Presentation for:
**Federation of Tax Administrators  9/30/02**
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www.AmericanEconomics.com

**Regional Economic Forecast:**

- The National Economic Setting
- Implications for The States

American Economics Group, Inc. (AEG) provides full service economics analysis to the states:

1. **Revenue Forecasting Systems**  
   (with Michael Evans)

2. **Sales & Use Tax Gap Measurement**  
   (with ChainBridge Software and Evans)

3. **Tax Policy Analysis Via Micro Simulation Models**  
   (with ChainBridge Software)
National Forecast: Overview 09/30/02

- U.S. is MIRED in AFTERMATH of RECESSION
- Firm Recovery Path is 2 -3 quarters away
- Real Growth will average 2.0% to 3.0% over next 6 quarters
- Possible Military Action Clouds Horizon

"I think the economy's turning around. That guy looked as if he were about to give me something."

New Yorker 9/30/02
National Forecast: Overview

- Weak employment growth
- Consumer purchase to weaken
- Capital spending not robust yet
- Motor vehicle sales to fall
- Higher federal spending offset by state cutbacks

High tech equipment still lagging:

- Computers
- Software
- Telecommunications
Official GDP Overstated:

- Bad Data (Walmart effect adds 1%)*
- Significant Revisions (1% per year)
- Productivity Overstated
- Growth is 2% GDP / 1.5% Productivity / .5% Employment

*Michael Evans Points this out.

Real GDP ($96)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2.0%</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>3.0%</td>
<td></td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
Nominal GDP

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>3.0%</td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2

National Forecast: Overview

Let’s Examine Components of Demand:

• Consumption (weakening)
• Capital spending (negative – will turn up)
• Exports (strong)
• Government/Defense purchases (up)
• State Spending (down)
### Personal Consumption Expenditures (chg in $96)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>3.1%</td>
<td></td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>3.0%</td>
<td></td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2

### Non-Residential Fixed Investment (chg in $96)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>-6.0%</td>
<td></td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>7.0%</td>
<td></td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
## Housing Starts (mil.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>1.67</td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>1.65</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2

## Industrial Production (chg in $96)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>0.0%</td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
## Automobile / Truck Sales (mil.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Sales (mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Forecast</td>
<td>17.2</td>
</tr>
<tr>
<td>2003</td>
<td>Forecast</td>
<td>17.1</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2

## Corporate Profits (chg in nominal)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Profits (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Forecast</td>
<td>8.7%</td>
</tr>
<tr>
<td>2003</td>
<td>Forecast</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
National Forecast: Overview

Let’s Examine Prices and Compensation:

Consumer Price Index (chg)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 Forecast</td>
<td>1.6%</td>
</tr>
<tr>
<td>2003 Forecast</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
National Forecast: **Overview**

Let’s Examine Interest Rates:
# Treasury Bills (3 mo.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>forecast</td>
<td>1.7% avg.</td>
</tr>
<tr>
<td>2003</td>
<td>forecast</td>
<td>1.8% avg.</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2

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# Treasury Notes (10 yr.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>forecast</td>
<td>4.75% avg.</td>
</tr>
<tr>
<td>2003</td>
<td>forecast</td>
<td>4.25% avg.</td>
</tr>
</tbody>
</table>

*Compound change from 2001-Q2
National Forecast: Overview

Major Tax Revenue: Slow Growth

- Personal Income Tax
- Corporate Profits Tax

Economic Forecast for The States:

Results will depend heavily on each state’s mix of industry

For example:

- States dependent on Agriculture will suffer
- Deep low means higher growth numbers for some (eg: Nevada)
Economic Forecast for The States:

Let’s Sort Industries into Four Groups:

- **Tier 1:** Perform Best
- **Tier 2:** Perform 2nd Best
- **Tier 3:** Perform 2nd Worst
- **Tier 4:** Perform Worst

### INDUSTRIES EXPECTED TO PERFORM BEST (Tier 1)

- Petroleum Refining
- Instruments
- Other Services
- Utility Services
- Construction
- Transportation & Communication
- Trade
INDUSTRIES EXPECTED TO PERFORM 2nd BEST (Tier 2)

Stone, Clay, Glass
Industrial Machinery
Misc Manufacturing
Medical Related
Semiconductors
Electrical Machinery
Paper & Paper Products
Government & Other

INDUSTRIES EXPECTED TO PERFORM 2nd Worst (Tier 3)

Recreation
Finance, Insurance, Real Estate
Lumber
Computers
Furniture
Mining / Extractive
Transportation Equipment
Rubber & Plastics
Fabricated Metals
INDUSTRIES EXPECTED TO PERFORM WORST (Tier 4)

- Printing
- Leather
- Chemicals
- Apparel
- Textiles
- Food & Tobacco Production
- Agriculture
- Primary Metals

Economic Forecast for The States:

Let’s Sort States into Four Groups:

- Tier 1: Perform Best
- Tier 2: Perform 2nd Best
- Tier 3: Perform 2nd Worst
- Tier 4: Perform Worst

(Forecast Growth Rate in Employment 2002 to 2003)
STATES EXPECTED TO PERFORM BEST (Tier 1)
(Above 0.65% Employment Growth)

Nevada
District of Columbia
Colorado
Maryland
Utah
New Hampshire

STATES EXPECTED TO PERFORM 2nd BEST (Tier 2)
(0.60% to 0.65% Employment Growth)

Connecticut
Arizona
New York
Florida
Louisiana
Hawaii
New Mexico
Virginia
**STATES EXPECTED TO PERFORM Average (Tier 3)**

*(0.50% to 0.60% Employment Growth)*

<table>
<thead>
<tr>
<th>State</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>Illinois</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>Texas</td>
<td>Michigan</td>
<td>Delaware</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Pennsylvania</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>Alaska</td>
<td>Wyoming</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Georgia</td>
<td>Oregon</td>
</tr>
<tr>
<td>California</td>
<td>Ohio</td>
<td>Missouri</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Maine</td>
<td>Washington</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Nebraska</td>
<td>Montana</td>
</tr>
</tbody>
</table>

**STATES EXPECTED TO PERFORM Worst (Tier 4)**

*(Below 0.5% Employment Growth)*

<table>
<thead>
<tr>
<th>State</th>
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</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>Kentucky</td>
</tr>
<tr>
<td>Indiana</td>
<td>Idaho</td>
</tr>
<tr>
<td>South Carolina</td>
<td>North Dakota</td>
</tr>
<tr>
<td>West Virginia</td>
<td>South Dakota</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Arkansas</td>
</tr>
<tr>
<td>Alabama</td>
<td>Mississippi</td>
</tr>
<tr>
<td>Iowa</td>
<td></td>
</tr>
</tbody>
</table>
After General Recovery Farm Belt Will Gain

- Lower dollar will spur exports
- Ethanol use will increase
- Corn, Soybeans and Wheat prices will rise strongly
- Recovery from the Farm Belt “depression” can occur

Other Observations and Assumptions I

- The response to both fiscal and monetary policy will be weak
- Further interest rates stabilize
- Increased federal spending on defense
- Consumer spending will weaken
- State tax increases
Problems with Forecasts Using NIPA Accounts

• High Error Rate on First-Released Data

• Alternative State-Level Data More Useful