SEAUPG 2006 – State Construction Budgets Cost Estimating and the Rising Cost of Doing Business

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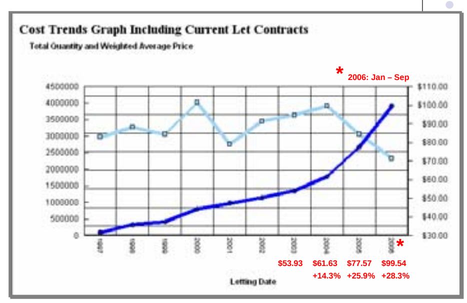
Asphalt

- Crude Oil prices.
- Bitumen prices, availability, and transportation costs.
- Aggregates prices, sources, uncertainty in supply, and transportation costs.
- MOT considerations.

Asphalt – Statewide

(Structural and Friction Course Tonnage Items)



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

Good News/Bad News

- The Good news is that oil prices have fallen and the rate of increase of aggregate increases seems to have flattened somewhat in the last couple months.
- The Bad News for Construction Budgets is that Asphalt is not the only construction material that has had increased over the last couple years…

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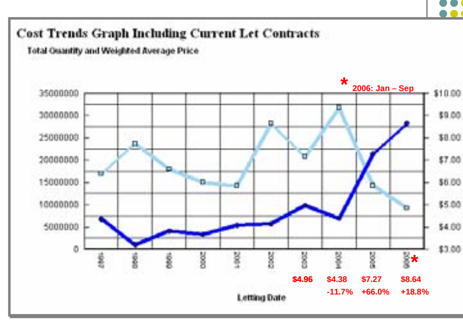
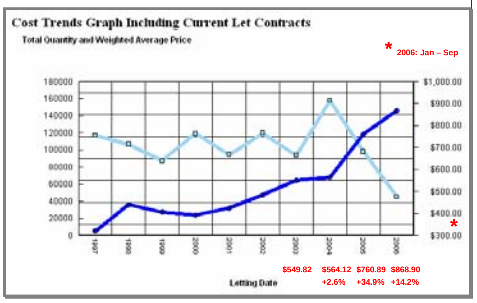
Earthwork - Statewide



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

Structural Concrete – Statewide



NOTE: Lump Sum, Design/Build Contracts not included

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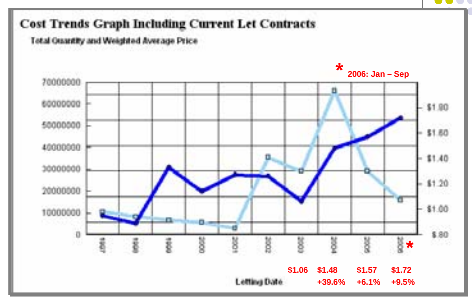
Structural Steel – Statewide



NOTE: Lump Sum, Design/Build Contracts not included.

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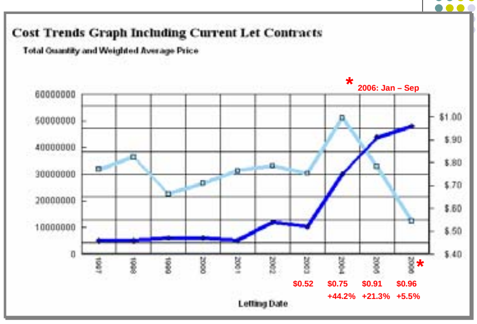
Reinforcing Steel - Statewide



NOTE: Lump Sum, Design/Build Contracts not included.

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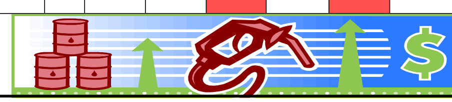
Summary – Florida
Statewide Weighted Average Prices

Pay Item Group	Unit	2003	2004	Change	2005	Change	2006 (Jan-Sep)	Change
Earthwork	CY	$4.96	$4.38	-11.7%	$7.27	+66.0%	$8.64	+18.8%
Asphalt	TN	$53.93	$61.63	+14.3%	$77.57	+25.9%	$99.54	+28.3%
Structural Concrete	CY	$549.82	$564.12	+2.6%	$760.89	+34.9%	$868.90	+14.2%
Structural Steel	LB	$1.06	$1.48	+39.6%	$1.57	+6.1%	$1.72	+9.5%
Reinforcing Steel	LB	$0.52	$0.75	+44.2%	$0.91	+21.3%	$0.96	+5.5%



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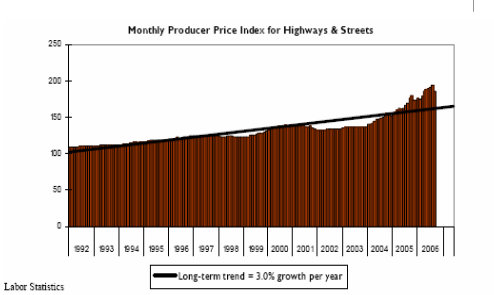
ARTBA PPI for Highway & Streets
October 2006



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ARTBA Economics & Research

HIGHWAY CONSTRUCTION PRODUCER PRICES
OCTOBER 2006

Highway & Bridge Construction Input Prices - Price Change From Same Month in Preceding Year

	Sep 05 to Sep 06	Aug 05 to Aug 06	July 05 to July 06	Sep 04 to Sep 05	Sep 03 to Sep 04	Sep 02 to Sep 03
Highway & Street Construction	5.6%	14.0%	15.3%	15.9%	11.0%	1.8%
Asphalt Paving & Block Mfg	30.6%	34.7%	34.1%	9.6%	3.1%	3.3%
Cement	11.1%	11.7%	12.2%	12.0%	6.1%	-1.6%
Concrete Block & Brick	8.3%	7.8%	8.3%	9.4%	3.5%	2.0%
Construction Machinery & Equipment Mfg	3.8%	3.5%	3.7%	4.4%	4.4%	1.2%
Construction Sand, Gravel & Crushed Stone	10.2%	9.8%	9.0%	7.6%	3.6%	2.5%
Iron & Steel Scrap	4.3%	21.3%	67.8%	-2.3%	72.0%	25.8%
Ready Mix Concrete	10.1%	11.8%	12.6%	12.2%	8.0%	0.1%
Inflation/Consumer Price Index	2.1%	3.8%	4.1%	4.7%	2.5%	2.3%
General Construction Inputs	5.7%	9.0%	9.1%	7.8%	9.3%	2.4%

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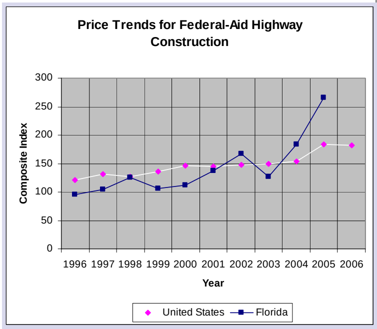
Trends – National vs. Florida



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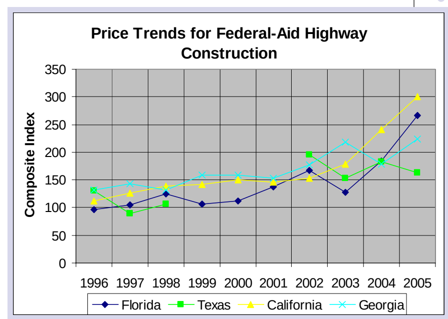
Trends - Other Comparable States



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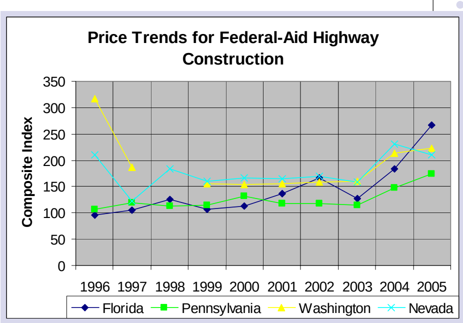
Trends - Other Comparable States



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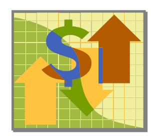
FHWA Price Trends

- Price Trends over 10 years:
  - National average = +5.27% per year
  - Florida average = +17.8% per year
- Price Trends 2003 – 2004:
  - National average = +3.07%
  - Florida average = +44.9%
- Price Trends 2004 – 2005:
  - National average = +18.9%
  - Florida average = +44.7%



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BID COMPETITION

CONTRACT CLASS 1 LETTINGS JULY 2002 thru JUNE 2006						
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	3.8	0	20	43	26.5%
2004/2005	240	3.5	4	11	51	27.5%
2005/2006	299	2.3	7	32	101	46.8%
CONTRACT CLASS 1 & 7 LETTINGS JULY 2006 thru SEPTEMBER 2006						
2006/2007*	126	3.1	9	13	36	46.0%

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 appears to be cooling off, however…
    - How long will it last is unclear.
    - Extent that it might benefit Transportation Industry and when we see the benefit is unclear (it could take up to an year).

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General Considerations

- Inflationary Risks/Uncertainty in escalators
  - Recouping of prior year losses.
  - Anticipating the unknown.
- 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.

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General Considerations

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

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FDOT Department Strategies
(Short Term)

- Deferred $1B within various phases over the next 3 Fiscal Years
  - That only addressed last fiscal year's commitments.
- Refine Awards Criteria
  - Department rejected 54 contracts (10%) valued at $618 million (Bids were at $1.04B).
- 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.

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FDOT Department Strategies
(Short Term)

- Encourage use of Bid Options and Bid 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.

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FDOT 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.

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FDOT 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.

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FDOT Department Strategies
(Long Term)

- Not require everything to Federal-aid Standards – only 25% use Federal-Aid
- Flexible Design and Engineering
  - We need to "Design what can be built easily" rather than "Build what can be designed easily".
- Develop indicators to aid in establishing letting levels
  - Maintain a "moderately aggressive" base level of lettings at all time.
  - Get contracts "Production Ready".

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FDOT 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.
- Permits for Aggregate sources and Plants (Asphalt and Concrete)

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Summary

- FDOT is committed to deliver its 5 Year Work Plan
- As costs rise, the ability to delivery is challenged.
- FDOT is making changes to accommodate.
- Industry is an active player in what these changes are and how they will affect the Industry.

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Thanks FDOT!

- I told Chief Engineer Ananth Prasad that I would thank the Florida Department of Transportation for the use of their materials in this presentation.
- But, he also said I had to thank the University of Florida…
  - But he didn't say how…
    - So here goes…

REMEMBER…

The early bird may get the worm,
but the second mouse always gets the cheese.

Thank You!

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