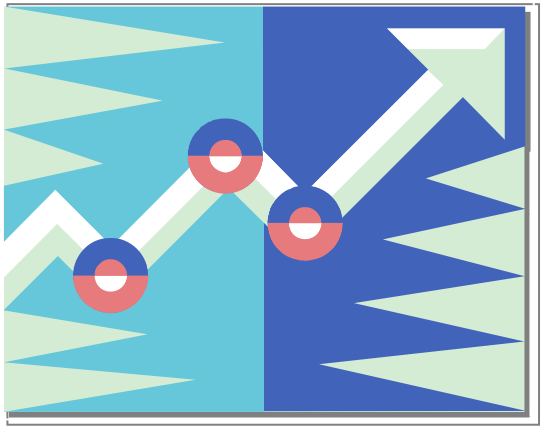
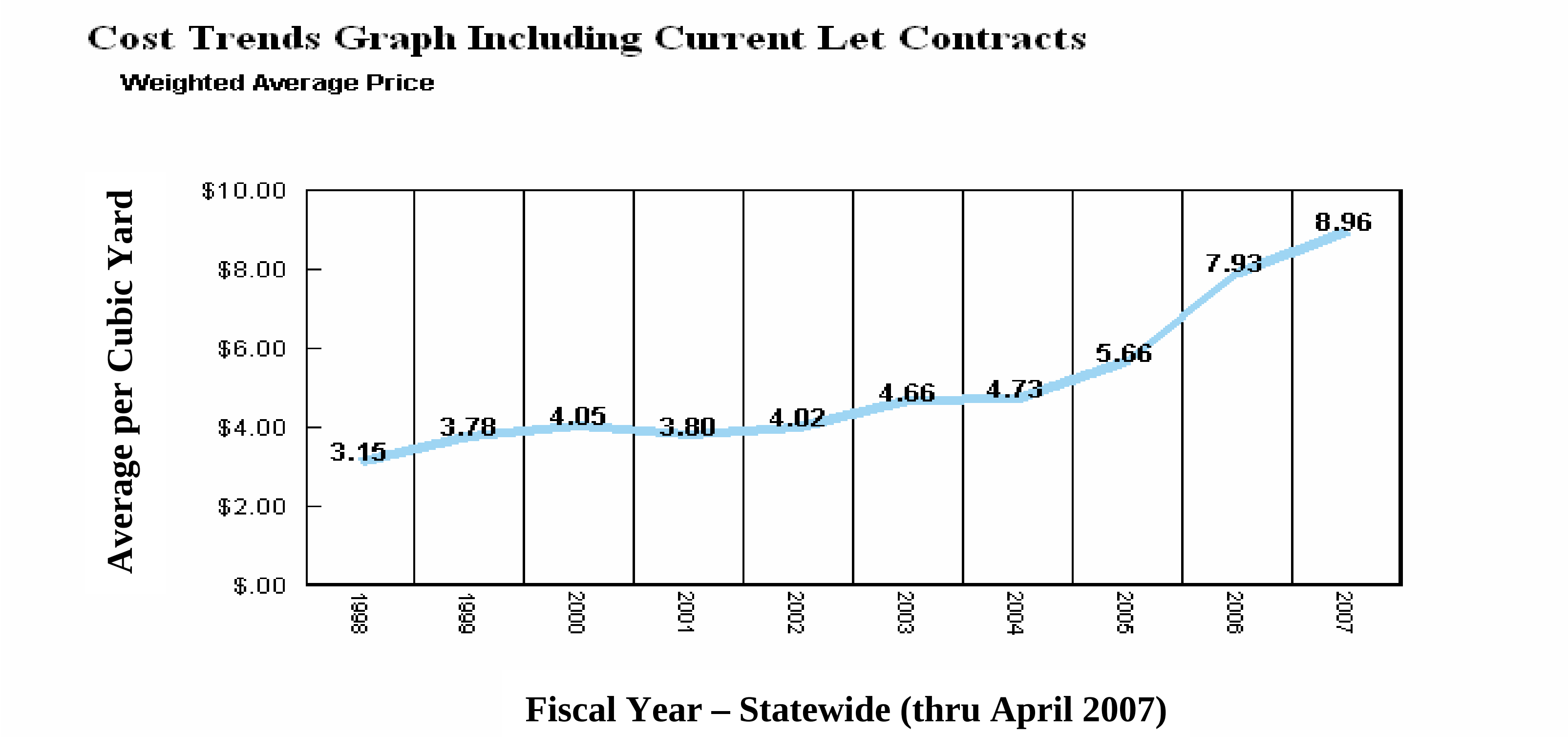


Rising Construction Costs
The Florida Story

Lora Hollingsworth, P.E.
Director, Office of Design
Florida Department of Transportation

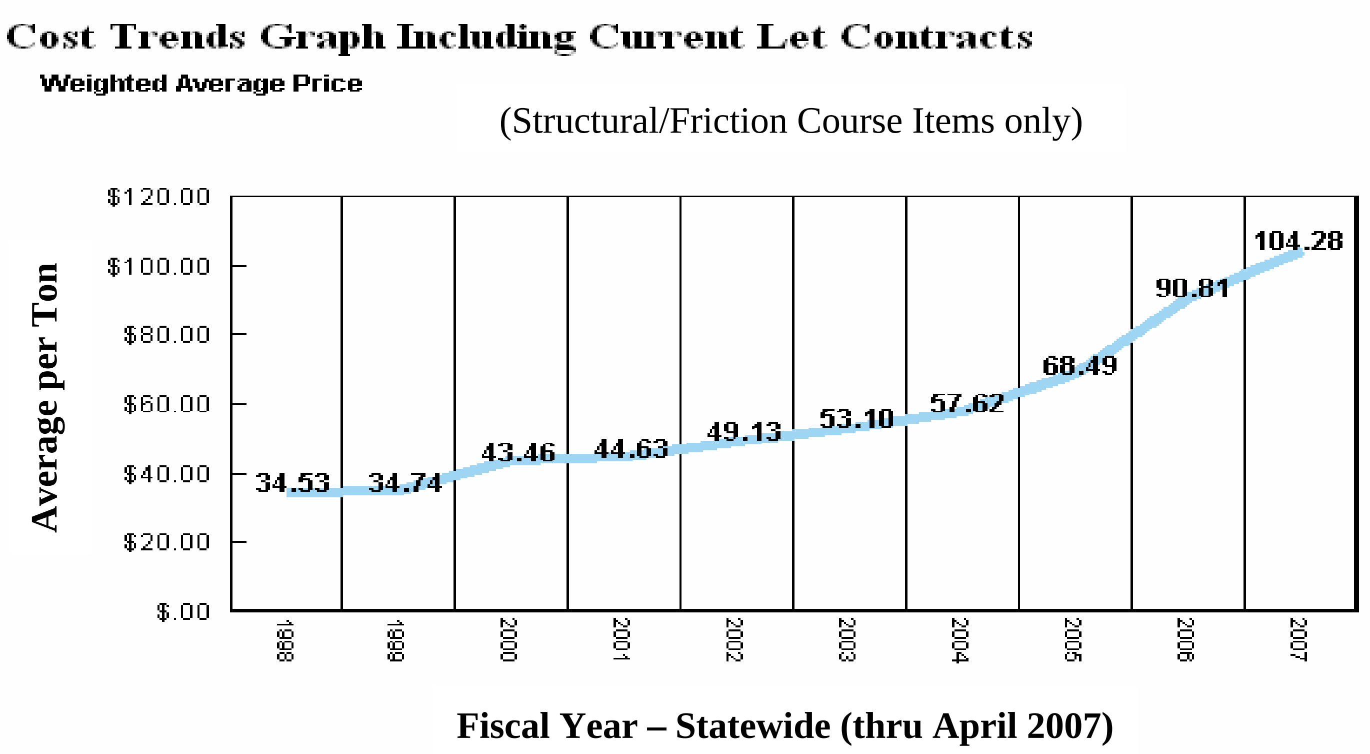
Produced by Specifications and Estimates Office
Updated May 2007

Earthwork



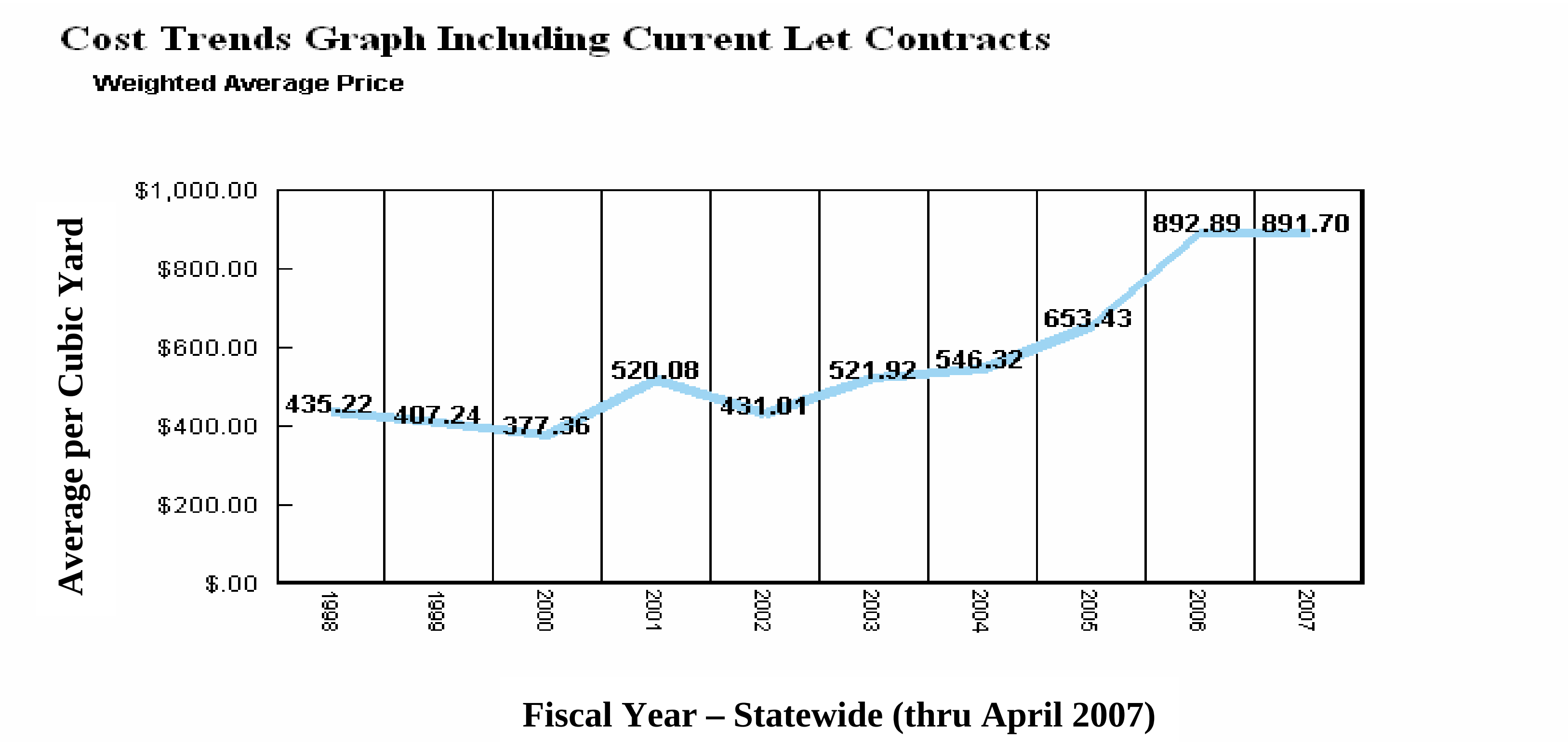
NOTE: Lump Sum, Design/Build Contracts not included in this graph

Asphalt



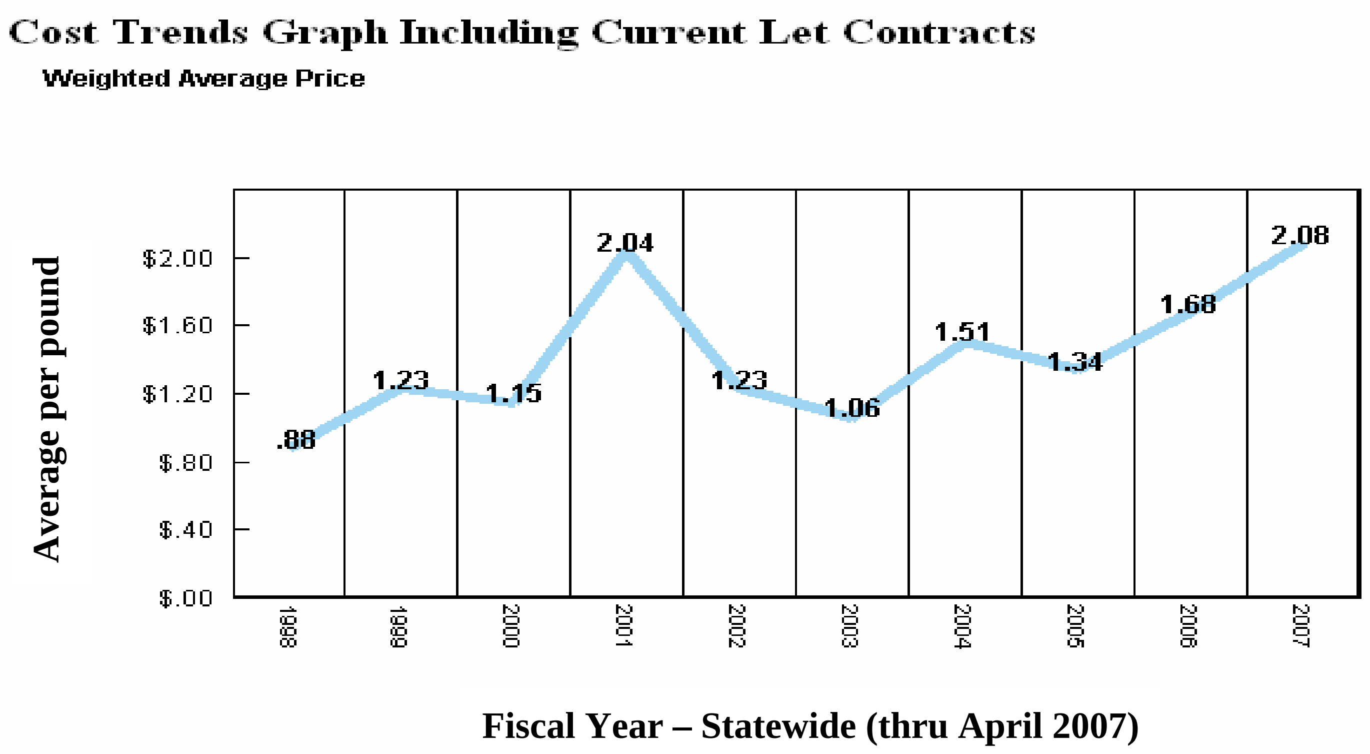
<u>NOTE: Lump Sum, Design/Build Contracts not included in this graph</u>

Structural Concrete



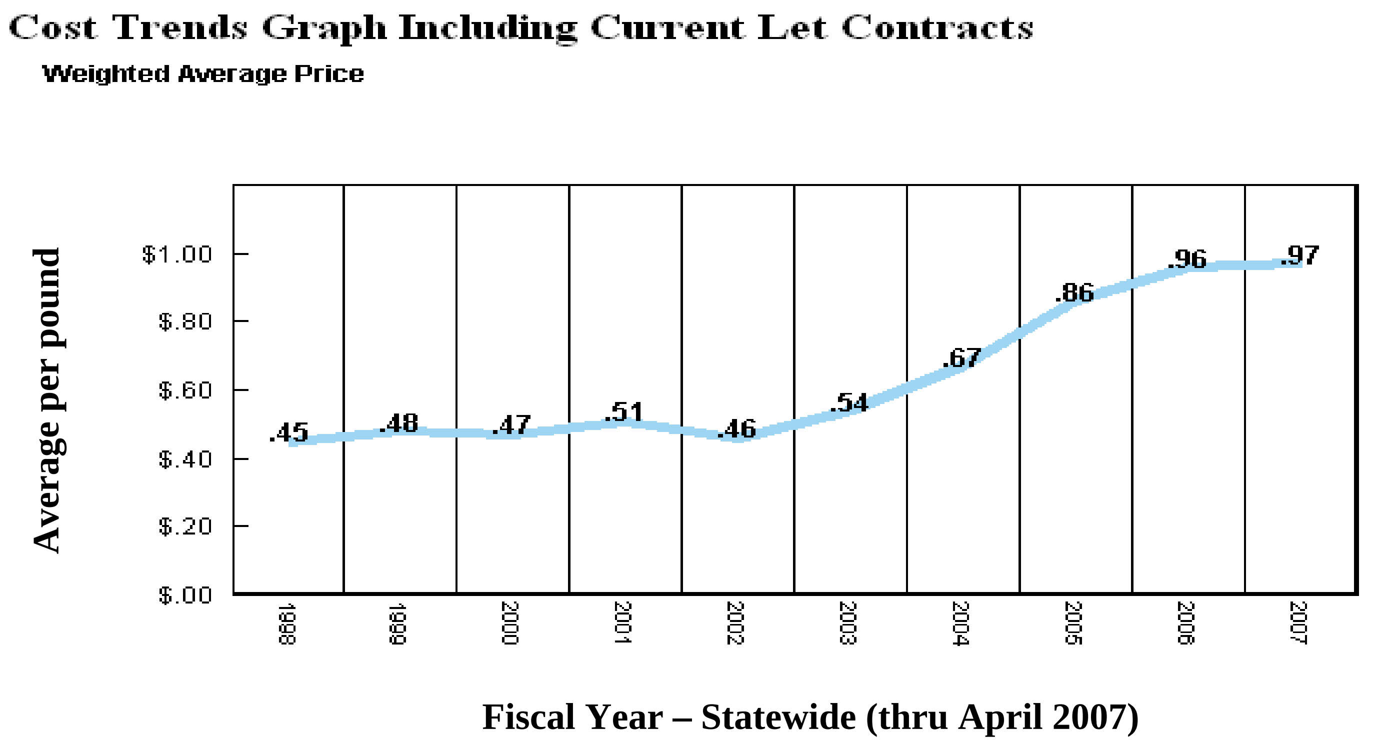
NOTE: Lump Sum, Design/Build Contracts not included in this graph

Structural Steel



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

Reinforcing Steel



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

Summary

Statewide Weighted Average Prices (Fiscal Year)

Pay Item Group	Unit	FY04	FY05	Change FY05/FY04	FY06	Change FY06/FY05	FY07 (Jul-Apr)	Change FY07/FY06
Earthwork	CY	$4.73	$5.66	+19.7%	$7.93	+40.1%	$8.96	-6.31%
Asphalt	TN	$57.62	$68.49	+18.9%	$90.81	+32.6%	$104.28	+14.8%
Structural Concrete	CY	$546.32	$653.43	+19.6%	$892.89	+36.7%	$891.70	-0.13%
Structural Steel	LB	$1.51	$1.34	-11.3%	$1.68	+25.4%	$2.08	+23.8%
Reinforcing Steel	LB	$0..67	$0.86	+28.4%	$0.96	+11.6%	$0.97	+1.04%

MONTHLY BID ANALYSIS - FOR FY 04/05

SUMMARY THROUGH JUNE LETTING

INCLUDES ALL PROJECTS LET BY THE DEPARTMENT THROUGH JUNE 2005 *(Projects rejected and deferred to 05/06 have been removed)*

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

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Adopted	Low Bid	Over/(-)Under	% of Chg
Low Bids	410.7	202.0	7.8	186.1	281.6	118.4	225.5	126.8	514.5	218.2	97.8	501.2				
# Projects	64	36	11	45	69	42	50	41	56	63	51	61				
D1	0.0	1.1	0.0	5.3	0.2	(0.9)	7.7	2.5	16.5	1.3	0.9	50.6	216.1	301.3	85.2	39.0%
D2	(16.2)	(0.1)	(2.0)	0.0	6.1	(2.9)	(2.0)	0.1	(15.2)	10.2	1.4	0.2	470.9	450.4	(20.5)	(4.0)%
D3	0.4	0.7	0.0	(0.7)	2.7	1.2	0.4	(0.2)	(10.3)	0.1	3.7	25.2	383.2	406.4	23.2	6.0%
D4	2.0	0.0	0.0	1.4	(1.6)	0.7	1.2	9.1	3.7	(0.7)	8.7	1.2	186.3	209.5	23.2	12.0%
D5	(3.8)	0.1	0.0	(0.6)	10.0	(6.4)	(2.9)	(1.4)	(1.3)	(1.3)	(2.9)	0.3	333.6	324.2	(9.4)	(3.0)%
D6	0.3	60.2	0.0	8.3	0.6	1.9	3.7	5.8	1.6	9.4	5.4	10.3	356.2	463.7	107.5	30.0%
D7	(2.2)	1.0	0.0	0.1	1.3	(0.1)	0.6	(7.1)	(2.5)	25.9	(2.0)	(4.1)	186.8	199.5	12.7	7.0%
TPK	3.1	7.0	0.0	2.4	0.0	(4.2)	42.4	0.0	5.0	0.5	0.0	33.6	445.8	535.6	89.8	20.0%
TOTALS	(16.4)	70.0	(2.0)	16.2	19.3	(10.7)	51.1	8.8	(2.5)	45.4	15.2	117.3	$2,578.9	$2,890.6	$311.7	12.0%

MONTHLY BID ANALYSIS - FOR FY 05/06

SUMMARY THROUGH JUNE LETTING

INCLUDES ALL PROJECTS LET BY THE DEPARTMENT THROUGH JUNE 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"

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Adopted	Low Bid	Over/(-)Under	% of Chg
Low Bids	365.2	175.8	188.1	95.2	57.9	111.8	132.8	116.8	122.3	269.9	93.8	347.1				
# Projects	74	61	42	34	19	61	47	47	53	66	48	68				
D1	1.4	0.5	1.6	4.2	2.4	13.2	7.2	1.7	4.2	1.3	10.2	7.7	148.2	203.8	55.6	37.5%
D2	0.1	(1.5)	(0.1)	4.5	(0.1)	(0.2)	4.0	3.4	1.1	10.4	(1.5)	1.2	242.4	263.7	21.3	8.8%
D3	11.6	3.3	3.9	2.1	(4.5)	2.6	5.5	12.7	5.3	22.7	0.2	24.7	256.7	346.8	90.1	35.1%
D4	3.4	5.0	11.2	0.4	0.0	3.1	2.3	6.2	(0.8)	5.3	4.6	8.7	222.2	271.6	49.4	22.2%
D5	(0.9)	0.4	5.5	1.7	0.0	0.6	1.8	1.7	2.6	(1.6)	3.5	14.4	343.8	373.5	29.7	8.6%
D6	0.2	0.0	0.1	0.0	(0.8)	2.6	2.3	(0.7)	23.7	4.1	(0.2)	1.1	95.4	127.8	32.4	34.0%
D7	(1.1)	2.1	4.0	9.9	0.0	(0.3)	0.3	4.6	1.0	7.9	0.4	30.9	228.2	287.9	59.7	26.2%
TPK	2.2	(0.9)	18.4	0.0	7.1	(0.6)	0.2	0.0	0.0	(7.4)	(8.6)	13.8	177.4	201.6	24.2	13.6%
TOTALS	16.9	8.9	44.6	22.8	4.1	21.0	23.6	29.6	37.1	42.7	8.6	102.5	**$1,714.3**	**$2,076.7**	**$362.4**	**21.1%**

MONTHLY BID ANALYSIS - FOR FY 06/07

SUMMARY THROUGH APRIL LETTING

INCLUDES ALL PROJECTS LET BY THE DEPARTMENT THROUGH APRIL 2007 **(Projects rejected and deferred to 07/08 have been removed)**

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

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Adopted	Low Bid	Over/(-)Under	% of Chg
	234.2	188.3	363.3	265.9	81.5	186.5	75.3	668.1	197.2	262.3						
# Projects	53	38	47	47	19	45	30	49	37	53						
D1	(2.3)	(2.9)	(3.1)	5.5	(0.1)	(4.3)	(6.3)	5.6	(4.0)	(17.0)			650.5	621.6	(28.9)	(4.4) %
D2	(2.7)	1.1	(36.5)	(14.7)	(0.7)	(3.8)	0.0	(7.6)	(2.3)	1.2			383.2	317.2	(66.0)	(17.2) %
D3	2.4	(1.0)	8.1	1.1	0.0	0.6	(5.8)	(6.3)	(0.8)	1.6			173.0	172.9	(0.1)	(0.1) %
D4	(5.2)	(0.6)	(3.8)	(5.0)	0.0	(6.0)	0.5	(7.9)	(2.6)	0.3			262.7	232.4	(30.3)	(11.5) %
D5	10.1	1.0	27.6	(0.3)	0.0	0.2	(2.7)	0.7	2.0	(3.3)			292.3	327.6	35.3	12.1 %
D6	(0.2)	0.0	(0.3)	2.1	(0.3)	(1.9)	(0.1)	(0.4)	(0.8)	0.0			188.7	186.8	(1.9)	(1.0) %
D7	0.8	(0.8)	1.0	3.6	0.0	1.2	1.8	18.2	20.0	(0.1)			213.1	258.8	45.7	21.4 %
TPK	10.1	(5.5)	3.8	0.0	(5.5)	(37.7)	0.0	2.0	(0.9)	(44.7)			483.7	405.3	(78.4)	(16.2) %
TOTALS	13.0	(8.7)	(3.2)	(7.7)	(6.6)	(51.7)	(12.6)	4.3	10.6	(62.0)	0.0	0.0	$2,647.2	$2,522.6	(124.6)	(4.7) %

Production Management Office - May 4, 2007

Office of Work Program

BID TRENDS

Fiscal Year	Avg Number of Bidders Per Contract	Percent of Contracts w/ 0, 1 or 2 Bids
2002/2003	4.3	14.0%
2003/2004	3.8	26.5%
2004/2005	3.5	27.5%
2005/2006	2.3	46.7%
2006/2007*	3.2	31.7%

*Class 1 Contracts thru April 2007

General Considerations

- Robust economy in Florida
  - Significant population growth
    - In 2004, value of construction put in place per capita in Florida was double the national average and passed California – a State twice its size.
    - 70% of construction activity has been in residential market, whereas the Highway and Bridge construction accounts for only 10% of the market.
  - Residential Market has cooled off
    - How long it will last is unclear

General Considerations

- Inflationary Risks/Uncertainty in escalators
  - Recouping of prior year losses
- Energy Costs (mainly fuel)
  - Fuel Index only addresses consumption in producing output
- Labor Shortages
  - Low unemployment rate and wages
  - Rate of growth in construction employment (7%) is double that of overall
  - Florida was less affected by recession

General Considerations

- Bid Competition
  - Consolidations
  - "Grass is greener on the other side"
- Hurricane rebuilding efforts in Florida and Southeast US
  - Putting strain on supply chains.
    - "Hand to Mouth"

Impacts to Florida's Program

- First impact occurred in FY05/06
  - Rejected 71 contracts because of high bids
    - These were advertised at $600M and bids came in at $977M
    - 28 of these were re-let, deleted or deferred
    - 43 contracts were rolled into FY 06/07 and cost estimates adjusted.

Impacts to Florida's Program

- FY06/07 to date (thru April 2007)
  - Rejected 9 contracts because of high bids
    - These were advertised at $22M and bids came in at $31M
    - 2 of these were re-let.
    - 7 projects are scheduled to be re-let, deferred to 07/08 or deleted.

Impacts to Florida's Program

- Imbalance in FY06/07
  - 2007: $4.0B, 2008: $2.6B, 2009: $2.2B
- Balanced Letting Plan
  - 2007: $2.8B, 2008: $3.0B, 2009: $3.3B
  - Production Ready Plan: 86 projects totaling $1.2B
    - 32 projects totaling $721M moved out
    - 54 projects totaling $452M being let this year
  - We will end FY 06/07 at about $3.0B

Impacts to Florida's Program

- Deferral of Construction & Right-of-Way project phases (FY 06/07 to FY 10/11)
  - Within the 5-year Tentative Program
    - 36 projects totaling $1.5B
  - Outside of the 5-year Tentative Program
    - 35 projects totaling $1.3B

Department Strategies

(Short Term)

- Refine Awards Criteria
  - Department rejected 71 contracts (14%) valued at $600M (Bids were at $977M)
- Revisit Inflation Rates and Contingency Levels
- Refine Department's Estimating Process
  - More periodic updates and performance measures established
  - Developed additional cost libraries that use historical unit prices from similar contracts & time durations

Department Strategies

(Short Term)

- Encourage use of Bid Options and Scope Alternates
  - “Got to have” versus “Nice to have”
- Implement Bid Maximum Specification
- Develop a comprehensive Price Index for Construction Contracts to manage risk
  - Considering indexing monthly payouts to PPI
- Optimize Night Work
  - Revisit windows of operations
- Contract Scope and Length
  - Bigger is not necessarily better

Department Strategies
(Long Term)

- Conduct a Work Force Study
  - Unskilled workers
  - Inmate training program
- Address conflicts in mobility and freight
  - Statewide Freight Study to address key supply chains (emphasis on ports and rail infrastructure)
  - Make investment in rail and port capacity that give us more return on such investments

Department Strategies

(Long Term)

- Better manage risk associated with material availability
  - Statewide Aggregate Resource Study
  - Department's procurement of aggregate to build redundancy in supply
- Right of Way Opportunities
  - Joint Use Stormwater Ponds
  - Securing Borrow Pits

Department Strategies

(Long Term)

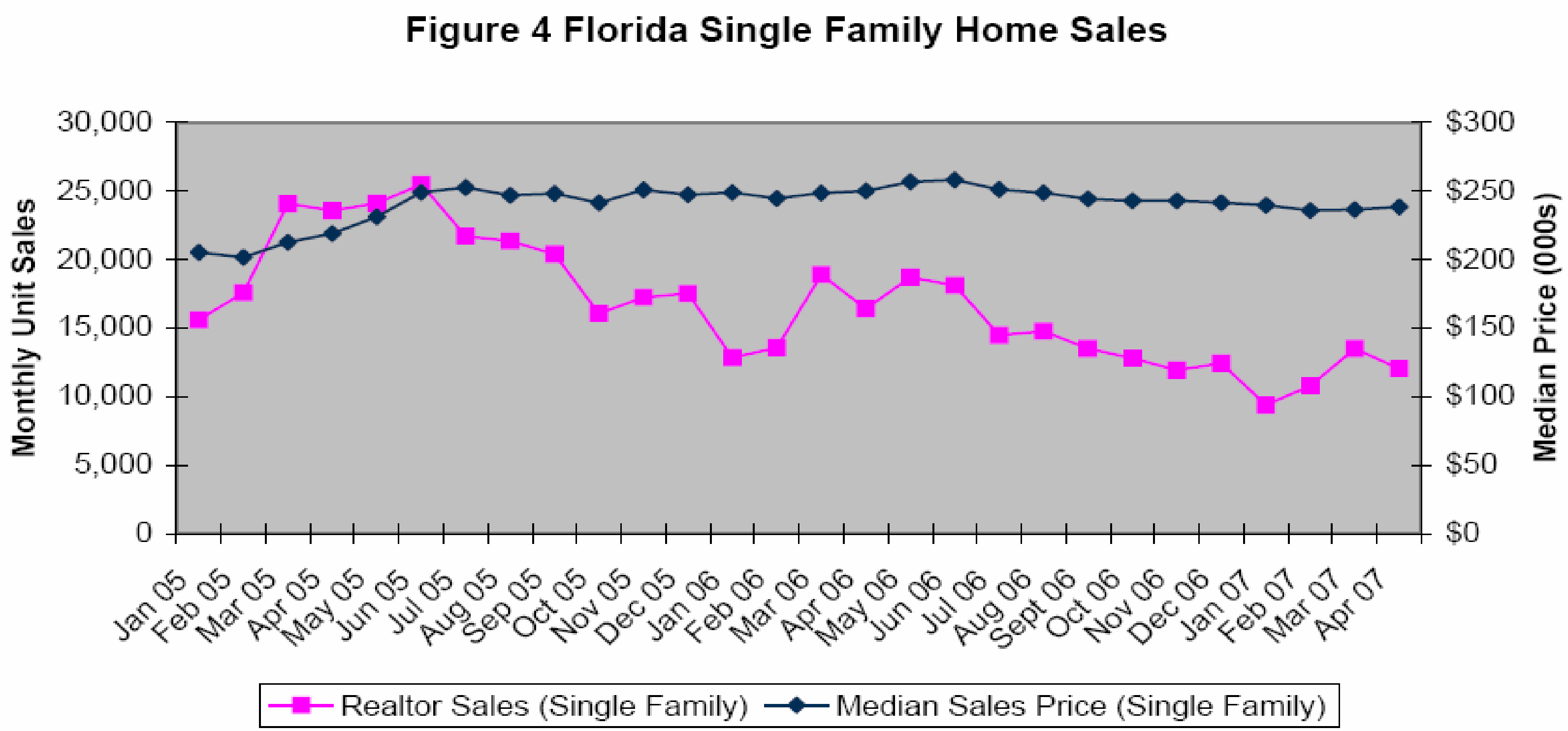
- Not require everything to Federal-aid Standards
  - Only 25% of Florida's Construction Program is funded by federal-aid dollars
- Flexible Design and Engineering
  - We need to "Design what can be built easily" rather than "Build what can be designed easily"

Department Strategies

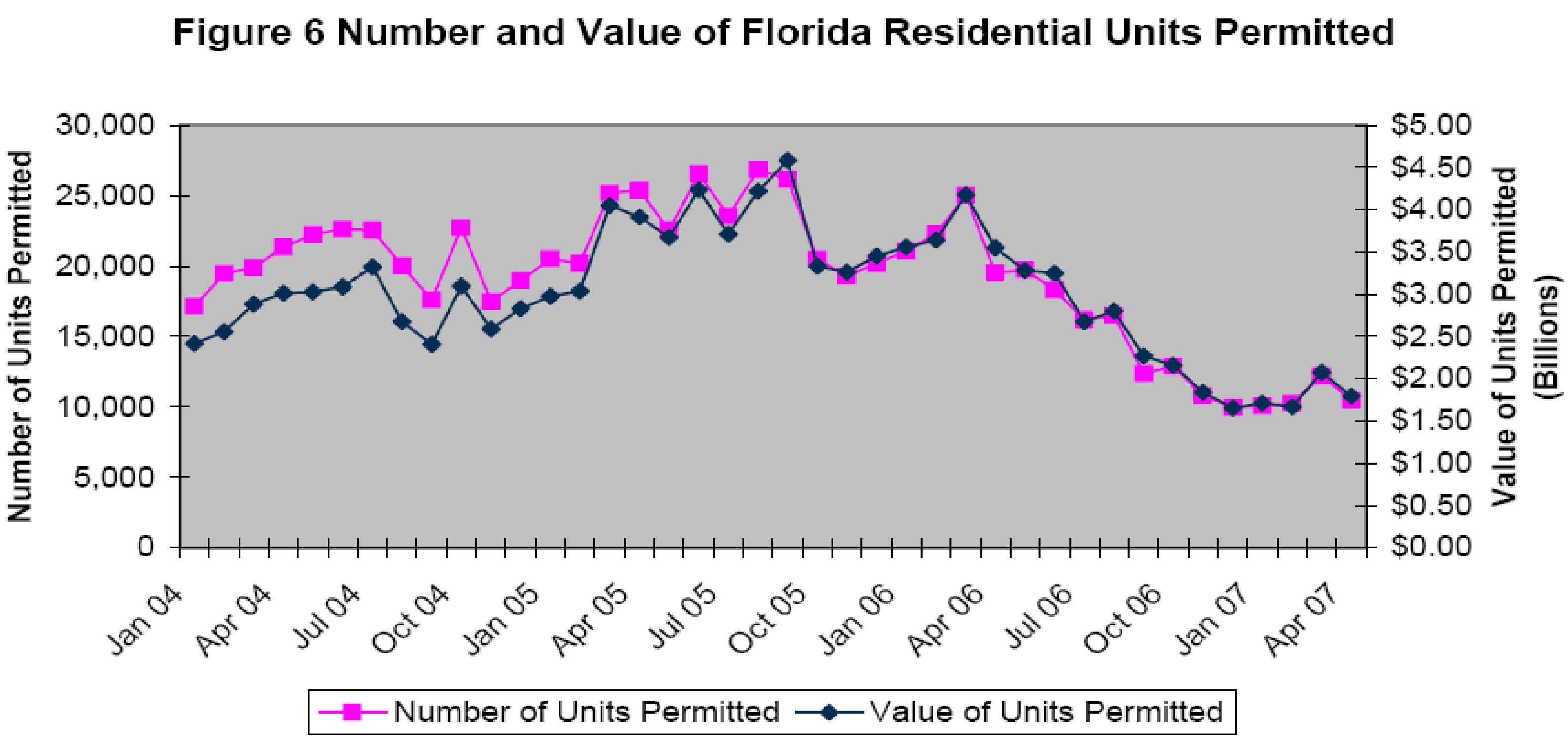
(Long Term)

- Develop indicators to aid in establishing letting levels
  - Maintain a “moderately aggressive” base level of lettings at all times
    - Statewide Construction Database shows \$9.1B for Highway and Bridge Work (FDOT’s share is only \$3.0B)
  - Get contracts “Production Ready”.
    - Revisit policy on “Production Ready” plans to bring up to current standards.
      - “Fatal Flaw” concept

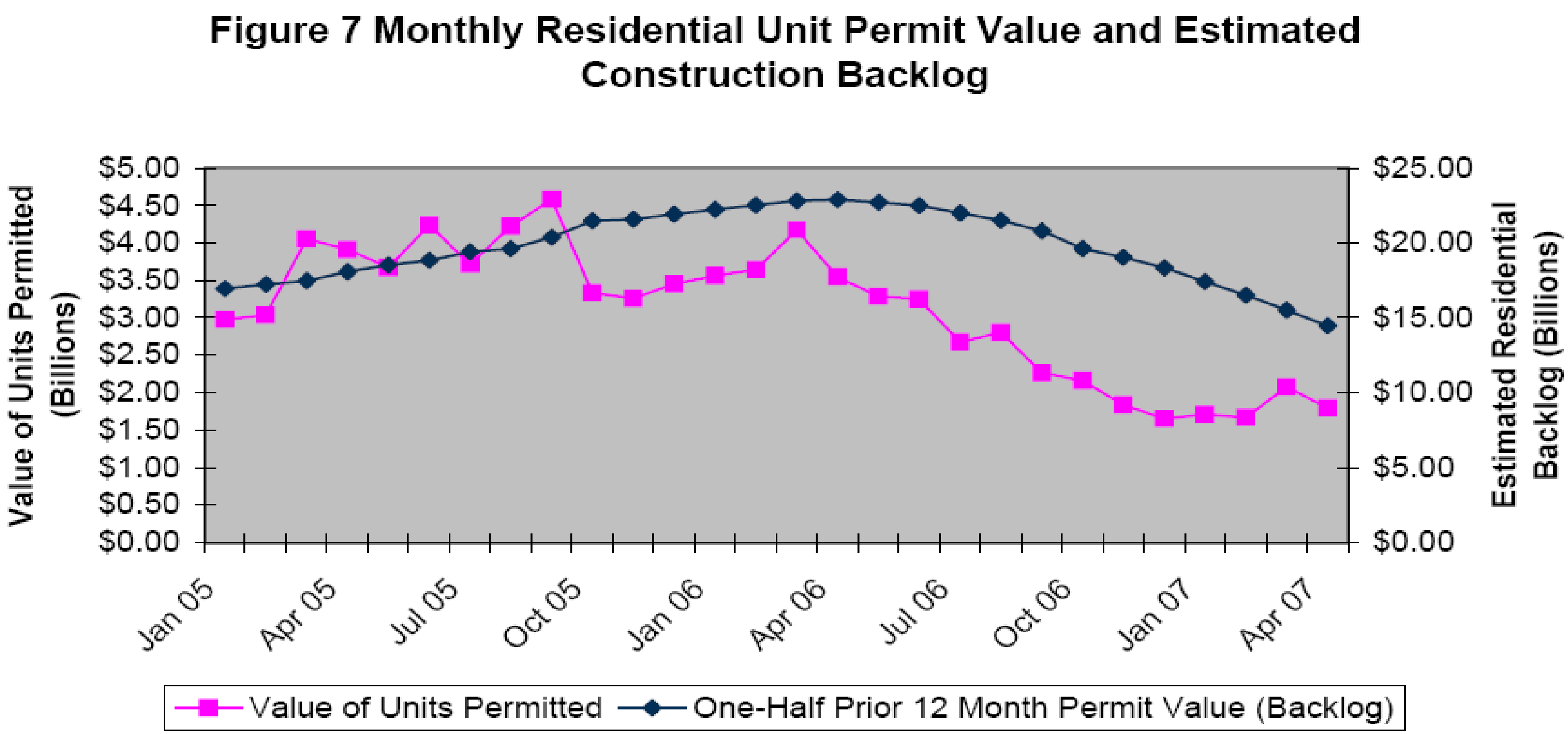
Transportation Cost Indicators



Transportation Cost Indicators



Transportation Cost Indicators



Department Strategies

(Long Term)

- Increase Competition
  - Even during this volatility, contracts with 3 or more bids came in closer to our estimate
  - Waive bonds on smaller contracts to develop next generation of Primes
  - Simplify contract administration (inspection and testing) on smaller contracts
  - “Remove restrictions that do not add value” initiative.
  - Procure and permit sites for temporary asphalt plants for contractors to use

Department Strategies
(Long Term)

- Permits for Aggregate Sources and Plants (Asphalt and Concrete)
  - Participate in the dialogue
    - Provide information so that an “informed” decision is made
    - Remember, there is a fine line between providing information and advocating
    - Legislature recently formed Strategic Aggregate Review Task Force
      - Evaluate the availability of construction aggregate and related mining & land use practices

Thank You and Any Questions!

BUCKLE UP
AMERICA
Every Trip. Every Time.

How 'bout them Gators!