DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: Value Engineering **OFFICE:** Chief Engineer

FROM: Gerald M. Ross, PE, Chief Engineer **DATE:** April 6, 2011

TO: Ben Buchan, Russell McMurry, Paul Liles, Ben Rabun, Bobby Hilliard, Darryl VanMeter, Todd McDuffie, Robert Mahoney, Jimmy Smith, George Brewer, David Millen, Bill Rountree, Joe Sheffield, Brent Thomas, Tony Collins, Brad Saxon, Kent Sager, DeWayne Comer, Bryant Poole, Scott Lee

SUBJECT: Utilizing Value Engineering techniques at the Concept Stage of Design

The use of Value Engineering has grown significantly at GDOT. Over the past 5 years, more than 250 VE studies have been held and implemented. GDOT has saved over $830 million, averaging $110 saved for every dollar spent on the VE program.

Value Engineering Studies produce many recommendations specific to an individual project; however, there are some recommendations that apply to many projects. Designers should review their projects and determine if any of the common recommendations listed below can be utilized. These recommendations should be incorporated during the earliest stages of design – while the concept is being formulated. By using Value Engineering techniques early in the design process, extra work for redesign can be eliminated, thereby minimizing design cost and reducing the project schedule.

Items that are frequently recommended and should be considered are as follows:

- Ensure design meets need and purpose and does not include “scope creep”
- Create a design that minimizes ROW footprint and avoids impacts
- Adjust vertical profile to minimize earthwork
- Use 11 foot lanes
- Incorporate narrower medians
- Minimize scope on side road tie-in lengths and intersecting angles
- In Urban areas, use 12 foot shoulders instead of 16 foot
- In Rural areas, pave 4 foot instead of 6 ½ foot
- Utilize multi-use trails; consider alternate materials for multi-use trails
- Modify turn lanes by reducing taper or storage length; eliminate unnecessary turn lanes
- Minimize bridge span length; use prefabricated culverts; use MSE walls

If you have any questions about the Value Engineering process, please contact Lisa Myers, Value Engineering Coordinator, in the Office of Engineering Services. She may be reached at 404-631-1770.

GMR:LLM