



Volkert, Inc.

3409 West Lemon Street
Tampa, FL 33609-1447

Office 813.875.1365
Fax 813.874.7656
tampa@volkert.com

September 6, 2011

www.volkert.com

Mr. Scott B. Cottrell, P.E.
Public Works Director – Sumter County
319 E. Anderson Avenue
Bushnell, FL 33513
352-569-6700

507-711-2205

Re: Proposal for Sumter County Highway Safety Program

Dear Mr. Cottrell:

As per your request, please find attached the following documents for the development of a Highway Safety Program for Sumter County:

- Sumter County Highway Safety Program Purpose Statement
- Sumter County Highway Safety Program Scope of Services
- Sumter County Highway Safety Program Project Schedule
- Sumter County Highway Safety Program Project Fee Proposal

This proposal for the development of a Sumter County Highway Safety Program is in response to your request that Volkert develop a Highway Safety Program for Sumter County that includes a project purpose statement, scope of services, schedule and project fee proposal. This project would be performed under the 2008 Consultant's Competitive Negotiations Act Agreement between Sumter County and Volkert, Inc. that was signed in 2008. The project fee for this work is \$40,000.00 and would be billed monthly. The proposed schedule shows that projects recommended for construction through Federal Traffic Safety funding would be forwarded to FDOT by January 31, 2012. The project would be completed by September 30, 2012.

The proposed Highway Safety Program will address all modes of travel (vehicular, bicycle, golf carts and pedestrian). It will include the following major activities:

- Identification of intersections and roadway segments with high incidents of traffic crashes and/or locations with potentially unsafe conditions.
- Once identified, candidate projects will be forwarded to the Florida Department of Transportation for Federal Traffic Safety Funding and/or Sumter County for funding through local highway funds.
- Assistance with the formation of a Traffic Safety Work Group (TSWG). The TSWG will be a multi-jurisdictional and multi-discipline effort aimed at promoting traffic safety through the 4E approach (education, enforcement, engineering and emergency services).
- Attend four quarterly TSWG meetings during Fiscal Year 2012.

Office Locations:

Birmingham, Foley, Huntsville, Mobile, Alabama • Gainesville, Orlando, Pensacola, Tampa, Florida • Atlanta, Georgia
Collinsville, Illinois • Baton Rouge, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri • Raleigh, North Carolina
Chattanooga, Tennessee • Alexandria, Virginia • Washington, D.C.





Volkert appreciates the opportunity to assist Sumter County with the development of a Highway Safety Program.

Please contact me if you need any additional information or have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "David W. Gwynn, Jr.".

David W. Gwynn, Jr., P.E.

Senior Vice President

david.gwynn@volkert.com

Volkert, Inc.

3409 W. Lemon Street

Tampa, FL 33609

Office 813-875-1365

Mobile 407-496-0411

Approved:

Don Burgess, Chairman
Sumter County Board of
County Commissioners

CC: Gene Quinn, P.E.
Brian Kanely, P.E.

Sumter County Highway Safety Program

Purpose Statement

The purpose/scope/goal of a Sumter County Highway Safety Program is to develop a multi-jurisdictional and multi-discipline approach to solving highway safety problems in Sumter County. This includes addressing all modes of travel (vehicular, bicycle and pedestrian) and including all local government agencies involved with promoting highway safety.

Sumter County has the following unique demographic and jurisdictional aspects that need to be recognized and incorporated into a highway safety program:

1. Rural nature of Sumter County – Sumter County is a rural county. The highway safety program needs to be aimed at addressing rural highway safety issues. In particular, the following characteristics of rural traffic crashes (based on information from the U.S. Department of Transportation Rural Safety Initiative, February 2008) needs to be investigated with available traffic crash records for Sumter County:
 - a. Rural crashes have a disproportionate number of fatalities.
 - b. Rural crashes have less exposure than urban areas, yet more fatalities.
 - c. Rural areas have a higher fatality rate.
 - d. Rural areas have less seat belt usage than urban areas.
 - e. Rural areas have more speeding fatalities.
 - f. Rural areas have more impaired driving fatalities.

Rural roads also have unique highway safety challenges. The challenges that the Highway Safety Program should recognize and address with respect to rural roads are:

- g. Identifying outdated roadway designs.
 - h. Identifying roadside hazards such as utility poles, sharp edged pavement drop offs and trees close to the roadway.
2. The Villages – The Villages development, located in northern Sumter County, presents several unique challenges for a Highway Safety Program to address. These are:
 - a. A high population density of senior citizens that is very mobile and active. The presence of this large senior population makes traffic safety issues for golf carts, bicyclists and pedestrians a critical component of a Highway Safety Program.
 - b. The location of The Villages with respect to its close proximity to Marion and Lake Counties. The Villages is located adjacent to Marion and Lake Counties. The Sumter County Highway Safety Program should work in conjunction with Marion and Lake Counties with respect to safety programs.

The Sumter County Highway Safety Program should have two initial goals as follows:

1. Identify high traffic crash intersections and roadway segments that are eligible for Federal Traffic Safety Funds and other highway/safety related funding.
2. Establishment of a Traffic Safety Work Group (TSWG) to promote traffic safety. The TSWG needs to be multi-jurisdictional and utilize a multi-discipline approach to promoting traffic safety through the 4E approach (education, enforcement, engineering and emergency services).

The establishment of a Sumter County Highway Safety Program will allow the County to identify intersections and roadway segments with high incidents of traffic crashes and/or locations that have unsafe conditions. Once identified, the County can seek funding for intersection/roadway modifications to reduce the traffic crashes and/or the conditions at these locations. The traffic safety funding can utilize Federal Traffic Safety Funds through the Florida Department of Transportation and local highway funding. The establishment of a Traffic Safety Work Group (TSWG) will provide for a multi-jurisdictional and multi-discipline approach to address traffic safety through the 4E approach (education, enforcement, engineering and emergency services).

8/30/11

Sumter County Highway Safety Program

Scope of Services

Tasks # 1, 2 & 3 – Develop Intersection Collision Diagrams and Roadway Segment Traffic Crash Strip Maps.

The purpose of this task is to review the Lake-Sumter MPO traffic crash data base, obtain traffic crash data from the Florida Highway Patrol and develop intersection collision diagrams and roadway traffic crash strip maps for the pre-selected intersections and roadway segments. The sub tasks are:

1. Develop working knowledge of the Lake-Sumter MPO traffic crash data base.
2. Obtain traffic crash data from the Florida Highway Patrol.
3. Obtain Federal Safety Funding guidelines, criteria, etc for high traffic crash locations.
4. Meet with Sumter County to review traffic crash data and obtain input on candidate roadway segments for study.
5. Determine intersection and non-intersection crashes. This data will need to be reviewed for consistency with the appropriate State and Federal Guidelines.
6. Review collision diagrams produced by the Lake-Sumter MPO traffic crash data base program for accuracy.
7. Prepare final intersection collision diagrams.
8. Prepare final roadway strip maps that contain traffic crash information.

Task #4, 5 & 6 – Determine Intersections and Roadway Segments that are Eligible for Federal Safety Funding.

The purpose for this task is to determine which intersections and roadway segments initially have the appropriate benefit/cost ratio to be candidates for Federal Safety Funding. The sub tasks are:

1. Determine which intersections and roadway segments contain the appropriate number of traffic crashes to initially qualify for Federal Safety Funding.
2. Review the candidate projects in the field in order to determine feasible intersection and roadway modifications that would reduce traffic crashes.
3. Meet with Sumter County to review candidate projects and recommended modifications.
4. Estimate the cost for the intersection and roadway segment modifications to reduce traffic crashes.
5. Determine the monetary benefits from the traffic crash reductions using the Federal Safety Funding guidelines.
6. Develop the benefit/cost ratio for the traffic crash reductions at the intersections and on the roadway segments.
7. Develop an initial list of candidate traffic safety projects that would qualify for Federal Safety Funding (List A Projects).
8. Develop an initial list of candidate traffic safety projects that would not qualify for Federal Safety Funding (List B Projects).

9. Forward List A Projects and List B Projects to Sumter County for review.
10. Meet with Sumter County to obtain concurrence for List A Projects and List B Projects.

Task #7 – Identify Traffic Safety Projects (List A Projects) to be Submitted to FDOT for Additional Study.

The purpose of this task is to identify the initial traffic safety projects which should be forwarded to FDOT for further study and possible Federal Safety Funding. The sub tasks are:

1. Review and update the traffic crash data for the candidate projects (if additional data is available).
2. Conduct a second and more in depth review of the engineering parameters (right of way, utilities, drainage, etc) at the candidate project locations to verify the feasibility of constructing the recommended traffic safety modifications.
3. Prepare final list of traffic safety projects for Sumter County approval and forwarding to FDOT for additional study.
4. Prepare final list of traffic safety projects for Sumter County approval that should not be forwarded to FDOT for additional study.
5. Forward Sumter County approved projects to FDOT for Approval and Funding.

Task #8 – Identify Other Traffic Safety Projects (List A Projects not forwarded to FDOT and List B Projects) for Funding by Sumter County and/or FDOT for Traffic Safety Modifications.

The purpose of this task is to determine if there are traffic safety modifications that can be constructed for projects that are not forwarded to FDOT for Federal Safety Funding. The sub tasks are:

1. Meet with Sumter County to develop a list of potential traffic safety projects for funding by FDOT and/or Sumter County (projects do not qualify for Federal Safety Funding).
2. Review the engineering parameters (right of way, utilities, drainage, etc) at the candidate locations to verify the feasibility of constructing traffic safety improvements.
3. For those projects containing viable traffic safety modifications, forward a memo to either FDOT (for FDOT jurisdiction projects) or Sumter County (for Sumter County jurisdiction projects) recommending a more extensive study of the candidate projects.
4. For those projects where a traffic safety improvement is not recommended and/or is not constructible, forwarded a memo to FDOT or Sumter County stating the rationale for not proceeding with the traffic safety modifications.

Task #9 – Work with Sumter County to Develop Traffic Safety Work Group.

The purpose of this task is to assist Sumter County in organizing a viable Traffic Safety Work Group (TSWG). The sub tasks are:

1. Meet with Sumter County officials to assist in organizing a Sumter County TSWG.
 - a. Establish goals and objectives for the TSWG (must be multi-modal).
 - b. Identify members of the TSWG.
 - c. Assist as needed to organize and schedule the TSWG meetings.
2. Attend Four Quarterly Traffic Safety Work Group Meetings during FY 12.

8/30/11

Sumter County Highway Safety Program

Project Schedule

Introduction

The schedule for the Sumter County Highway Safety Program is stated below. This is an aggressive schedule and is dependent on accomplishing the following tasks by the stated dates.

- Project start up in early October 2011.
- Collection of traffic crash data in a timely manner (mid October 2011).
- Obtaining necessary input on candidate projects from Sumter County officials (Public Works, Sumter County Sheriff's Office, Florida Highway Patrol, School Board, other members of the Traffic Safety Work Group, etc) by mid November 2011.
- Sumter County approval of candidate projects by December 1, 2011.

It is important that the various members of the Traffic Safety Work Group be involved in the project at the project start up. This will facilitate the gathering of traffic safety related information that may not be obvious in the traffic crash data and will assist in the development of candidate projects for review.

Once projects have been identified and forwarded to FDOT for funding, the schedule for constructing the modifications will be dependent on the available funding and production schedule from FDOT. The schedule and funding of FDOT projects is accomplished through the FDOT 5 Year Work Program. If funds are available, projects that are relatively straight forward and not requiring complex design activities could proceed to construction in two years or less. More complex and/or expensive projects may have a longer time frame to reach construction. As the projects are identified, FDOT will be able to provide information on possible design and construction scheduling.

Project Schedule

October 2011:

- Project kick off meeting.
- Meet with Sumter County Public Works (SCPW) staff and review potential projects.
- Obtain necessary information from Florida Department of Transportation (FDOT) relating to Federal Safety Funding activities.
- Obtain traffic crash data from Lake-Sumter MPO and Florida Highway Patrol.
- Prepare preliminary intersection collision diagrams and roadway segment strip maps.
- Conduct initial field review of candidate projects.
- Identify members of Traffic Safety Work Group (TSWG).

November 2011:

- Conduct first meeting of the TSWG, review preliminary traffic crash data with the TSWG and obtain TSWG input on candidate projects.
- Prepare final intersection collision diagrams and roadway segment strip maps.
- Meet with SCPW staff to discuss candidate projects.
- Develop final list of candidate projects for SCPW approval.

December 2011:

- SCPW approval of final list of candidate projects (December 1, 2011).
- Review candidate projects in the field to determine feasible modifications.
- Develop benefit/cost ratios for candidate projects.
- Develop list of projects that qualify for Federal funding (List A) and projects that do not qualify for Federal funding (List B).
- Obtain SCPW approval of project Lists A and B.

January 2012:

- Review updated crash data if available.
- Conduct in depth field review of projects for constructability.
- Prepare final list of projects to submit to FDOT.
- Prepare final list of projects not to submit to FDOT.
- Obtain SCPW approval of projects to submit to FDOT.
- Submit projects to FDOT.
- Identify other candidate traffic safety projects and submit to Sumter County and/or FDOT for consideration for funding.

February 2012:

- Meet with FDOT to determine where candidate projects could be placed in the FDOT 5 Year Work Program.
- Conduct second meeting of TSWG, discuss status of projects.

May 2012:

- Conduct third meeting of TSWG, discuss status of projects.

August 2012:

- Conduct fourth meeting of TSWG, discuss status of projects.

8/30/11

INSTRUCTIONS FOR COMPLETING SPREADSHEET

1. Fill-in the Type of Work & Project Title (Cell A11)
2. Fill-in Wage Rates for each classification (Cells B18 thru G18)
3. Determine Project Multiplier and apply to the Labor Rates (Cell B19 thru G19)
4. Determine the number of Tasks and various Assignments
5. Fill-in the estimated number of man-hours per Task Assignment
6. Determine what percent of the Fee Sub-total should be expenses (i.e., 5%, 10%, etc...)
7. Round off the Grand Total Fee

Project Multipliers
 Multiplier = 2.75
 Multiplier = 3
 Multiplier = 3.25
 Multiplier = 3.5

Sumter County Highway Safety Program Project Fee Proposal

Prepared by: Brian Kanely, PE
 Date prepared: 9/6/2011

	Number of Man-Hours by Classification										Total Fees by Task	
	Principal Engineer	Senior Engineer	Transportation Engineer	Technician	Administration	Total Hours by Task	Transportation Engr. Intern	Technician	Administration	Total Hours by Task		
Wage Rates	\$80.00	\$40.00	\$66.00	\$16.00	\$21.00		\$46.00	\$16.00	\$21.00			
Labor Rates	\$240.00	\$120.00	\$198.00	\$48.00	\$63.00		\$138.00	\$48.00	\$63.00			
Project Name:												
Task No. 1: Project Start Up												
A. Meet with Sumter City to Start Project	4	4	0	0	0	0	0	0	0	0	8	\$1,440.00
B. Obtain Federal/FDOT Safety Funding Guidelines	0	2	0	0	0	0	0	0	0	0	2	\$240.00
C.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
D.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Task No. 1 Hours	4	6	0	0	0	0	0	0	0	0	10	\$1,680.00
Task No. 1 Fee	\$960.00	\$720.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		
Task No. 2: Intersection Collision Diagrams												
A. Develop Knowledge of LSM/PO Crash Data Base	0	4	0	0	0	12	0	0	0	0	16	\$2,136.00
B. Work with FHP to Obtain Crash Data & Forms	0	0	0	0	0	4	0	0	0	0	4	\$552.00
C. Determine Intersection/Non Intersection Crashes	0	4	0	0	0	12	0	0	0	0	16	\$2,136.00
D. Verify Collision Diagrams from MPO Program	0	4	0	0	0	4	0	0	0	0	8	\$1,032.00
E. Prepare Final Intersection Collision Diagrams	0	4	0	0	0	16	0	0	0	0	20	\$2,688.00
Task No. 2 Hours	0	16	0	0	0	48	0	0	0	0	64	\$8,544.00
Task No. 2 Fee	\$0.00	\$1,920.00	\$0.00	\$0.00	\$0.00	\$6,624.00	\$0.00	\$0.00	\$0.00	\$0.00		
Task No. 3: Roadway Segment Crash Strip Maps												
A. Review Roadway Crash Data, Plot on Strip Maps	0	4	0	0	0	4	0	0	0	0	8	\$1,032.00
B. Meet w/Sumter City for Input on Candidate Road Seg.	0	4	0	0	0	0	0	0	0	0	4	\$480.00
C. Field Review to Locate/Verify High Crash Locations	0	8	0	0	0	8	0	0	0	0	16	\$2,064.00
D. Prepare Final Roadway Seg. Crash Strip Diagrams	0	0	0	0	0	8	0	0	0	0	8	\$1,040.00
E.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Task No. 3 Hours	0	16	0	0	0	20	0	0	0	0	36	\$4,680.00
Task No. 3 Fee	\$0.00	\$1,920.00	\$0.00	\$0.00	\$0.00	\$2,760.00	\$0.00	\$0.00	\$0.00	\$0.00		
Task No. 4: Select Initial Projects & Field Review												
A. Meet w/Sumter City to Review Int & Road Seg Data	0	4	0	0	0	0	0	0	0	0	4	\$480.00
B. Select Int/Road Seg. Qualify for Federal Safety Funds	0	8	8	0	0	4	0	0	0	0	8	\$1,032.00
C. Review Projects in Field for Feasible Modifications	0	0	0	0	0	0	0	0	0	0	0	\$0.00
D.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
Task No. 4 Hours	0	16	8	0	0	12	0	0	0	0	36	\$5,160.00
Task No. 4 Fee	\$0.00	\$1,920.00	\$1,584.00	\$0.00	\$0.00	\$1,656.00	\$0.00	\$0.00	\$0.00	\$0.00		
Task No. 5: Develop B/C Ratio for Projects												
A. Estimate Costs for Int & Road Seg Modifications	0	4	4	0	0	8	0	0	0	0	16	\$2,376.00
B. Estimate Monetary Benefits from Crash Reductions	0	4	0	0	0	4	0	0	0	0	8	\$1,032.00
C. Develop B/C Ratio for Intersections & Road Seg.	0	4	0	0	0	4	0	0	0	0	8	\$1,032.00
D.	0	0	0	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	0	0	0	\$0.00

Task No.	Hours	Fee	12	4	16	0	0	32	
Task No. 5	Hours	Fee	12	4	16	0	0	32	
Task No. 5 Fee		\$0.00	\$1,440.00	\$792.00	\$2,208.00	\$0.00	\$0.00		\$4,440.00
Task No. 6: Develop Lists A & B (qualify/do not qualify)									
A. Develop List A Projects (Qualify for Federal Funding)	0	0	4	0	4	0	0	8	\$1,032.00
B. Develop List B Projects (do not qualify for Fed. Fund)	0	0	2	0	2	0	0	4	\$516.00
C. Obtain Sumter City Concurrence for Lists A & B	0	0	2	0	0	0	0	2	\$240.00
D.	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	\$0.00
Task No. 6 Hours	0	0	8	0	6	0	0	14	\$1,788.00
Task No. 6 Fee	\$0.00	\$960.00	\$0.00	\$0.00	\$828.00	\$0.00	\$0.00		
Task No. 7: Identify Projects to Submit to FDOT									
A. Review Updated Crash Data if Available	0	0	0	0	0	0	0	0	\$0.00
B. Conduct in Depth Field Review for Constructability	0	8	8	8	8	0	0	24	\$3,648.00
C. Prepare Final List of Projects to Forward to FDOT	0	2	2	2	2	0	0	4	\$516.00
D. Prepare Final List of Projects not to Forward to FDOT	0	2	2	2	2	0	0	4	\$516.00
E. Forward Projects to FDOT	0	0	0	0	0	0	0	0	\$0.00
Task No. 7 Hours	0	12	12	8	12	0	0	32	\$4,680.00
Task No. 7 Fee	\$0.00	\$1,440.00	\$1,584.00	\$0.00	\$1,656.00	\$0.00	\$0.00		
Task No. 8: Identify Other Traffic Safety Projects									
A. Develop List of Projects for Sumter City & FDOT	0	2	2	0	4	0	0	6	\$792.00
B. Forward List of Viable Projects to Sumter City/FDOT	0	2	2	2	2	0	0	4	\$516.00
C. Forward List of Non-Viable Projects to City/FDOT	0	1	1	1	1	0	0	2	\$258.00
D.	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	\$0.00
Task No. 8 Hours	0	5	5	0	7	0	0	12	\$1,566.00
Task No. 8 Fee	\$0.00	\$600.00	\$0.00	\$0.00	\$966.00	\$0.00	\$0.00		
Task No. 9: Sumter City Traffic Safety Work Group									
A. Assist in Initiating Sumter City TSWG	0	4	4	0	0	0	0	4	\$480.00
B. Attend 4 Quarterly TSWG Meetings	6	24	24	0	24	0	0	54	\$7,632.00
C.	0	0	0	0	0	0	0	0	\$0.00
D.	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	\$0.00
Task No. 9 Hours	6	28	28	0	24	0	0	58	\$8,112.00
Task No. 9 Fee	\$1,440.00	\$3,360.00	\$0.00	\$0.00	\$3,312.00	\$0.00	\$0.00		
Task No. 10:									
A.	0	0	0	0	0	0	0	0	\$0.00
B.	0	0	0	0	0	0	0	0	\$0.00
C.	0	0	0	0	0	0	0	0	\$0.00
D.	0	0	0	0	0	0	0	0	\$0.00
E.	0	0	0	0	0	0	0	0	\$0.00
Task No. 10 Hours	0	0	0	0	0	0	0	0	\$0.00
Task No. 10 Fee	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		

Sumter County Highway Safety Program Project Fee Proposal

	Principal Engineer	Senior Traffic Engineer	Transportation Engineer	Transportation Engr. Intern	Technician	Administration		
TOTAL HOURS	10	119	20	145	0	0	294	
	ESTIMATED HOURS	ESTIMATED FEE					Hours	Labor Rate
Task No. 1	10	\$1,680.00					10	\$240.00
Task No. 2	64	\$8,544.00					119	\$120.00
Task No. 3	36	\$4,680.00					20	\$198.00
Task No. 4	36	\$5,160.00					145	\$138.00
Task No. 5	32	\$4,440.00					0	\$48.00
Task No. 6	14	\$1,788.00					0	\$63.00
Task No. 7	32	\$4,680.00					294	
Task No. 8	12	\$1,566.00						
Task No. 9	58	\$8,112.00						
Task No. 10	0	\$0.00						
			Hours and Fee by Position					
			Principal Engineer					
			Senior Traffic Engineer					
			Transportation Engineer					
			Trans. Engr. Intern					
			Technician					
			Administration					
			Total					
							Total Fee	
							\$2,400.00	
							\$14,280.00	
							\$3,960.00	
							\$20,010.00	
							\$0.00	
							\$0.00	
							\$40,650.00	

SUB TOTAL	294	\$40,650.00
EXPENSES		
GRAND TOTAL		\$40,650.00
SAY		\$40,000