Appendix 1: Materials used by Mr. Kos
Current U.S. 3-Month Deposit Rates and Rates Implied by Traded Forward Rate Agreements
May 6, 2004 - August 6, 2004

LIBOR Fixing 3M Forward 6M Forward 9M Forward
Percent Percent Percent

Yield on the 2-Year Treasury Note
May 6, 2004 - August 6, 2004

Yield on the 10-Year Treasury Note
May 6, 2004 - August 6, 2004

Yield Spread between 2-and 10-Year Treasury Notes
May 6, 2004 - August 6, 2004
### Mortgage Market Duration
May 6, 2004 - August 6, 2004

Duration of 30-Year MBS Index

Source: Lehman Brothers

### MBS Spreads
May 6, 2004 - August 6, 2004

OAS of 30-Year MBS Index

Source: Lehman Brothers

### Corporate Debt Spreads
May 6, 2004 - August 6, 2004

Investment Grade Corporate Index OAS

Source: Lehman Brothers

### High Yield and EMBI+ Spreads
May 6, 2004 - August 6, 2004

EMBI+

Merrill Lynch High Yield Bond Index OAS

Source: Merrill Lynch, JP Morgan

### Select Equity Indices
May 6, 2004 - August 6, 2004

NASDAQ

Dow Jones Industrials

S&P 500

Index: 100 = 5/6/04

Source: Lehman Brothers, Merrill Lynch, JP Morgan

6/30 FOMC +25 bps
Implied Volatility on S&P500 Index
January 4, 1999 - August 6, 2004

Implied Volatility of Major Currency Pairs
January 4, 1999 - August 6, 2004

Implied Swaption Volatility
May 3, 1999 - August 6, 2004
Appendix 2: Materials used by Mr. Gramlich
Figure 1
Output gap vs. real oil price

- Output gap (percent, nonfarm business, staff judgmental estimate)
- Composite refiner acquisition cost divided by GDP chain price index (2004Q2 dollars per barrel)
Appendix 3: Materials used by Mr. Madigan
Material for
FOMC Briefing on Monetary Policy Alternatives

Brian Madigan
August 10, 2004
Exhibit 1
Financial Market Developments

**Bond Yields**
- Daily
- Ten-year A corporate
- Ten-year Treasury
- June FOMC

**Equity Prices**
- Daily
- Nasdaq
- S&P 500
- June FOMC
- Index: 12/31/03 = 100

**Expected Federal Funds Rates**
- Percent
- June 29, 2004
- August 9, 2004

**Implied Probability of Policy Moves at the August FOMC Meeting**
- Percent
- No change
- +50 b.p.
- June 30, 2004
- August 9, 2004

*Estimates from federal funds and Eurodollar futures, with an allowance for term premia and other adjustments.

*Risk-neutral probabilities based on options on federal funds futures.

Results of Dealer Survey

- All the dealers expect the FOMC to tighten policy by 25 basis points today.
- All the dealers expect the risk assessment for growth and inflation to remain balanced.
- Most dealers expect the statement will retain the "measured" language.

*Based on federal funds futures rates at the close of trading. Estimates assume a 1.0 basis point per month term premium and zero probability of intermeeting moves.
Exhibit 2
The Case For Unchanged Policy

Change in Payroll Employment

Staff Real GDP Forecast

<table>
<thead>
<tr>
<th>Year</th>
<th>June Greenbook</th>
<th>August Post Emp. Rpt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td>2004:H1</td>
<td>4.6</td>
<td>3.8</td>
</tr>
<tr>
<td>H2</td>
<td>5.0</td>
<td>3.9</td>
</tr>
<tr>
<td>2005</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Staff Output Gap Forecast

Staff Inflation Forecast (August Greenbook)

<table>
<thead>
<tr>
<th>Year</th>
<th>Core PCE</th>
<th>Overall PCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td>2004:H1</td>
<td>2.0</td>
<td>3.3</td>
</tr>
<tr>
<td>H2</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>2005</td>
<td>1.5</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Inflation Expectations

*Based on a comparison of the TIPS yield curve to an estimated nominal off-the-run Treasury yield curve. Final observation is August 9, 2004.
Exhibit 3
The Case For Tighter Policy

Range of Estimated Equilibrium Real Rates

Note. The shaded range represents the maximum and the minimum values each quarter of four estimates of the equilibrium real federal funds rate. A four-quarter moving average of core PCE inflation is used as a proxy for inflation expectations. Historical average for 1964Q1-2004Q2.

Values from Policy Rules and Futures Markets

Note. The shaded range represents the maximum and the minimum values each quarter of the prescriptions from five estimated policy rules based on the output gap and core PCE inflation.

Rationale for Alternative C (+50 b.p.)

- Negative real federal funds rate.
- Financial conditions mostly supportive of growth.
- Economic activity likely to accelerate.
- Risks to inflation expectations and inflation.

Rationale for Alternative B (+25 b.p.)

- Inflation expectations contained.
- Recent data suggests policy firming can be measured.
- Projected persistence of slack.
- Market expects a 25-basis-point hike today.
## Third Revision of Table 1: Alternative Language for the August FOMC Announcement

<table>
<thead>
<tr>
<th>Policy Decision</th>
<th>June FOMC</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 1-1/4 percent.</td>
<td>The Federal Open Market Committee decided today to raise its target for the federal funds rate at 1-1/4 percent.</td>
<td>The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 1-1/2 percent.</td>
<td>The Federal Open Market Committee decided today to raise its target for the federal funds rate by 50 basis points to 1-3/4 percent.</td>
<td></td>
</tr>
<tr>
<td><strong>2.</strong> The Committee believes that, even after this action, the stance of monetary policy remains accommodative and, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.</td>
<td>The Committee believes that the accommodative stance of monetary policy, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.</td>
<td>[Unchanged]</td>
<td>The Committee continues to believe that robust underlying growth in productivity is providing ongoing support to economic activity.</td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong> The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid pace and labor market conditions have improved.</td>
<td>The evidence accumulated over the intermeeting period indicates a moderation in output growth and some slowing in the pace of improvement in labor market conditions.</td>
<td>In recent months, output growth has moderated and the pace of improvement in labor market conditions has slowed. This softness likely owes importantly to the substantial rise in energy prices. The economy nevertheless appears poised to resume a stronger pace of expansion going forward.</td>
<td>The evidence accumulated over the intermeeting period indicates that output growth has moderated but appears poised to resume a stronger pace going forward.</td>
<td></td>
</tr>
<tr>
<td><strong>4.</strong> Although incoming inflation data are somewhat elevated, a portion of the increase in recent months appears to have been due to transitory factors.</td>
<td>Recent inflation data have been somewhat elevated, though a portion of the rise in prices evidently reflects transitory factors.</td>
<td>Inflation has been somewhat elevated this year, though a portion of the rise in prices evidently reflects transitory factors.</td>
<td>Although a portion of the rise in inflation this year appears to have been due to transitory factors, continuing and substantial increases in energy prices are putting persistent upward pressure on costs and overall prices.</td>
<td></td>
</tr>
<tr>
<td><strong>5.</strong> The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters are roughly equal.</td>
<td>[Unchanged]</td>
<td>[Unchanged]</td>
<td>In current circumstances, the Committee believes that the existing degree of policy accommodation, if sustained over the next few quarters, could foster economic growth that is more likely to be above than below its long-run sustainable pace. Similarly, with respect to the Committee's goal of price stability, such an unchanged policy stance implies greater risks to the upside than the downside.</td>
<td></td>
</tr>
<tr>
<td><strong>6.</strong> With underlying inflation still expected to be relatively low, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.</td>
<td>With underlying inflation still expected to be relatively low, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to promote price stability and sustainable growth.</td>
<td>[Unchanged]</td>
<td>[None]</td>
<td></td>
</tr>
</tbody>
</table>