SESSION 22
COST RISK ANALYSIS ON I-595 PROJECT

By
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COST RISK ANALYSIS ON I-595 PROJECT

- **SCOPE**: The purpose of this project is to increase the capacity of I-595 between I-75 and I-95 during peak travel times

- **ASSUMPTIONS**: Project cost estimation began with an assumed pavement design, number of interchanges including entrance, exit points and level of service.

COST RISK ANALYSIS ON I-595 PROJECT

- **Costs**: All prices were adjusted based on present day costs with location, length of project time, seasons and major anticipated events during the time of construction. Material availability, different types of potential contractors needed, specialized areas of work, specialized equipment and coordination with adjacent Turnpike, I-95 and current projects under construction. These were some of the considerations that could increase risks for a project of this type.

COST RISK ANALYSIS ON I-595 PROJECT

- **RISK IDENTIFICATION / RISK REGISTER**
  - A project cost was prepared identifying and listing potential risks.
  - Risk factors based on probability of construction tasks being influenced by negative/positive external events.
- Each risk was ranked according to magnitude.
- A contingency was assigned for each risk based on likelihood percent of happening and associated costs increase (Threat) OR cost decrease (opportunity).

COST RISK ANALYSIS ON I-595 PROJECT

- **BASELINE WAS ESTABLISHED FOR THE ASSUMED PROJECT SCOPE**
- All contingencies were removed
- Pavement Design
- High Mast Lighting
- Bridges Braided and By-Pass
- Interchanges
- Demolition
- Retention Areas
- Noise Abatement
- Drainage
- Contamination
- Broward Transit Agencies
- Utilities

COST RISK ANALYSIS ON I-595 PROJECT

- **ASSESSMENT OF ALL IDENTIFIED RISKS**

- **ANALYSIS OF RISKS IDENTIFIED**

COST RISK ANALYSIS ON I-595 PROJECT

- **MIGITATE IDENTIFIED RISKS** – As project RFP is being prepared additional work in areas of High Risk to reduce or eliminate the risk.
- **ALLOCATION OF ANY REMAINING RISKS**

COST RISK ANALYSIS ON I-595 PROJECT

- **MONITOR, UPDATE COSTS AND REFINE COSTS**
- **CREATE A SCHEDULE OF VALUES FOR INCLUSION IN THE RFP**

COST RISK ANALYSIS ON I-595 PROJECT

- **POTENTIAL ADVANTAGES OF USING THIS METHOD**
- No Time constraints and also the contractor can use his own means and methods and value engineering.
- Cuts down on bureaucratic red tape
- Financial Gains
- Contractors/Consultants are motivated to produce the best product in the least time. This funding method provides incentive for contractors/consultants to work together with minimum errors/time delays with the ultimate goal of installing the revenue collection operation as soon as possible
- Builder assumes the most of financial risk while the owner will assumes a smaller portion of risks.

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- QUESTIONS???