



(procurement of)  
**Digital Image Based  
PhotoLog System**

Innovative Traffic Engineering Tools - I  
Lake Buena Vista – 2:00pm – Tuesday  
Presenters: Nazir Lalani (Ventura County)  
& Joe Breyer

**works**  
consulting, llc



geographic information solutions

spatial information development

roadways

traffic

public safety

for desktop

intranet

web

## Need Identified

- Replacement of 35mm film reels with new imagery
  - Vital to quick assessment of agency infrastructure
  - Traffic Safety and Litigation Support
  - Old system was on 3-4 year refresh cycle
  - Trained Staff had retired
  - Reel viewer limited amount of users
  - Welcome to the digital age
  - A dozen + contract vendors identified



## First Attempts

- Independent attempt in CY 2000 to solicit bids to generate new digital imagery.
- Two responses with very wide variation in cost and potential deliverables.
- Site visits identified gaps between real needs and proposed deliverables of two offers.
- Recommendation to re-bid project with outside consultant assistance.



## Works Consulting, LLC

- One of the two offers on the original RFP.
- Forfeited opportunity to re-bid in order to assist the County-led effort on contract.
- Tasks
  - Develop more comprehensive RFP and bidders list.
  - Refine final scope of work with selected vendor.
  - Manage the delivery/implementation of the new product and system.



## Bid Preparation and Evaluation

- RFP distributed to listing of a dozen vendors identified from multiple sources.
- Website interactive map display of roadway to be photo-imaged.
- Shapefiles available if waiver is signed
- One month response period
- Three responses received – all included a pavement rating component.
- Scoring identified the most desirable consultant



## Notice to Proceed

- Delayed purposefully in order to avert the rainy season.
- Change in County Attorney prompted additional review and re-writing of work scope.
- Opportunity seized to improve the accuracy of the GIS files that dictate “where” and “what” to photo-image
- Finally, kickoff was interrupted by the wildfires in Ventura County in late October and early November.



## Delivery of “System”

- 700,000 +/- images delivered
  - One Hard Disk Drive
  - Two sets of DVDs
    - Backup
    - Mobile Users
- GPS shapefile indexes with ArcMap and ArcView 3.x access scripts.
- One licensed copy of Feature Inventory workstation software
- Unlimited “view-only” installations
- Thumbnail creator for web distribution interface
- Pavement data collection subcontract deliverables.



## System Cost

- Base cost of \$65/mile for 4 cameras
- 550 miles of two-way roads = 1100 miles of one-way imagery
- \$2,500 in one-time costs for ArcView and ArcMap scripts compliant with GIS shapefile index.
- Feature Inventory software (est. \$12,000) included in \$65/mile cost
- Project Management contract \$25,000
- Photo-imagery cost ~ \$73,000
- Pavement data cost ~ \$25,000



## Lessons Learned – Slide 1

- Consultant assistance provided the County with optimistic and realistic design of RFP capable of drawing meaningful comparisons by categorizing and optioning the potential deliverables.
  - Some options were dismissible based upon budget availability
  - Satisfaction came through the line item approach at selecting options
- Quality Review by County after the first day of data collection was instrumental in dictating overall outcome.



## Lessons Learned – Slide 2

- Preparation of “inventory” document critically important in directing the vendor. GIS map is critical and much preferred to tabular lists.
  - Most follow-up issues were due to lack of local knowledge by vendor and failure to clarify potential issues before the photo image vehicle left the area.
- Use of website to distribute “inventory” a moderate success.
  - Con - May have deterred bidders who prefer longer routes.
  - Pro - Eased burden on County staff by offloading GIS duties to consultant



For more Information:



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