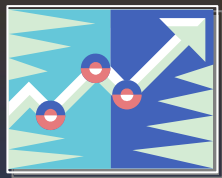


# Cost Trends 1997-2006

Ananth Prasad, P.E., Chief Engineer

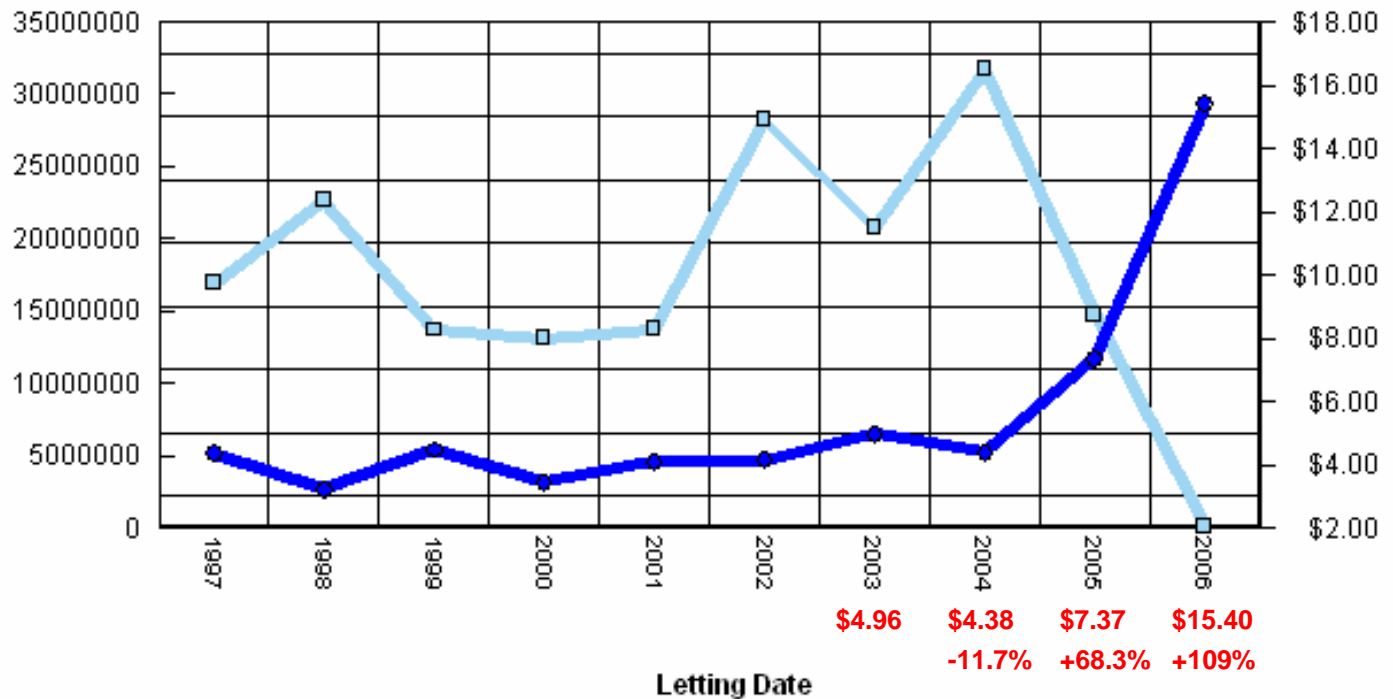
Produced by State Estimates Office

Updated March 2006



# Earthwork

Cost Trends Graph Including Current Let Contracts  
Quantity and Average Price

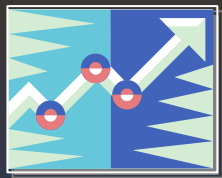


Pay Items:

120-1  
thru  
120-6

2120-1  
thru  
2120-6

NOTE: Lump Sum, Design/Build Contracts not included in this graph



# Asphalt –Structural and FC Tonnage Items

**Pay Items:**

331-1  
thru  
331-2

334-1-1  
thru  
334-1-25

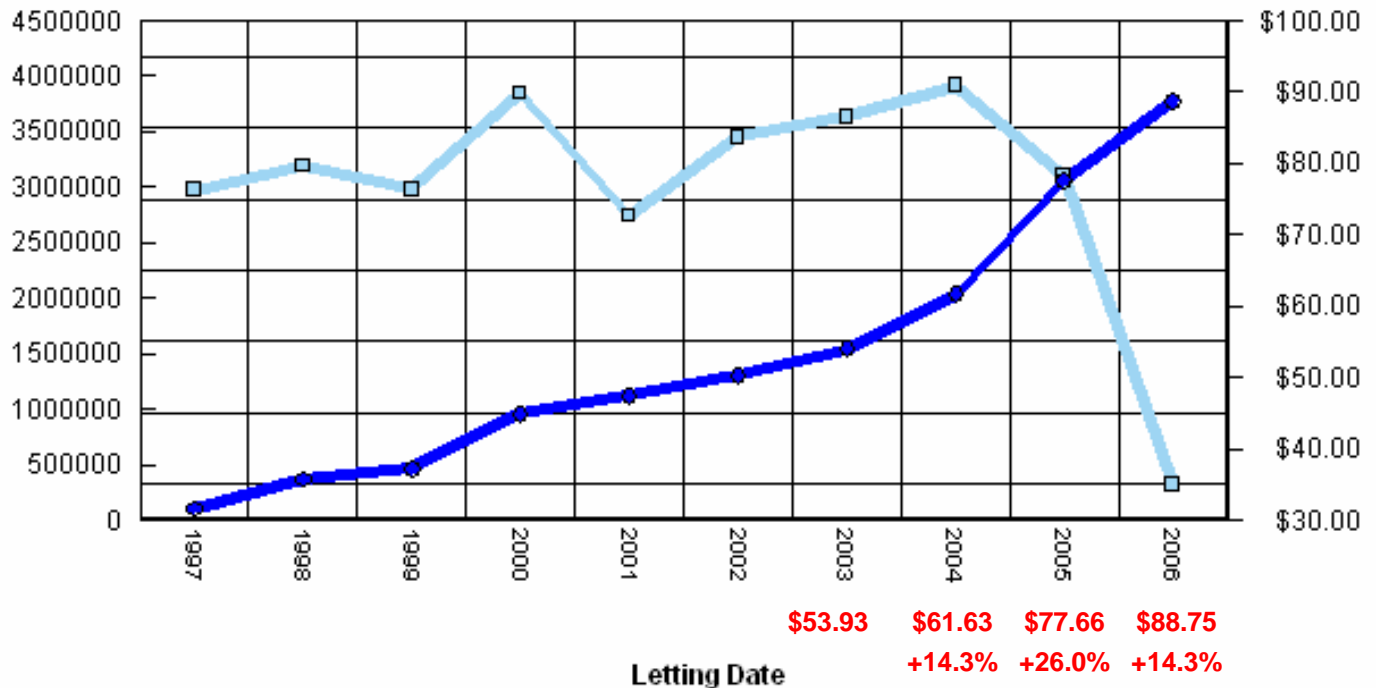
337-7-2  
thru  
337-7-22

2331-1  
thru  
2331-2

2334-1-1  
thru  
2334-1-25

2337-7-2  
thru  
2337-7-22

**Cost Trends Graph Including Current Let Contracts**  
Quantity and Average Price



NOTE: Lump Sum, Design/Build Contracts not included in this graph

# Structural Concrete

Pay Items:

400-2-4  
thru  
400-2-5

400-2-24  
thru  
400-2-25

400-4-4  
thru  
400-4-5

400-4-24  
thru  
400-4-25

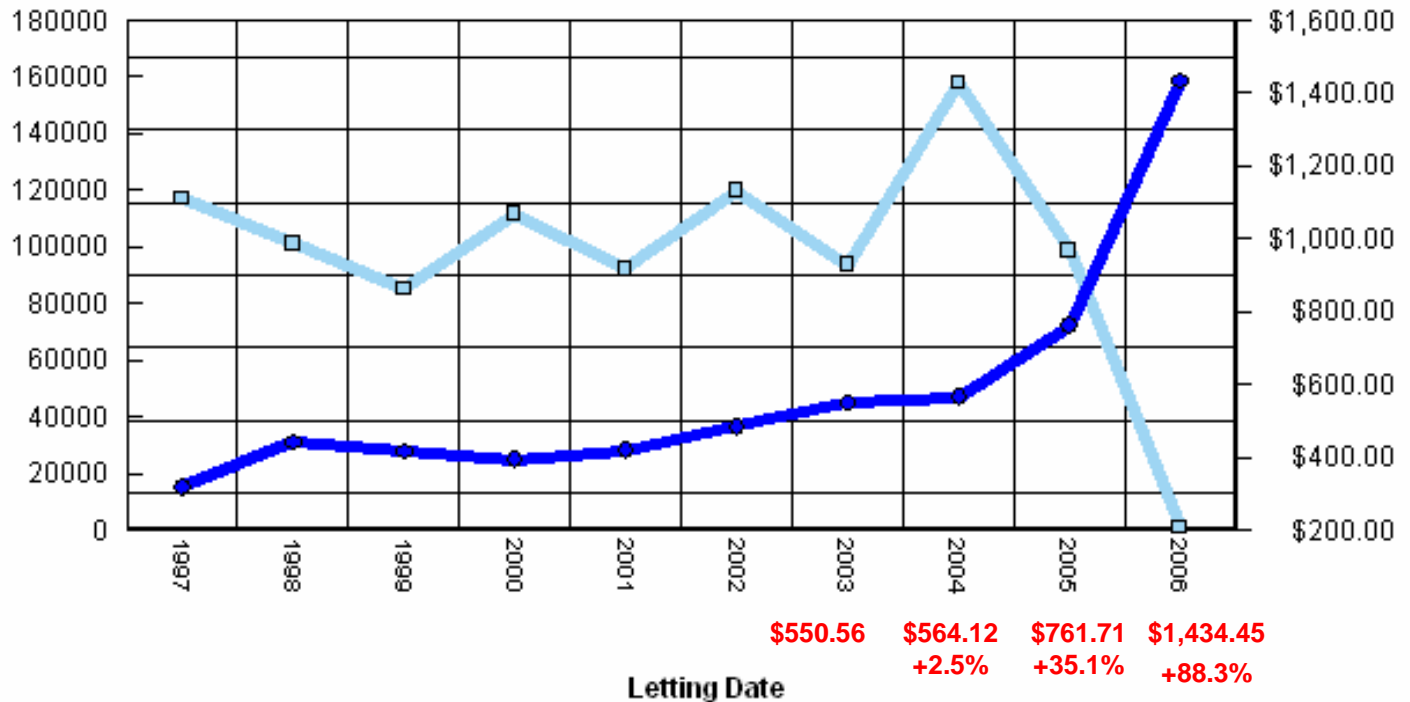
2400-2-4  
thru  
2400-2-5

2400-2-24  
thru  
2400-2-25

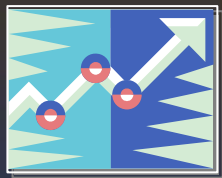
2400-4-4  
thru  
2400-4-5

2400-4-24  
thru  
2400-4-25

**Cost Trends Graph Including Current Let Contracts**  
Quantity and Average Price



NOTE: Lump Sum, Design/Build Contracts not included in this graph



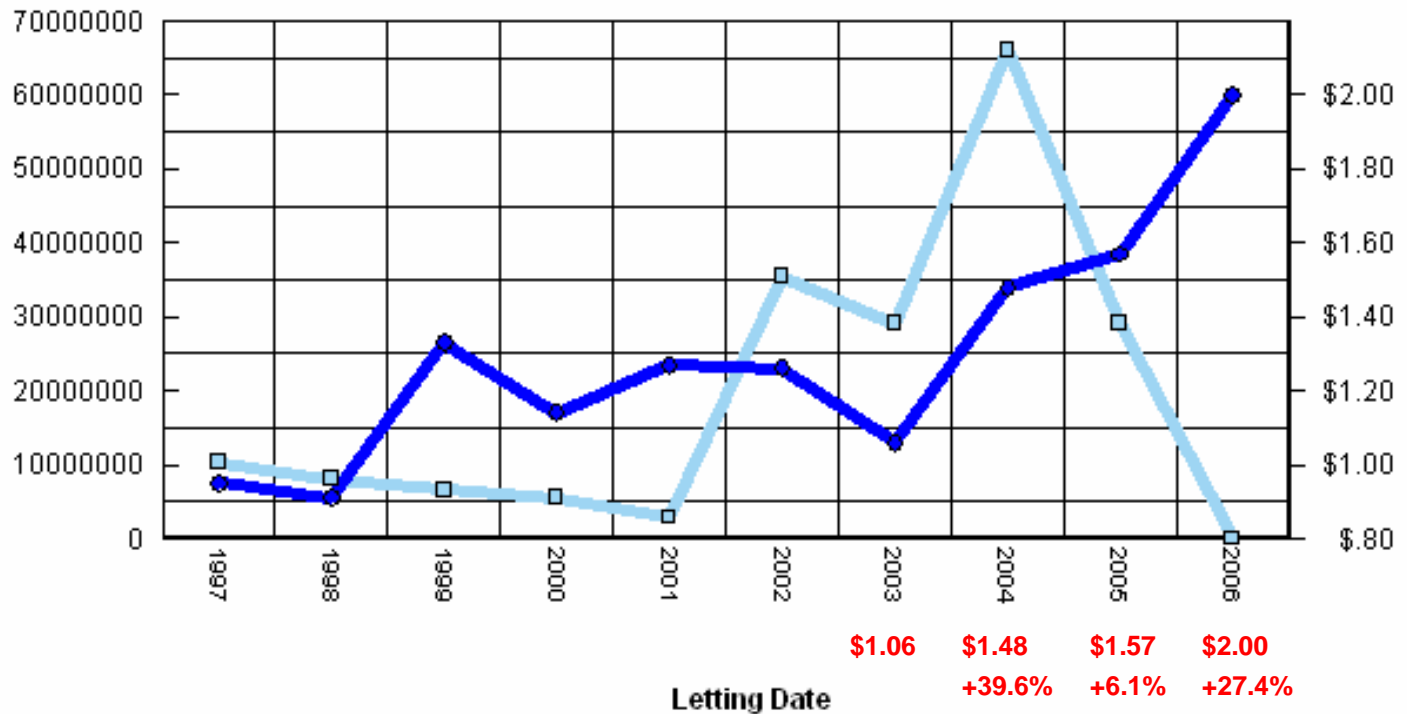
# Structural Steel

**Cost Trends Graph Including Current Let Contracts**  
Quantity and Average Price

Pay Items:

460-2-1  
thru  
460-2-2

2460-2-1  
thru  
2460-2-2



NOTE: Lump Sum, Design/Build Contracts not included in this graph

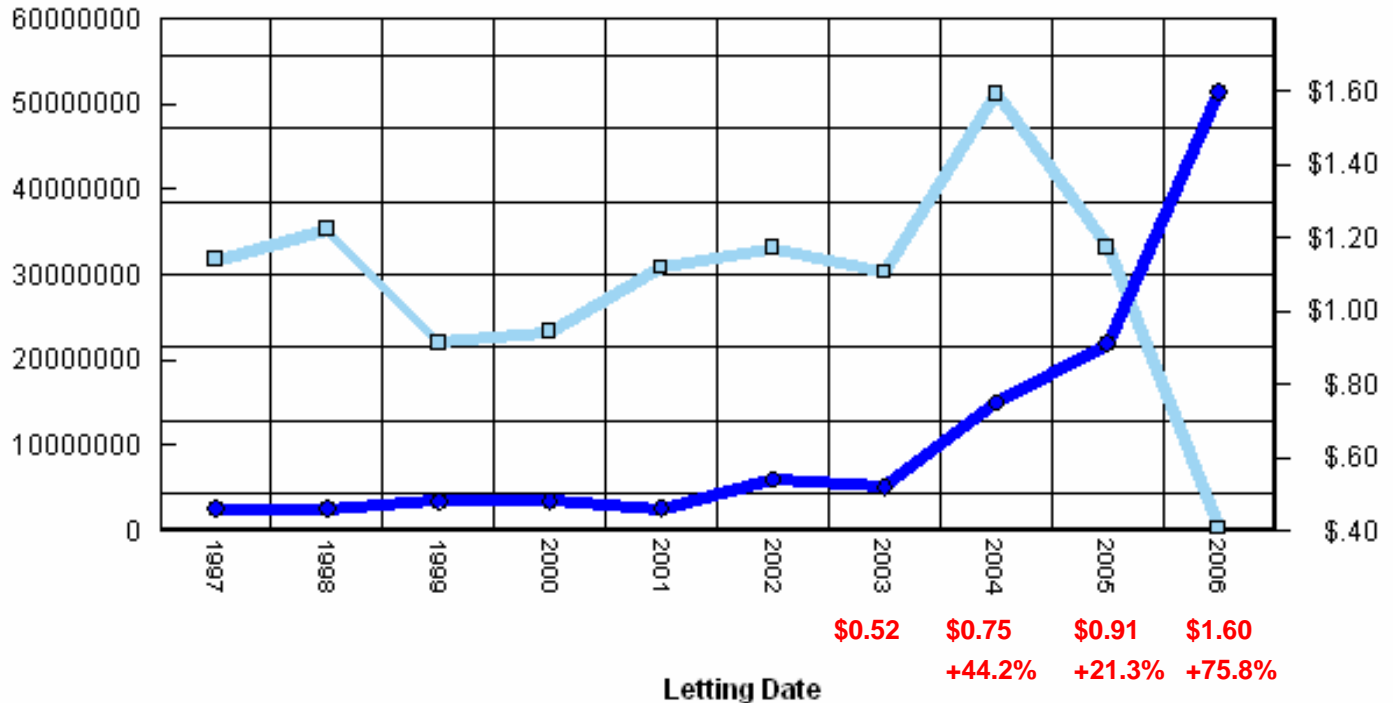
# Reinforcing Steel

Cost Trends Graph Including Current Let Contracts  
Quantity and Average Price

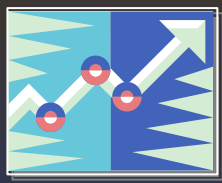
Pay Items:

415-1-1  
thru  
415-1-9

2415-1-1  
thru  
2415-1-9

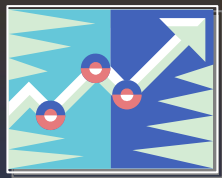


NOTE: Lump Sum, Design/Build Contracts not included in this graph



# Summary – Weighted Average Prices FDOT

Pay Item Group	Unit	2003	2004	Change	2005	Change	2006	Change
<b>Earthwork</b>	CY	\$4.96	\$4.38	-11.7%	\$7.37	+68.3%	\$15.40	+109%
<b>Asphalt</b> (Tonnage Items)	TN	\$53.93	\$61.63	+14.3%	\$77.66	+26.0%	\$88.75	+14.3%
<b>Concrete</b> (Structural)	CY	\$550.5 6	\$564.12	+2.5%	\$761.7 1	+35.1%	\$1,434.4 5	+88.3%
<b>Steel</b> (Structural)	LB	\$1.06	\$1.48	+39.6%	\$1.57	+6.1%	\$2.00	+27.4%
<b>Steel</b> (Reinforcing)	LB	\$0.52	\$0.75	+44.2%	\$0.91	+21.3%	\$1.60	+75.8%



# Comparison of 2005 Prices FDOT vs Other Agencies

Pay Item Group	Unit	FDOT	OOCEA	JTA	Leon Co	Orange Co
<b>Earthwork</b>	CY	\$7.32	\$12.64	\$7.00	\$10.21	\$8.42
<b>Asphalt</b> (Tonnage Items)	TN	\$77.57	\$90.75	\$66.46	\$65.26	\$82.09
<b>Concrete</b> (Structural)	CY	\$761.71	\$1,383.11	\$540.57	\$510.00	\$831.35
<b>Steel</b> (Structural)	LB	\$1.57	\$2.68	-	-	-
<b>Steel</b> (Reinforcing)	LB	\$0.91	\$0.97	\$0.73	\$0.71	-

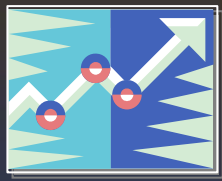
# Summary – Weighted Average

## Prices

### Orlando-Orange County

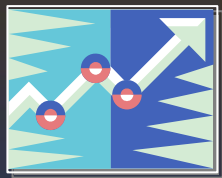
#### Expressway

Pay Item Group	Unit	2003	2004	Change	2005	Change
<b>Earthwork</b>	CY	\$9.39	\$7.46	-20.6%	\$12.64	+69.4%
<b>Asphalt</b> (Tonnage Items)	TN	\$71.84	\$65.47	-8.9%	\$90.75	+38.6%
<b>Concrete</b> (Structural)	CY	\$565.18	\$660.32	+16.8%	\$1,383.11	+109%
<b>Steel</b> (Structural)	LB	-	-	-	\$2.68	-
<b>Steel</b> (Reinforcing)	LB	\$0.54	\$0.90	+66.7%	\$0.97	+7.8%



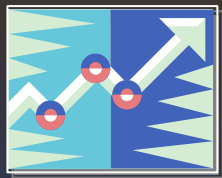
# Summary – Weighted Average Prices Leon County

Pay Item Group	Unit	2003	2004	Change	2005	Change
<b>Earthwork</b>	CY	\$8.26	\$3.86	-11.7%	\$10.21	+67.1%
<b>Asphalt</b> (Tonnage Items)	TN	\$77.43	\$45.00	+14.3%	\$65.26	+25.9%
<b>Concrete</b> (Structural)	CY	-	-	-	\$510.00	-
<b>Steel</b> (Structural)	LB	-	-	-	-	-
<b>Steel</b> (Reinforcing)	LB	-	-	-	\$0.71	-



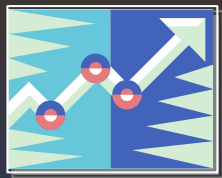
# Washington State

Work Group	Unit	2004	2005 (1 <sup>st</sup> Qtr)	Change	2005 (2nd Qtr)	Change
Roadway Excavation	CY	\$5.33	\$3.88	-27.2%	\$10.53	+171%
Hot Mix Asphalt	TN	\$41.00	\$39.67	+16.9%	\$47.94	+20.9%
Concrete (Structural)	CY	\$325.00	\$342.30	+5.32%	\$410.95	+20.1%
Steel (Structural)	LB	\$5.15	\$5.76	+11.8	\$0.84	-85.4%
Steel (Reinforcing)	LB	\$0.90	\$1.02	+13.3	\$0.79	-22.6%



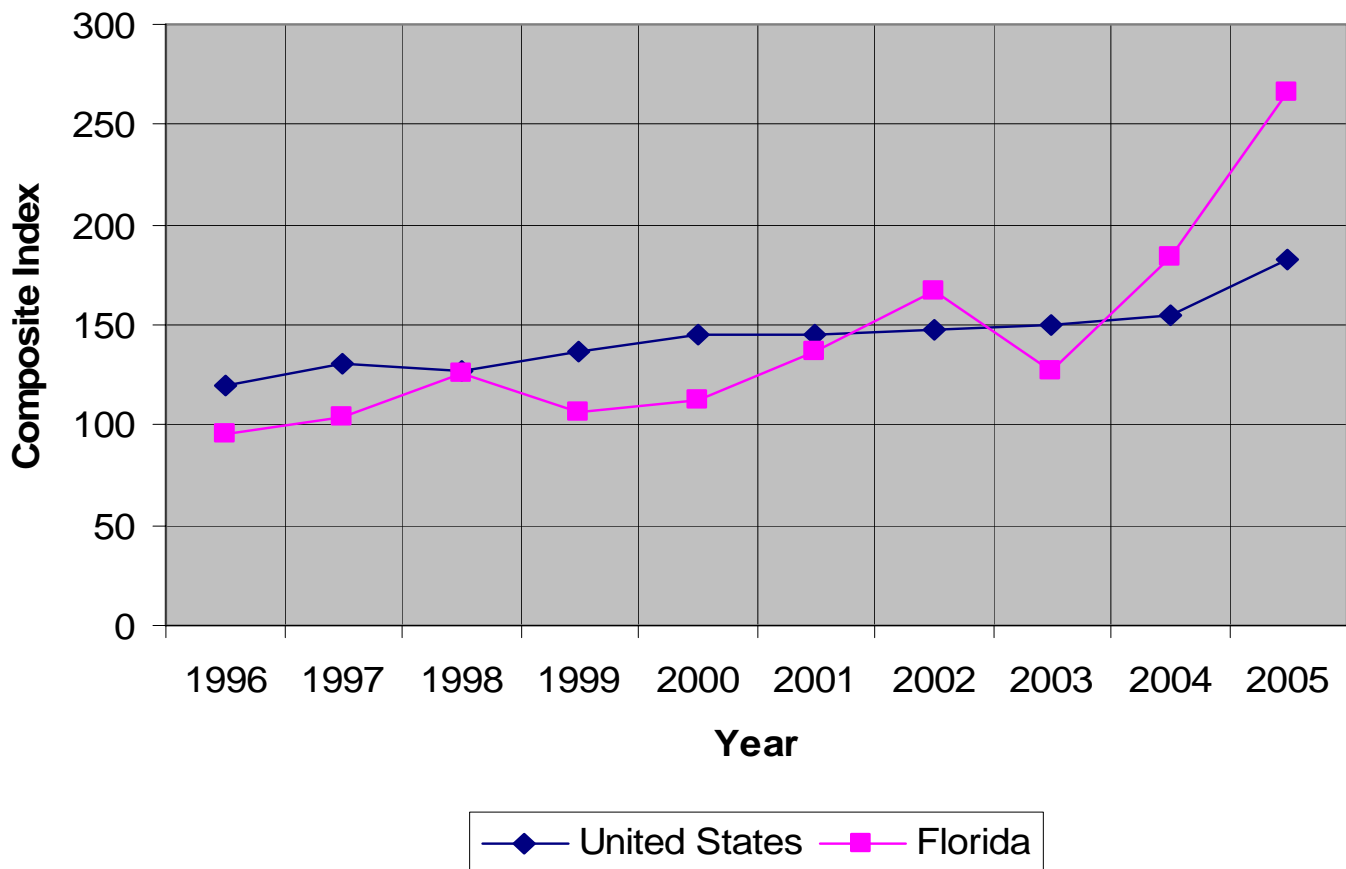
# California

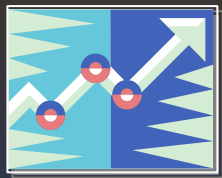
Work Group	Unit	2003	2004	Change	2005 (3 <sup>rd</sup> Qtr)	Change
Roadway Excavation	CY	\$5.05	\$13.11	+160%	\$11.81	-9.92%
Hot Mix Asphalt	TN	\$48.35	\$53.55	+10.8%	\$74.25	+38.7%
Concrete (Structural)	CY	\$362.75	\$399.64	+10.2%	\$816.30	+104%
Steel (Structural)	LB	\$1.71	\$5.39	+215%	\$9.88	+83.3%
Steel (Reinforcing)	LB	\$0.60	\$0.95	+58.3%	\$1.20	+26.3%



# Trends – National vs. Florida

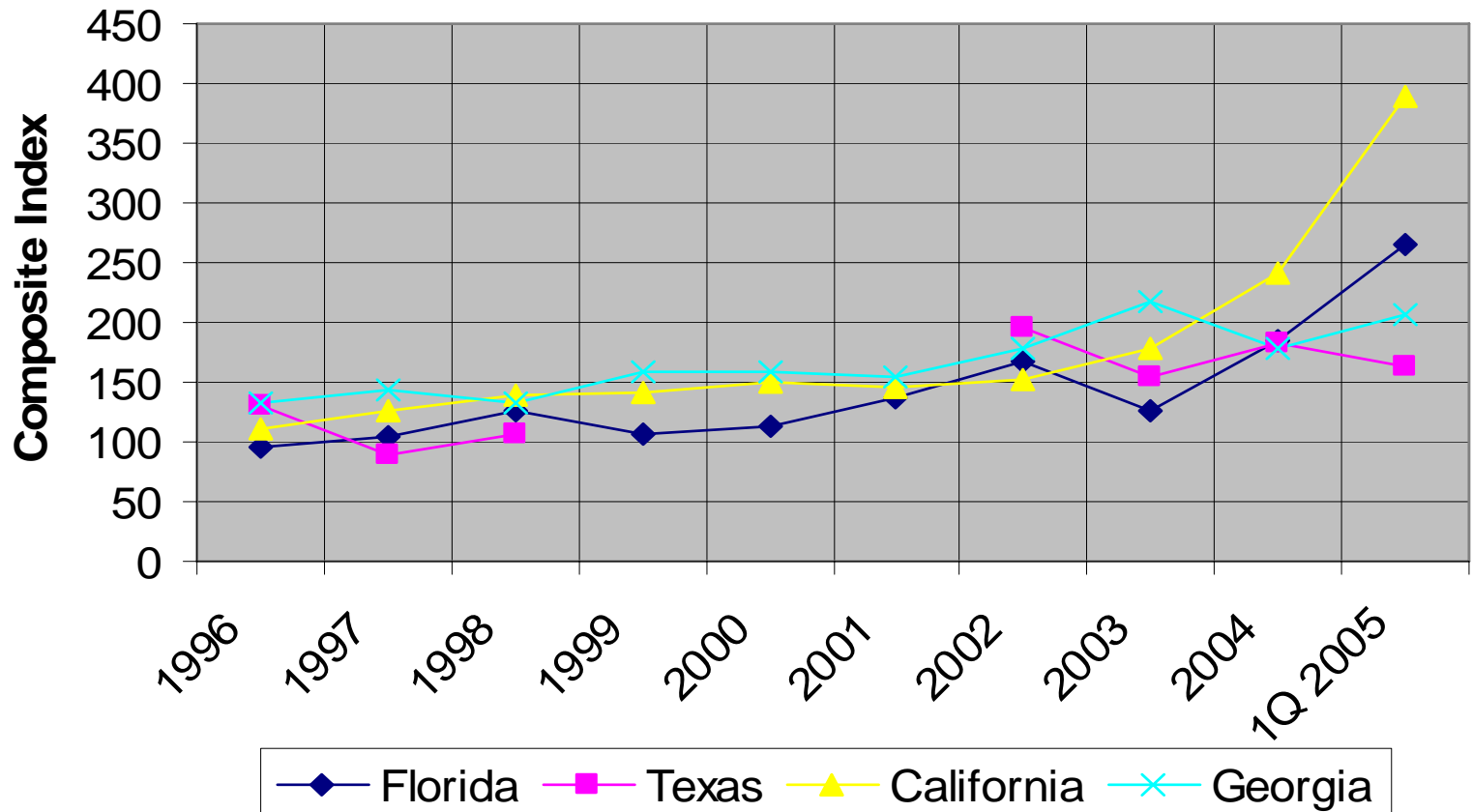
## Price Trends for Federal-Aid Highway Construction

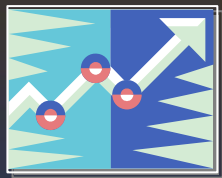




# Trends - Other Comparable States

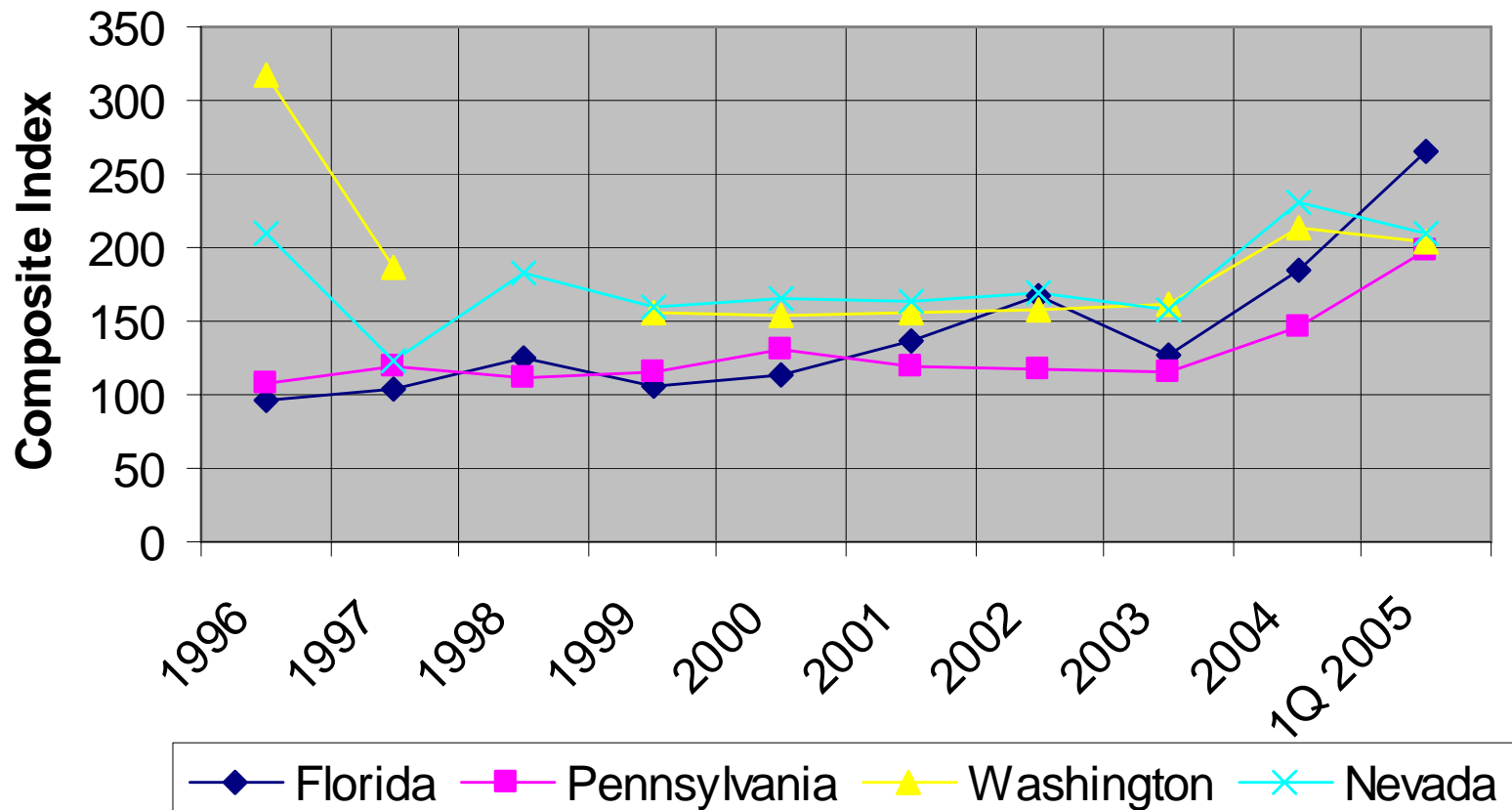
## Price Trends for Federal-Aid Highway Construction

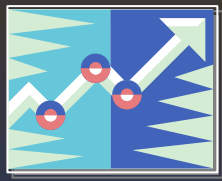




# Trends - Other Comparable States

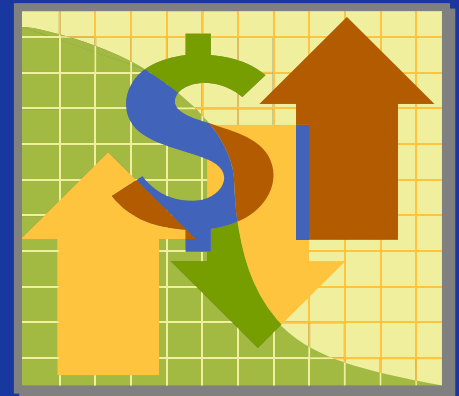
## Price Trends for Federal-Aid Highway Construction





# FHWA Price Trends

- Price Trends over 10 years:
  - National average = +2.97% per year
  - Florida average = +10.2% per year
- Price Trends 2003 – 2004:
  - National average = +3.09%
  - Florida average = +44.9%
- Price Trends 2004 – 2005:
  - National average = +0.97%
  - Florida average = +44.7%



# MONTHLY BID ANALYSIS - FOR FY 05/06

## SUMMARY THROUGH FEBRUARY LETTING

INCLUDES ALL PROJECTS LET BY THE DEPARTMENT THROUGH FEBRUARY 2006 *(Projects rejected and deferred to 06/07 have been removed)*

THIS REPORT COMPARES THE "APPARENT LOW BID DOLLAR AMOUNT" TO THE "JULY ADOPTED DOLLAR AMOUNT"

	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>		<u>Adopted</u>	<u>Low Bid</u>	<u>Over/(-)Under</u>	<u>% of Chg</u>	
Low Bids	365.2	175.8	188.1	98.3	57.9	111.8	142.3	116.8										
# Projects	74	61	42	35	19	61	49	47										
D1	1.4	0.5	1.6	4.2	2.4	13.2	7.2	1.7						103.8	136.0	32.2	31.0%	
D2	0.1	(1.5)	(0.1)	4.5	(0.1)	(0.2)	4.0	3.4						136.1	146.2	10.1	7.4%	
D3	11.6	3.3	3.9	2.0	(4.5)	2.6	3.7	12.7						116.1	151.4	35.3	30.4%	
D4	3.4	5.0	11.2	0.4	0.0	3.0	3.8	6.2						168.4	201.4	33.0	19.6%	
D5	(0.9)	0.4	5.5	1.7	0.0	0.6	3.9	1.7						287.5	300.4	12.9	4.5%	
D6	0.2	0.0	0.1	0.0	(0.8)	2.6	2.3	(0.7)						37.8	41.5	3.7	9.8%	
D7	(1.1)	2.1	4.0	11.2	0.0	(0.3)	0.3	4.6						144.2	165.0	20.8	14.4%	
TPK	2.2	(0.9)	18.4	0.0	7.1	(0.6)	0.2	0.0						87.9	114.3	26.4	30.0%	
<b>TOTALS</b>	16.9	8.9	44.6	24.0	4.1	20.9	25.4	29.6	0.0	0.0	0.0	0.0		<b>\$1,081.8</b>	<b>\$1,256.2</b>	<b>\$174.4</b>	<b>16.1%</b>	

# CONTRACT LETTINGS

## (Class 1 Contracts only)

Fiscal Year	Number of Contracts	Avg Number of Bidders Per Contract	Contracts With No Bid	Contracts with One Bid	Contracts with Two Bids	Percent of Contracts w/ 0, 1 or 2 Bids
2002/2003	243	4.3	0	7	27	14.0%
2003/2004	238	3.9	0	20	43	26.5%
2004/2005	240	3.5	4	11	51	27.5%
2005/2006*	180	2.9	3	14	64	45.0%
*Data thru Feb 2006 Letting						

# Summit Recommendations

- Short Term (Immediate to within a year)
  - Refine Project Scoping Process.
  - Review and Refine Awards Criteria.
  - Increase Contingency Reserve in the Tentative Work Program.
  - Increase Construction Inflation Rates.
  - Optimize Night work.
  - Alternative Contracting – base bid with Options.

# Summit Recommendations

- Short Term (Immediate to within a year)
  - Modify bonding and prequalification requirements.
  - Flexible Design/Better Engineering to reduce costs.
  - Additional Price Indexes for construction materials.
  - Simplify Construction Contract Administration Processes.

# Summit Recommendations

- Short Term (Immediate to within a year)
  - Break contracts into multiple smaller contracts to increase competition.
  - Attract more competition
  - Develop leading indicators to determine best letting opportunities.

# Summit Recommendations

- Long Term (Within 2 to 5 years)
  - Conduct a Work Force Study and expand labor Force.
  - Conflict in needs between freight and people.
  - To better manage risk associated with materials availability.
  - Flexible Design/Better Engineering to reduce costs.
  - Not require everything to FHWA Standards.
  - Right-of-Way Opportunities and providing borrow pits.
  - Attract more competition.

Any  
Questions?