TASK ORDER REQUEST
I-95 Corridor Evaluation– Overview and Phase 2 Scope

OVERVIEW

The forty-six miles of the I-95 corridor located in the GWRC Region serves a critical role in regional, Statewide and national transportation, commerce, economic vitality, quality of life, and security. This fact is well-understood by all parties at the local, State, and national level. In recent years, a number of significant projects of regional impact have been approved and funded, having direct impact on future travel in the GWRC Region. The two most noteworthy projects include the I-95 Southbound Collector-Distributor Lanes between US 17 & Route 3 and the FredEx project to extend the 95 Express Lanes further south to US 17 (Exit 133). Other significant 'companion' projects, such as the Northbound Collector-Distributor lanes and modification to or addition of new I-95 access points,are in earlier stages of project development and are not yet funded. Each project is on a different approval / delivery schedule, requiring clear documentation of justification, priorities, and detailed impact assessment of the projects individually and when combined.

With this study, a comprehensive investigation will be performed to include activities such as:

- Macroscopic travel demand forecasting
- Microscopic traffic operations analysis
- Identification of choke-points / deficiencies
- Finalizing scope, sequencing and prioritization of projects still awaiting approval and funding
- Documentation of project benefits (improved operations, economic benefits, etc.)
- Consideration of both weekday and weekend demand & operations
- Monthly coordination with the FAMPO Long-Range Transportation Plan Advisory Committee
- Close coordination with others performing transit planning in region
- Close coordination with US 301 / Route 207 Corridor study being performed concurrently

It's expected that the result of this work will lead to Smart Scale application(s) during the 2018/2019cycle so the schedule of events is set with those deadlines in mind.

In addition to the activities identified above, GWRC is looking for consultant support during the 2017/2018 update of FAMPO Long-Range Transportation Plan. The nature of the work involves application of the regional travel demand forecasting model Version 3.1. Providing this assistance concurrently with the detailed study of I-95 is logical and efficient due to the similar tools and skills.

Below are the tasks necessary to accomplish the above activities.

Task 1 - Document Review

57 hours required (Consultant Team – 26, FAMPO – 31) –2% of total effort.

As Michael Baker International (Baker) has been involved in much of the previous work done along the I-95 corridor in the GWRC region, this task will not be significant. However, Baker needs to review all available information related to the FredEx initiative, documentation for Travel Demand Model Version 3.1, and any other recent planning or capital improvement plan changes that have taken place at the local, State, or Federal level.

Work Product:

- Results of task will be used in and folded into other tasks such as travel demand forecasting and development of build scenarios.

Task 2 - Supplemental Data Collection

64 hours required (Consultant Team – 64, FAMPO – 0) –3% of total effort.

The Consultant will collect a variety of planning and traffic data for this study. Much of the data is readily available and will be provided to the Consultant by GWRC/FAMPO, VDOT, Stafford County, City of Fredericksburg, and Spotsylvania County. Furthermore, a previous task order was approved to allow select supplemental counts to be taken before school ends for the season.

Data Required from GWRC/FAMPO

- Latest VGIN Ortho photos available (aerial image files)
- Latest GIS data for the study area (land use, environmental features, major utilities, infrastructure, etc.)

Data Required from City of Fredericksburg, StaffordCounty, and SpotsylvaniaCounty

- Any studies within the study area including traffic counts and any relevant Synchro or VISSIM networks (digital format preferred)
- Capital Improvement Plans
- Comprehensive Plans and amendments for the study area
- Relevant GIS mapping data files (land use, environmental features, community facilities, neighborhoods, commercial areas, major utilities, infrastructure, etc.)
- Planned developments within the area which might influence travel forecasting
- Signal timings for signalized intersections within the study area (not controlled by VDOT).

Data Required from VDOT

- Historical traffic volumes
- Data from any permanent count stations in the defined study area
    - Station south of Exit 130
    - Station north of Exit 130
    - Station north of Exit 133
- Crash data as specified in scope (See Task 4.1)
- Travel forecasting output relevant to the FredEx proposal (See Task 3.2 for more detail)
- Signal timings for signalized intersections within the study area

Work Product:

- All data collected and used as part of the study will be delivered to GWRC upon request but no later than the end of the study

TASK 3 - Travel Demand Model Development& Forecasts

504 hours required (Consultant Team – 504, FAMPO – 0) – 20% of total effort.

Subtask 3.1 – Peer review of recently updated Version 3.1 FAMPO Model

The consultant will review available documentation describing the FAMPO model update and associated performance. The review will include an examination of currently available base and future year model sets reflecting the updates and will execute the model set(s), mechanically verifying the implementation of updates as described in the documentation as well as model performance. In addition to verifying model performance as documented, the consultant will also compare performance to standards defined in the VTM Policies and Procedures Manual. While the peer review may recommend further modification and testing of the model sets, services in this task order shall be confined to an examination and review of updates to the FAMPO model as documented. The consultant will summarize our review findings in a technical memorandum.

Subtask 3.2 - Establish Forecasting Methodology

This study will use the newly released Version 3.1 Travel Demand Model for the FAMPO area.No modification of model land use is assumed as part of this study. GPS data (Streetlight) will inform this study to determine origin-destination patterns, travel times, and, travel reliability in the study area. This information will be used for travel demand model and VISSIM microscopic model calibration/validation as described in Tasks 4 & 5. Implied growth from the travel forecasting model will be used to post-process ground counts to arrive at forecast volumes. While this is a traditional process for the purpose of weekday AM and PM peak hours, the v3.1 model does not reflect weekend travel. In this study, there is particular interest in Sunday peak period travel. A customized approach will be developed to create Sunday forecasts. While this process has yet to be specifically determined, it will likely involve some type of pivot process where the relationship between weekday traffic counts and Sunday traffic counts are utilized to create a mechanism to estimate Sunday peak period forecasts.**It is assumed that forecasts will be provided by VDOT that reflect the southern terminus of the FredEx initiative.**While the v3.1 FAMPO model has the capability to forecast the travel demand and split between proposed managed lanes and general purpose lanes north of Exit 133 (US 17);for study accuracy and consistency, we assume that year 2030 and 2045 FredEx forecasts will be made available to this study team.

Subtask 3.3– Development Forecasts

Development of forecasts will proceed as follows:

- Evaluate the base year FAMPO area model (version 3.1) performance in the study area, particularly against the observed travel data including the Streetlight GPS data and 2015 American Community Survey, as well as other traffic and transportation data compiled in Task 2.

- Travel model refinements will include enhancing and correcting the coding of existing roadways to more accurately represent existing conditions. Refinement will include a review of traffic analysis zones (TAZs) in the study area. Sub-dividing TAZs into smaller geographic units usually improves model performance.

- Validate the refined model against the observed data to the standards defined in the VTM Policies and Procedures Manual; and provide adjustment as necessary.

- Develop a future year model for an appropriate forecasting year, incorporating the changes and adjustments made for the base year and modifying the model network as necessary to reflect the build conditions for year 2030 and 2045.

In addition to the projects that are the subject of this study, the study team and FAMPO will determine the most impactful CLRP projects with respect to our analysis objectives and incorporate these into the future no-build and build conditions. It is expected that there will be a limited number of iterationsreflecting variants of build scenarios in 2030 and 2045 in order for the study team to arrive at

the preferred alternative that meets the needs of each year of analysis.For the purpose of this scope of work, we assume a maximum of fourvariants for each of the future year scenarios (2030& 2045), with one of the variants including the no-build condition plus only the northbound river crossing project.The forecasts will be developed with the specific intent of informing the microscopic VISSIM analysis described in Task 4 & 5. Consequently, the forecasts will need to take the form of peak hour volumes on each element of infrastructure in the VISSIM study area for the typical weekday AM & PM peak hours as well as peak hour on Sunday.

Work Product:

- The products of this task will be incorporated in the deliverables of subsequent tasks. In addition, a memorandum will be prepared which documents methodology used.

Task 4–Existing, 2030 No-Build, and 2045 No-Build Conditions

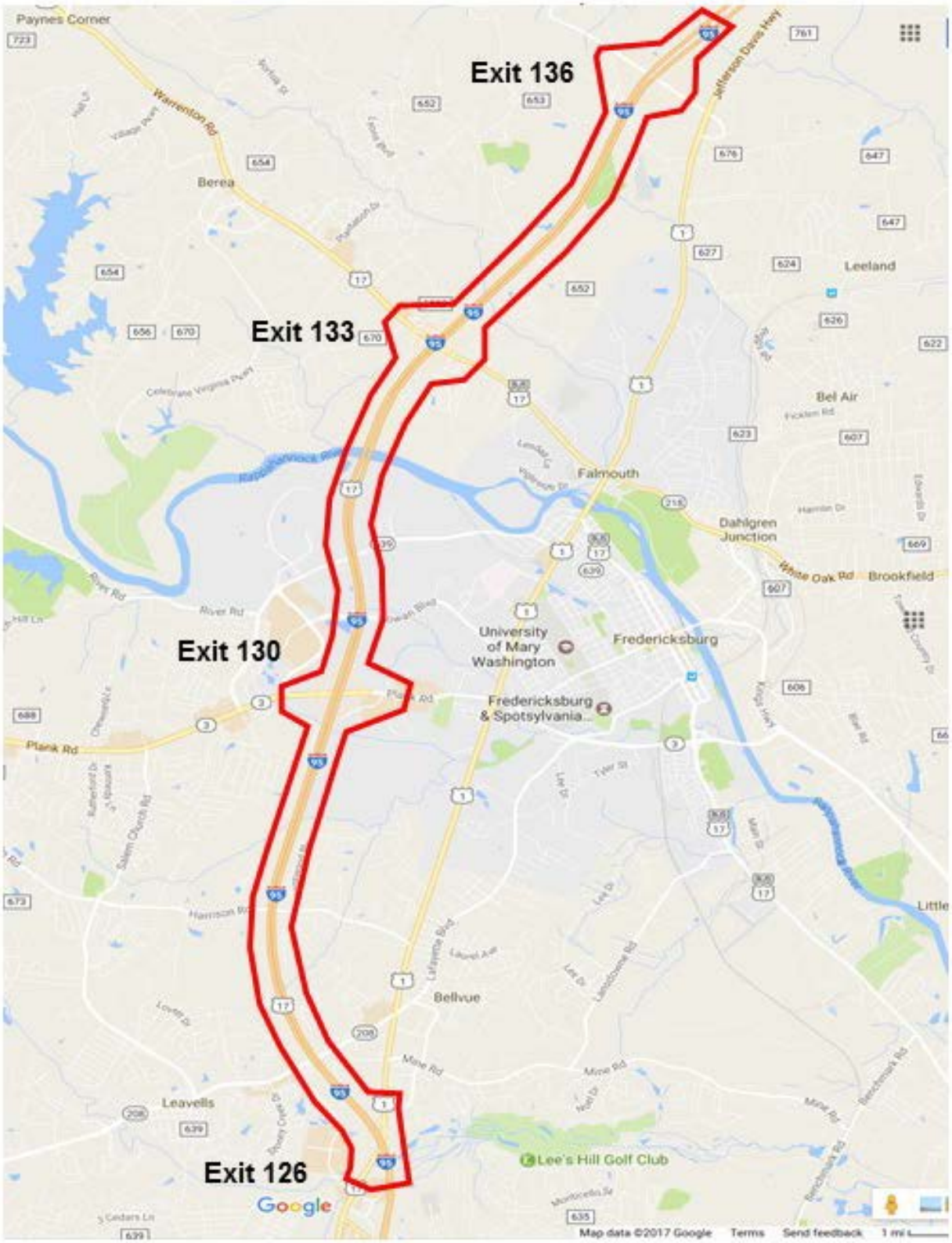
253 hours required (Consultant Team – 253, FAMPO – 0) – 10% of total effort.

Subtask 4.1– Establish methodology & Develop Existing Traffic Operations Models

Using the travel forecasts developed in Task 3, traffic operations will be analyzed with VISSIM for the existing conditions. The time periods to be examined include weekday AM Peak Hour, weekday PM Peak Hour and Sunday Peak Hour.

The Consultant will develop a base VISSIM model forI-95 including the US 1, Route 3, US 17, and Centreport interchanges, and calibrate the Existing Conditions to ensure that the model is performing accurately. The O&D information described in Task 3.1 will be used in the VISSIM model development. The modeled network will be limited to the I-95 facility (including all general purpose lanes, CD lanes, express lanes, and ramps) as well as the first signalized intersection on each side of the I-95 interchanges. The image below illustrates the geographic VISSIM analysis area.

VISSIM Study area



As a compliment to the figure above, the precise list of analysis area includes:

- Both NB and SB segments of I-95, from a point north of the Centreport Parkway/Exit 136 interchange (which would be south of the interchange at Exit 140), to a point south of the US 1 interchange/Exit 126 (which would be north of the interchange at 118),
- Any and all C-D roads, including both existing NB C-D road through interchange at Exit 133 as well as potential express lanes and C-D roads proposed as part of the Alternatives to be defined) along I-95 within those limits,
- All ramps within the interchanges at Exits 136, 133, 130 and 126, inclusive.
- The off ramp to and on-ramp from the Rest Area on SB I-95 between the Rappahannock River and VA Route 3 (Exit 130) assuming that volumes for these ramps are made available.
- The segments of US 17/US 17 Business, VA Route 3, US 1, and Centreport Parkway within the interchange areas and extending to a point approximately 500 ft beyond the next upstream and downstream signal-controlled intersections outside of the interchange on those routes.
- The signal-controlled intersections at the following junctions:
    1) Centreport Parkway and Ramps to/from I-95 NB
    2) Centreport Parkway and Ramps to/from I-95 SB
    3) US Route 1 and Centerport Parkway
    4) US 17 and Stanford Drive (northwest of I-95)
    5) US 17 Business and Short Street (Southeast of I-95)
    6) VA Route 3/ Carl D. Silver Parkway (west of I-95)
    7) VA Route 3 / Gateway Blvd (east of I-95)
    8) US Route 1 / Market Street (northeast of I-95)
    9) US Route 1 / Ramps to/from NB I-95 (east of I-95)
    10) US Route 1 / Ramps to/from SB I-95 (west of I-95)
    11) US Route 1 / Commercial entrance at Kentucky Fried Chicken Restaurant
- No other intersections or driveways beyond those cited above.

The consultant team will conduct a thorough QA/QC review of the existing conditions analyses and the calibration and validation processes used. The calibrated and validated operations analysis of existing conditions will be used to develop the future No-Build VISSIM model. It will be performed to meet the VDOT requirements set forth in the Traffic Operations and Safety Analysis Manual (TOSAM). Signal operations and timing information will be assembled and analyzed for the key signal-controlled intersections within the study area. Synchro files for those adjacent systems will be requested and obtained from VDOT or developed if they do not exist.

In addition, the consultant will retrieve crash data from VDOT for the most recent three years available at the sections of arterials and signal-controlled intersection immediately adjacent to the interchanges, ramp and freeway segments within the interchange areas and all freeway segments between the three interchanges within the study area. The consultant shall summarize these results and identify crash patterns and trends to the extent that they can be identified over a 3 year period, and locations with high incidence of reported crashes within the corridors. Crash rates will be computed and will be compared to regional averages for similar type facilities. Crash "pin" maps using GIS tools will be developed. As necessary, collision diagrams will be prepared for selected high crash locations.

Subtask 4.2 - Develop Future No-Build Traffic Operations Model

The consultant team will work with the Study Work Group (See Task 9) to identify the future (2030& 2045) planned improvements within the defined study area that will be incorporated into the existing VISSIM model developed in Task 4.1. It is assumed that these changes to the existing condition VISSIM model will be minor in nature while the significant changes such as CD lanes and Express lanes will be saved for the 'Build' condition in Task 5. Synchro analyses will be conducted to developed optimized

signal timings for the future 2030 and 2045 No Build scenarios. The time periods to be examined include weekday AM Peak Hour, weekday PM Peak Hour and Sunday Peak Hour.

Subtask 4.3 – Analyze and document Existing, 2030,& 2045 No-Build Conditions

Using the travel forecasts developed in Task 3, the VISSIM model will be used to generate various performance measures such as travel times, level of service, queuing, hours of delay, etc. This information will be documented with figures, tables, and slideshows as appropriate. Results from this work need to be provided in a way that is presentable to audiences of varying levels of technical background.

Task 4 Meetings

The consultant will meet with GWRC/FAMPO and others to present and discuss the findings of the traffic operations analyses and simulation efforts. Dynamic displays of traffic movements simulated through the VISSIM software tool will be presented at the meeting.

Work Product:

- The products of this task will be incorporated in the deliverables of subsequent tasks. In addition, a technical memorandum will be prepared that documents the existing, 2030, and 2045 No-Build conditions.

Task 5–2030& 2045 Build Conditions

194 hours required (Consultant Team – 252, FAMPO – 0) –10% of total effort.

Using the same technical methodology described in Task 4, the consultant team will prepare VISSIM modeling to reflect the build condition in years 2030 and 2045. The details of each build condition will be determined based on coordination with the Study Work Group (See Task 9). It is expected that there will be a limited amount of iteration of various build scenarios in 2030 and 2045 in order for the study team to arrive at the preferred alternative that meets the needs of each year of analysis. For the purpose of this scope of work, a maximum of four scenarios is assumed for each of the future years (2030& 2045), with one of the variants including the no-build condition plus only the northbound river crossing project. As in the existing and no-build conditions, the analysis will include weekday AM Peak Hour, weekday PM Peak Hour, and Sunday Peak Hour.

Work Product:

- The product of this task will be incorporated in the deliverables of subsequent tasks. In addition, a technical memorandum will be prepared that documents the 2030 and 2045 Build conditions.

Task 6 – Version 3.1 Travel Model Review and LRTP Support

149 hours required (Consultant Team – 149, FAMPO – 0) – 6% of total effort.

The consultant will provide application of the v3.1 FAMPO model to test and report information needed for the upcoming vision and constrained LRTP update which includes the entire GWRC area (four counties and one city). Example support activities include coding of projects and model runs of existing conditions, future no-build (committed projects only), future constrained plan, and future vision plan. Specifically, scenarios will consist of:

- 2045 No Build: Existing + Committed SYIP
- 2045 CLRP Build- Fiscally Constrained Long Range Plan[1]
- 2045 Vision Build[2]

These activities will generate data describing roadway level of service such as volume-to-capacity ratios and other measures for use in plan scenario evaluation.

The consultant will review project lists for each of the future plan scenarios and ensure that all relevant projects are included in the coded network for the GWRC area and are accurately represented in their operational and physical characteristics. In addition, staff will ensure that all facilities are accurately connected to the existing coded network. The consultant will then execute the FAMPO model to estimate 2045 travel demand for AM peak period, PM peak period and a 24 hour period for the baseline 2045 conditions. Based on model runs and post-processing, the consultant will develop forecasts and level of service measures that FAMPO staff will use to identify forecast year transportation deficiencies and an initial set of recommendations to address the deficiencies.

Measures used to identify deficiencies will include link volumes, volume-to-capacity ratios, and travel speeds (to compare degrees of congestion on failing roadways). An additional measure the consultant staff has found useful in suburbanizing areas is the identification of "transitional roads." These are roads that have a very low volume in the existing (base) year, are known to be geometrically deficient (i.e., narrow lanes, no shoulders), and have a high projected annual growth rate such as 6% or more. These roads are not projected to be congested, but the combination of geometric deficiencies and high traffic growth rates is a red flag. When assessing transportation improvements which may not directly involve transitional roads, it is useful to observe whether the growth rates on these roads are reduced. The consultant will communicate level of service measures via mapping and tabular summaries of technical data.

FAMPO staff will develop a set of test alternatives for any given future scenario, incorporating initial recommendations, based on the level of service analysis described above. The consultant will develop <u>one additional</u> round of forecasts and level of service measures based on the test alternatives specified by FAMPO.

<u>Work Products:</u>

- Technical Memorandum: Baseline and Revised Forecasts. This memo will document the model application and resulting forecasts, including appropriate mapping to illustrate level of service analysis

Task 7–Economic Benefits

264 hours required (Consultant Team – 264, FAMPO – 0) –10% of total effort.

This task will provide an assessment of the anticipated economic benefit to the region due to the reduced travel congestion resulting from the 2045 preferred alternative along I-95. Due to limited

[1] Assumes top improvements from I-95 Phase 2 & some other mostly local road projects

[2] Assumes additional improvements that could be done if FAMPO had an authority like NOVA and VRE Gas Tax Floor in place. Preliminary estimates are that this would increase available funding by about 125% above expected CLRP funding levels without an authority or VRE gas tax floor in place.

resources associated with this Phase 2 study, this economic benefit task will only focus on direct benefits such as the value of time saved based on reduction in lost time due to congestion, reductions in fuel consumption, and changes in other vehicle operating costs derived from the simulation analyses. Indirect and induced economic benefits will only be discussed in a qualitative way, referencing literature readily available on these subjects.

Our proposed approach will quantify current[3] and future congestion costs associated with incremental delay and vehicle operation experienced directly by motorists traveling on I-95 northbound and southbound between the interchange with Russell Road (Exit 148) and VA 639 (Exit 110), as well as the associated indirect and induced costs. The southern study terminus was chosen to ensure documentation of known and recurring weekend congestion. The approach will also quantify the broader economic impacts on the region[4] as a result of this traffic congestion.

Subtask 7.1 – Data Collection

This study will feature the use of a GPS-based dataset (Streetlight) to assess motor vehicle travel flows. This information is already being used in other tasks of this study. The dataset will include a breakdown of passenger vehicles, medium and heavy commercial vehicles; and will also provide the capability to "trace" the origins and destinations of motorists using I-95. These traces also contain information characterizing the motorists' trips including: relative traffic volumes, trip length/time distributions, and various traveler attribute metrics. Metrics are broken out by weekday and day-part.The task also includes collection and review of economic and demographic supplemental information from government and private sources to develop a socioeconomic portfolio of I-95 motorists including personal and commercial users in the area of influence. These sources, among others, include the County Business Patterns, Census of Business, U.S. Census, ESRI business analyst and commercial business data sources.

Subtask 7.2 – Determine Value and Cost of Travel

Activities in this subtask will allow a derivation of value and cost of travel for motorists using I-95 in the study area. The value and cost of travel will be an integral component in determining the direct costs of congestion to the motorist as well as the regional costs on the economy.

The GPS dataset will provide the information necessary to determine the area of influence based on the location of origins and destinations of motorists using I-95. Once identified, Census data or income distributions available from the GPS datasets will enable calculation of the average income of the motorists that are engaged in personal travel. Generally, the value of time for travel is about 50%-70% of income[5]. The cost determination will also include additional fuel and wear-and-tear on the vehicle caused by increased idling and travel time.

Determination of the value for commercial travel will use industry data from Census and available commodity flow data. Commercial travel values vary with distance traveled, shipment costs, and commodity type and can range from a few dollars per hour to $100 per hour.[6] Calculations will also reflect the cost of equipment (e.g. trucks, company cars, etc.), fuel, and wear-and-tear.

[3] Circa 2016.

[4] Spotsylvania, Caroline, Stafford, and King George counties and the City of Fredericksburg.

[5] "Departmental Guidance for the Valuation of Travel Time in Economic Analysis", USDOT, originally issued in 1997 and updated in 2003.

[6] "Modeling Values-of-Time to Support Freight Decision Making: Results from a Stated Preference Survey in New York", Komanduri, Musti, and Proussaloglou, November 2011

Subtask 7.3 – Determine Costs Experienced by Motorists

The magnitude of costs will be a function of delay experienced by motorists traveling on I-95 due to congestion. The GPS dataset will provide the observed number of vehicles traveling on I-95 by origin-destination pair as well as the travel time distribution of those vehicles. Several methods of delay calculation will be considered and will result in a range of costs when delay is multiplied by the appropriate value of travel. Total costs will include increases in vehicle operating costs due to delay.

Subtask 7.4 – Alternatives Analysis

Analysis will include a forecast of traffic congestion costs in and 2030 and 2045 directly experienced by motorists and the effect of the "preferred alternative" from Phase 2 of the I-95 Needs Study. Forecasts will utilize delay estimates produced in Task 3 reflecting existing conditions and grow that delay based on travel demand modeling results from the needs study. This approach will reflect the effect of future, increased demand in the corridor as well as the effect of the preferred alternative on congestion. Derivation of weekend delay projections will utilize the observed relationship between weekday and weekend traffic as revealed through the GPS dataset and historic count data where available.

Work Product:

- Findings from this task will be shared with GWRC staff and rolled into the Technical Report described in Task 8.

Task 8 - Technical Report

330 hours required (Consultant Team – 330, FAMPO – 0) – 13% of total effort.

A technical report will be prepared that documents the work done in Tasks 1 – 7. Draft and final documents will be prepared based on review by GWRC staff.

Work Products:

- Draft Technical Report
- Final Technical Report

Task 9 - Project Meetings

401hours required (Consultant Team – 252, FAMPO – 131) –15% of total effort.

A Study Work Group has been established that will participate in development of the 2045 Long Range Planning process as well as this I-95 Phase 2 Study. It is assumed that the consultant team will attend a pre-scoping meeting with VDOT and a number of monthly Study Work Group meetings to discuss progress and results from the Phase 2 Study. Beyond the Study Work Group, this scope assumes additional meetings at the discretion of GWRC staff. These could take the form of briefings to Councils, Boards, or VDOT. The consultant budget assumes a total of 12-meetings that can be allocated by GWRC staff across the purposes described in this subtask. No public involvement is assumed as part of this scope.

Work Products:

- Results of these meetings will fold into other tasks.

Task 10 - Project Presentations

301 hours required (Consultant Team – 180, FAMPO – 113) –11% of total effort.

The development and delivery of presentations will be needed at various points in the study. It is assumed that the consultant will prepare for and deliver a maximum of ten presentations during the course of Tasks 1 – 7and these presentations will take place during the meetings described in Task 9. GWRC staff will decide how to allocate these presentations across the timeframe of the study.

Work Products:

- Slideshow presentation in electronic format
- Up to 3 consultant staff for each presentation

SCHEDULE

The study will be completed by April 2018 in order for GWRC to meet deadlines associated with the completion of the 2045 Long Range Plan and the next round of Smart Scale. Task 6 (LRTP Modeling) needs to be completed no later than November 30, 2017 to meet the LRTP schedule.

COST

The total labor cost is $364,753 which is derived from 2,566 hours at fully burdened rates spread across multiple job classifications from the Consultant Team and FAMPO staff. Direct expensesare expected to be $5,363 for travel to/from meetingsin the study area, and printing. Therefore, the total project cost will be $370,115.

I-95 Corridor Evaluation - Phase 2

5/8/2017

TEAM PROJECT TOTALS

	Labor	ODCs	Total
Baker	$ 247,302	$ 2,000	$ 249,302
ATCS	$ 95,450	$ 363	$ 95,813
FAMPO	$ 22,000	$ 3,000	$ 25,000
	$ 364,753	**$ 5,363**	**$ 370,115**

BAKER PROJECT TOTALS

LABOR

Task No.	Task	BAKER	Total Hours	BAKER	Total Cost
	I-95 Corridor Evaluation – Phase 2 - BAKER				
1	Document Review	27	27	$3,759	$3,759
2	Supplemental Data Collection	64	64	$8,089	$8,089
3	Travel Demand Model Development & Forecasts	504	504	$74,125	$74,125
4	Existing, 2030 No-Build & 2045 No-Build Conditions	42	42	$8,642	$8,642
5	2030 & 2045 Build Conditions	40	40	$8,108	$8,108
6	Version 3.1 Travel Model Review and LRTP Support	149	149	$21,847	$21,847
7	Economic Benefits	264	264	$40,025	$40,025
8	Technical Report	246	246	$31,632	$31,632
9	Project Meetings	204	204	$33,156	$33,156
10	Final Project Presentations	152	152	$17,920	$17,920
	Total	**1692**	**1692**	**$247,302**	**$247,302**

ODC's

Task No.	Task	BAKER Reproduction	BAKER Travel	BAKER Vendors	BAKER Communication/Postage	TOTAL
	I-95 Corridor Evaluation – Phase 2 - BAKER					
1	Document Review	$0	$0	$0	$0	$0
2	Supplemental Data Collection	$0	$0	$0	$0	$0
3	Travel Demand Model Development & Forecasts	$0	$0	$0	$0	$0
4	Existing, 2030 No-Build and 2045 No-Build Conditions	$0	$0	$0	$0	$0
5	2030 & 2045 Build Conditions	$0	$0	$0	$0	$0
6	Version 3.1 Travel Model Review and LRTP Support	$0	$0	$0	$0	$0
7	Economic Benefits	$0	$0	$0	$0	$0
8	Technical Report	$500	$0	$0	$0	$500
9	Project Meetings	$500	$800	$0	$0	$1,300
10	Final Project Presentations	$200	$0	$0	$0	$200
	Total	**$1,200**	**$800**	**$0**	**$0**	**$2,000**

SUB TOTAL

I-95 Corridor Evaluation – Phase 2 - BAKER

Labor	$247,302
ODC's	$2,000
Total	$249,302

ATCS PROJECT TOTALS

LABOR

Task No.	Task	ATCS	Total Hours	ATCS	Total Cost
	I-95 Corridor Evaluation – Phase 2 - ATCS				
1	Document Review	0	0	$0	$0
2	Supplemental Data Collection	0	0	$0	$0
3	Travel Demand Model Development & Forecasts	0	0	$0	$0
4	Existing, 2030 No-Build & 2045 No-Build Conditions	211	211	$34,504	$34,504
5	2030 & 2045 Build Conditions	212	212	$34,014	$34,014
6	Version 3.1 Travel Model Review and LRTP Support	0	0	$0	$0
7	Economic Benefits	0	0	$0	$0
8	Technical Report	100	100	$12,728	$12,728
9	Project Meetings	48	48	$8,918	$8,918
10	Final Project Presentations	28	28	$5,286	$5,286
	Total	**599**	**599**	**$95,450**	**$95,450**

ODC's

Task No.	Task	ATCS Reproduction	ATCS Travel	ATCS Vendors	ATCS Communication/Postage	TOTAL
	I-95 Corridor Evaluation – Phase 2 - ATCS					
1	Document Review	$0	$0	$0	$0	$0
2	Supplemental Data Collection	$0	$0	$0	$0	$0
3	Travel Demand Model Development & Forecasts	$0	$0	$0	$0	$0
4	Existing, 2030 No-Build and 2045 No-Build Conditions	$0	$0	$0	$0	$0
5	2030 & 2045 Build Conditions	$0	$0	$0	$0	$0
6	Version 3.1 Travel Model Review and LRTP Support	$0	$0	$0	$0	$0
7	Economic Benefits	$0	$0	$0	$0	$0
8	Technical Report	$130	$0	$0	$50	$180
9	Project Meetings	$0	$133	$0	$0	$133
10	Final Project Presentations	$0	$0	$0	$50	$50
	Total	**$130**	**$133**	**$0**	**$100**	**$363**

SUB TOTAL

I-95 Corridor Evaluation – Phase 2 - ATCS

Labor	$95,450
ODC's	$363
Total	$95,813

FAMPO PROJECT TOTALS

LABOR

Task No.	Task	FAMPO	Total Hours	FAMPO	Total Cost
	I-95 Corridor Evaluation – Phase 2 - FAMPO				
1	Document Review	31	31	$2,480	$2,480
2	Supplemental Data Collection	0	0	$0	$0
3	Travel Demand Model Development & Forecasts	0	0	$0	$0
4	Existing, 2030 No-Build & 2045 No-Build Conditions	0	0	$0	$0
5	2030 & 2045 Build Conditions	0	0	$0	$0
6	Version 3.1 Travel Model Review and LRTP Support	0	0	$0	$0
7	Economic Benefits	0	0	$0	$0
8	Technical Report	0	0	$0	$0
9	Project Meetings	131	131	$10,480	$10,480
10	Final Project Presentations	113	113	$9,040	$9,040
	Total	**275**	**275**	**$22,000**	**$22,000**

ODC's

Task No.	Task	FAMPO Reproduction	FAMPO Travel	FAMPO Vendors	FAMPO Communication/Postage	TOTAL
	I-95 Corridor Evaluation – Phase 2 - FAMPO					
1	Document Review					$0
2	Supplemental Data Collection					$0
3	Travel Demand Model Development & Forecasts					$0
4	Existing, 2030 No-Build and 2045 No-Build Conditions					$0
5	2030 & 2045 Build Conditions					$0
6	Version 3.1 Travel Model Review and LRTP Support					$0
7	Economic Benefits					$0
8	Technical Report					$0
9	Project Meetings	$3,000				$3,000
10	Final Project Presentations					$0
	Total	**$3,000**	**$0**	**$0**	**$0**	**$3,000**

SUB TOTAL

I-95 Corridor Evaluation – Phase 2 - FAMPO

Labor	$22,000
ODC's	$3,000
Total	$25,000