.0%
0.0%
5.0%
10.0%
15.0%
20.0%

Firms Employment Wages