Regional Activity Center (RAC) of Downtown Broward
Comprehensive Urban Subarea Mobility Strategy and Implementation Plan

Work Order 1

Section I – Purpose

The purpose of this collaborative effort is to create a Comprehensive Urban Mobility Strategy and Implementation Plan (the IMPLEMENTATION PLAN) consistent with and to accomplish the scope of work attached to the Joint Participation Agreement as between the Florida Department of Transportation - District IV (attached to this Work Order as Exhibit E) and the Fort Lauderdale Downtown Development Authority, that will maximize pedestrian-oriented mobility opportunities and access to other transportation system connections within and leading to the Regional Activity Center (RAC) of Downtown Broward. This IMPLEMENTATION PLAN will consider pedestrian-oriented design, transit access strategies, economic development, urban design, environmental quality and other issues that affect the quality of urban life and improve the livability of the downtown study area as referenced in the Scope of Work.

Section II – Objectives

The objective of the Comprehensive Urban Subarea Mobility Strategy and Implementation Plan is to identify alternatives, select an alternative to be implemented to improve pedestrian-oriented mobility and access to other transportation systems, secure funding and implement appropriate improvements that accomplish the purpose stated above.

Section III – Phasing

The IMPLEMENTATION PLAN will be developed in three phases as follows:

Phase I - Conceptual Plan

Conceptual Plan outline of each task will be prepared based upon existing information, best judgement and community input. The product of this phase will be a summary report and presentation to be submitted to the Congressional representation to request priority recognition in the reauthorization of TEA-21 scheduled for October 2003. A draft Conceptual Plan outline will be completed by June 30, 2002, and the completed Conceptual Plan proposal will be presented to the Study Advisory Committee (SAC) in October of 2002. (See the Exhibit B schedule attached to this work order).

Phase II – Analysis, Planning and Proposal

In-depth analyses and refinement will be prepared for each Conceptual Plan alternative. The product of this phase will include a report and presentation of a preferred alternative to be used by the Congressional representation to request funding appropriations. This phase will be completed in January of 2003.

Phase III – Implementation Plan

Implementation plan and cost estimates will be completed on or before June 2003 and will be submitted to the Congressional representation and USDOT when needed for authorization and funding approvals.

The above schedule and phases are undertaken to coincide with the expected requirements for Congressional designation of the preferred alternative proposal as a priority project upon the reauthorization of TEA-21, scheduled for October 2003. The CONSULTANT will advise the SAC should additional information become available as to funding or authorization schedules that would require revision to this planning effort. Following these phases, the funding obligation process must continue with specific Congressional requests for funding, applications for grants from FTA/FHWA, and state funding where appropriate. These services will be performed as needed under an addendum to this work order.

Section IV – Responsibilities of the Study Advisory Committee (SAC) Technical and Policy Subcommittees

The CONSULTANT and the DDA project manager shall respond to directions of the SAC based upon the following:

- The Technical Subcommittee will meet as needed to review alternatives and the impact analysis of any proposal and to report its observations to the SAC as to feasibility issues affecting construction of proposed improvements and realistic expectations of successful implementation and operations.

- The Policy Subcommittee will meet as needed to address any required changes in the Scope of Work, the Work Order or Schedule, to respond to funding deadlines and report its recommendations to the SAC.

Subcommittee meetings will be scheduled as directed by the SAC, and when a subcommittee report is received by the SAC, it will be considered with all other information available to the SAC during its deliberations as provided for in the Scope of Work.

Section V – RAC Comprehensive Urban Subarea Mobility Strategy and Implementation Plan

Following is a comprehensive scope for all phases of the IMPLEMENTATION PLAN. This scope will be completed in three phases as described above. Each phase will be a continuation and elaboration of the work completed under each task as appropriate to the stage of funding application. The responsibilities and deliverables described for each member of the planning and design team are for the first phase of work. In general, transportation related issues will be the responsibility of Keith and Schnars, P.A., while urban design, physical planning, architecture and landscape architecture are the responsibility of EDSA. The members of this team include:

Keith and Schnars, P.A. (K&S)

Subconsultants to K&S:

The Goodman Corporation (TGC)	Comprehensive transit and pedestrian oriented strategies and funding and implementation plans
Cartaya and Associates – Architects (CAA)	Architecture
Anthony Abbate Architects (AAA)	Computer modeling of urban architectural forms and academic review and critique
Dickey Consulting Services (DCS)	Public Outreach

EDSA

Subconsultants to EDSA:

Tinter Associates	Transportation research and planning
Craven Thompson	Civil engineering and surveying
The Center for Creating the Future, Inc. (CCF)	Parking research and strategies
Construction Management Services (CMS)	Cost estimating
James N. Archer Architects, P.A.	Sketch illustrations and design review
Ronald E. Frazier & Associates, P.A. (REF)	Urban design, town planning and consensus development for the Sistrunk Corridor (Andrews Avenue to and including the NW 7 Avenue intersection)

As prime consultants, K&S and EDSA shall designate key personnel to jointly coordinate all work for project management review and comment in preparation for and submission to the SAC. Although these subconsultants report to the two prime consultants as shown above, all members will be responsible for the success of the study.

Task 1.0 – Community Awareness, Consensus Building and Intergovernmental Coordination

The CONSULTANT will engage in a variety of community awareness, consensus building, public involvement and intergovernmental coordination activities throughout the entire study process so that the community may contribute to the design and development of the mobility system for Downtown Broward. These activities will help identify issues and build community and governmental consensus to carry the project forward to subsequent implementation phases.

Task 1.1 Study Advisory Committee (SAC) Meetings

The CONSULTANT will meet with the SAC once a month or more frequently if requested by SAC for the duration of the project to present findings and status of the project, and to receive approval to continue to the next phase. The content and format of these and other consensus building meetings will be designed to promote an informed SAC to review and provide input as the project progresses.

Task 1.2 Technical/Policy Coordinating Committee Meetings

The CONSULTANT will meet with the Technical and Policy Subcommittees as needed to review proposed CONSULTANT issues, findings and plans.

Task 1.3 Public Informational Meetings and Workshops

The CONSULTANT, prior to the conclusions of Phase I of the Implementation Plan, will make up to 10 presentations to the community organizations within or nearby the study areas to obtain public input of plans and strategies, and to help create public support for the project. The Consultant will prepare a newsletter for distribution to the community organizations to inform them of the work effort and schedule, with newsletter content generally to be provided by K&S and EDSA. Additional emphasis to establish urban design and build community consensus with planning documents and appropriate graphics will be undertaken for Sistrunk Boulevard between Andrews Avenue and the NW 7 Avenue intersection.

Task 1.4 Presentations to Local Agencies and the Broward County MPO

The CONSULTANT will make periodic presentations of findings and plans to the City, County, DDA, CRA, MPO, Tri-Rail and FDOT District IV to receive their comments and support for the project and will notify the community organizations referenced in Task 1.3 of such meetings and their opportunity to comment on proposals and planning efforts. There will be up to 12 presentations from the initiation of the Work Order through June 2003.

Task 1.5 Draft Technical Memorandum #1

The CONSULTANT shall prepare Draft Technical Memorandum #1 – the Community Awareness Plan, documenting the public involvement process for the RAC Comprehensive Urban Subarea Mobility Strategy and Implementation Plan.

Responsibilities and Deliverables

DDA Project Manager – Agenda, organization for meetings and meeting management
AAA – Assist project manager to arrange speakers for meetings
Team – Presentations of current work at meetings
K&S – Technical Memorandum of this task
EDSA – Technical Memorandum of this task
DCS – Coordination of the public outreach efforts and presentations
REF - Urban design and building community consensus with planning documents and appropriate graphics for Sistrunk Boulevard between Andrews Avenue and the NW 7 Avenue intersection.

Task 2.0 – Historical Overview, Issues Identification and Setting Objectives

Task 2.1 Introduction and Historical Overview

The CONSULTANT will research and provide a foundation for the study – its process and conclusions that is based on existing information for historical perspectives and the input of various consensus-building groups for goals and issues. Sections will include:

A. Project executive summary
B. History of the project, goals and schedule
C. Issues identification
D. Mobility Vision for Downtown
E. System Breakdown in the Future
C. Local history
F. International and national examples

Task 2.2 Mobility Objectives and Benefits

The CONSULTANT will identify methods, quantify and give specific examples of mobility objectives for the IMPLEMENTATION PLAN, and will identify the benefits resulting from achieving these objectives.

Task 2.3 Draft Technical Memorandum #2

The CONSULTANT shall prepare Draft Technical Memorandum #2 to document the historical overview, the methods, quantification and examples of the mobility vision and objectives for the IMPLEMENTATION PLAN.

Responsibilities and deliverables:
EDSA – Introduction and historical overview research and section of Technical Memorandum
Tinter Associates – Research mobility objectives and benefits
K&S – Quantification and overview of mobility objectives and benefits and section of Technical Memorandum
TGC – Quantification and overview of mobility objectives and benefits
REF – Provide a section in the Technical Memorandum to cover the historical overview of prior planning efforts for Sistrunk Boulevard using the *Sistrunk Commercial Revitalization Study, 1985* and the *Safe Neighborhood Study, 1990.*

Task 3.0 – Existing and Committed Land Use and Transportation Conditions Analysis

The CONSULTANT will prepare an inventory of existing and committed land uses, projected development patterns, potential development rights and uses and current ownership identification listings and graphics. Vehicular, pedestrian, bicycle, transit and parking data will be assembled for use in the analysis of system alternatives. Regional mobility connections providing access into the study area will be analyzed, along with the existing subarea mobility patterns found providing pedestrian-oriented and transit access linkages within the study area. Existing and projected PM peak hour traffic volumes, transit service, transit ridership, pedestrian activity and parking supply will be identified using available City and County data, prior City reports and the latest available ridership data from the local transit operators. Vehicular, pedestrian and transit volumes within the study area will be projected based upon current development trends and the approved but unbuilt committed development projects. Existing data will be obtained and screened for accuracy, and additional data requirements will be identified and collected if needed. Existing traffic, transit, pedestrian and parking level of service conditions will be analyzed within the study area using the most advanced FDOT and/or federally allowed procedures for evaluating multi-modal systems and establishing multi-modal levels of service where applicable. Existing service, and the planned and programmed expansions of transit service and capital facilities within the study area will be identified including those provided by Broward County Transit (BCt), Tri-Rail, Downtown TMA, Charter services, Water Taxi/Water Bus Service and local community shuttles. Specific tasks are listed below.

Task 3.1 Prepare the Existing and Committed Plans

A. Show current buildings and transportation corridors with a land use overlay.
B. Show approved but unbuilt committed development projects, potential development and projected development patterns.
C. Create an ownership identification listing and present graphically on the plan.

Responsibilities and Deliverables

Craven Thompson – Planimetric showing buildings, roads, parking areas, pedestrian areas, parks and open space
Tinter Associates – Approved but unbuilt transportation project overlay
EDSA – Land use overlay, overlay of approved but unbuilt building projects, analysis of development patterns and ownership graphic – written section of Technical Memorandum
AAA – Development of computer generated architectural model of study area

Task 3.2 Document Existing and Committed Transportation Mobility

A. Vehicle (auto, freight, deliveries, emergency vehicles)
B. Pedestrian and bicycle
C. Transit modes (BCT, Community Shuttles, TMAX, City Cruiser, Water Taxi, CAC Alt. Fuel. Tri-Rail feeder buses, beach shuttles and New Transit Concepts
D. Parking supply and strategies

Responsibilities and Deliverables
Tinter Associates – Research and documentation of this task
K&S – Coordination and format of data collected, transit data, overview and written section of Technical Memorandum
CCF – overview of existing parking supply and strategies

Task 3.3 Document the Existing Land Use Law and Regulatory Framework

A. Describe the law in place – ULDR's and Comprehensive Plan
B. Describe the existing regulatory structure - land use and zoning
C. Describe the applicable mobility engineering design and safety criteria

Responsibilities and Deliverables
EDSA – Research and document relevant land use and zoning regulations – Technical Memorandum on all but transportation
CAA – Research and document relevant zoning or building regulations that relate to, promote or adversely affect pedestrian-oriented design
Tinter Associates – Research and document relevant transportation related regulations, including mobility engineering design and safety criteria
K&S – Technical Memorandum on transportation regulations

Task 3.4 Document the Existing Infrastructure System

A. Identify the locations and types of underground and overhead utilities within the public ROW
B. Identify stormwater drainage system opportunities and constraints
C. Identify the current cross section measurements of selected study area roadway corridors

Responsibilities and Deliverables
Craven Thompson – Research and documentation of this task
EDSA – Appropriate section of Technical Memorandum

Task 3.5 Coordinate with the Recommendations of Previous and Ongoing Studies

Previous and ongoing transportation studies will be reviewed and their findings and recommendations will be documented in the context of the objectives set forth for this study. The review of the findings from the previous and ongoing studies may assist in the development and screening of corridor mobility enhancement alternatives. The following ongoing studies and plans will be examined:

- Andrews Avenue, Third Avenue, and Sistrunk Boulevard Preliminary PD&E
- 7th/9th Avenue Connector PD&E
- I-95 HOV Systems Plan – Downtown Fort Lauderdale Connection Project Needs Study
- Broward County Clean Air Cooperative Phase II - Operations Plan
- Broward County 2020 Vision Plan
- Broward County MPO Long Range Transportation Plan and TIP
- Broward County Transit Development Program

- Fort Lauderdale Beach Transit and Parking PD&E Study
- Ongoing Tri-Rail Studies
- I-595 (East/West) Premium Transit Alternatives Analysis
- Consolidated Downtown Master Plan
- South Florida Transit Analysis Study (FEC Corridor)
- Broward Urban River Trails (BURT) Dixie Highway/FEC Greenway
- Other plans referenced on Page 23 of the Scope of Work or as determined by the SAC to be relevant to the IMPLEMENTATION PLAN.

Responsibilities and Deliverables
K&S – Research and documentation and appropriate section of Technical Memorandum

Task 3.6 Draft Technical Memorandum #3

Prepare Draft Technical Memorandum #3 to present an overview of the existing and committed land use and transportation system within the study area. Included will be a brief summary of the findings and applicability of previous and ongoing studies and plans. Existing mobility deficiencies will be documented.

Responsibilities and Deliverables
K&S – Applicable sections (see above)
EDSA – Applicable sections (see above)

Task 4.0 - Demand Forecasts and Projected Needs

The CONSULTANT will project future mobility demand for each travel mode assuming no further mobility enhancements are planned.

Task 4.1 Demand Forecasts

The CONSULTANT will project future mobility demand for each travel mode (using opening, interim and design year horizons) for the study area assuming no further mobility enhancements are planned. Demand forecasts to achieve design year transportation activity will be established using pedestrian, bicycle, traffic and transit modeling techniques. Projected levels of service will be examined for each existing travel mode, using current and new practices to establish multi-modal levels of service (where applicable). The CONSULTANT will calculate future mobility demand in the study area (through modeling) for each of the travel modes listed below, and will identify the specific transportation deficiencies experienced.

A. Vehicle (auto, freight, deliveries, emergency vehicles)
B. Pedestrian and bicycle
C. Transit modes (BCT, Community Shuttles, TMAX, City Cruiser, Water Taxi, CAC Alt. Fuel. Tri-Rail feeder buses, beach shuttles and pedestrian oriented transit concepts
D. Parking supply and strategies

Task 4.2 Draft Technical Memorandum #4

The CONSULTANT shall prepare Draft Technical Memorandum #4 documenting the demand forecasts for each travel mode, and the anticipated transportation deficiencies within the study area.

Responsibilities and Deliverables
K&S – Research and overview of all sections – documentation and Technical Memorandum
TGC – Research and input on transit demand and ridership forecasts
CCF – Research and input on parking
Tinter Associates – Review of findings

Task 5.0 – Develop the Subarea Mobility Plan Alternatives

Based upon the public and SAC feedback from Task 1.0, and the information collected in Task 3.0, the CONSULTANT will develop three mobility plan alternatives (plus a no build or do nothing alternative) for the study area and will develop a first phase component for every alternative that will provide pedestrian-oriented transit linkages between the Beach CRA area, the Downtown study area and the Northwest/Progresso/Flagler Heights CRA area. These efforts however, will be initiated as soon as possible to enhance public input on the development of the alternatives. The framework for each Subarea Mobility Plan Alternative is provided below.

Task 5.1 Develop the Subarea Mobility Plan Alternatives

Using plans developed in the previous phases as a base, develop alternative urban design and planning scenarios for mobility.

A. Major roadway arterials with 4 to 6 through lanes stay in place. These urban design and planning scenarios shall conform with FDOT standards as to design changes to state roads.

- lane widths may be reduced
- medians may be expanded
- most curb locations can stay in place
- turn lanes may be eliminated
- pedestrian-oriented design would be incorporated onto non-arterial lanes and to the extent possible on major arterials
- wide pedestrian corridors and public spaces, squares, zaquanes, midblock pedestrian corridors and courtyards will be established throughout the study area
- intermittent street parking (parallel) is established with large bulb out pedestrian areas
- local pedestrian-oriented circulation systems and transit access strategies would be incorporated
- mixed use linear building opportunities are developed along the perimeter of the existing parking structures or large single entrance or single purpose buildings and new mixed use parking structures are developed on the periphery of the study area
- most at grade parking lots are eliminated

B. Maximize pedestrian improvements (in addition to items in Task 5.1.A.). Where POD/TAS require alternative roadway design standards, those will be identified and resolved with FDOT.

- Additional mixed use parking structures are developed on the periphery of the study area and all at grade parking lots eliminated
- one way looped roadways would provide access into the study area to and from existing parking facilities
- major arterials bisecting the study area would be eliminated as through streets and lanes of traffic and lane widths reduced
- roadway right of way would be transformed into pedestrian and transit corridors

- more curb locations will be relocated as required to maximize pedestrian improvements
- pedestrian oriented design will be incorporated into all roadway segments
- continuous pedestrian-oriented urban form established

C. Mixture of Alternatives A and B

D. No build or do nothing

The following design elements and information would be created to evaluate each alternative:

- Development of an Opportunities Plan to identify potential corridors for pedestrian-oriented design and transit access strategies showing development opportunities and constraints
- Sample cross sections and plan views for selected corridors (5 areas)
- Sample renderings for selected corridors with prototypical façade transformations for each alternative
- Computer simulation modeling to evaluate vehicular, transit and pedestrian mobility
- Development of a transformed parking system (where applicable) along with a parking operational analysis

Responsibilities and Deliverables

CAA – Conceptual building programs and architecture for buildings at four sample areas – documentation including written program, plans and elevations

K&S – Transportation network alternative plans (using modeling where possible)

EDSA – Alternative land use diagrams and summary plan graphics for study area, renderings of four sample areas showing architecture, and transportation system – street sections of four sample areas – appropriate section of Technical Memorandum

REF – Establish urban design and community consensus with planning documents and appropriate graphics for Sistrunk Boulevard between Andrews Avenue and the NW 7 Avenue intersection; provide renderings of one sample area showing architecture, street sections and transportation system and provide appropriate section of Technical Memorandum

Team – Participation in three planning workshops

Task 5.2 Develop the Pedestrian-Oriented Overlay

The CONSULTANT shall identify the useful, comfortable and interesting pedestrian-oriented and mixed mode corridors for each alternative that would benefit from pedestrian-oriented design and transit access strategies. The CONSULTANT shall identify the pedestrian infrastructure improvements necessary to transform the study corridors, providing enhanced pedestrian-oriented linkages between the parking structures, study area destinations and the regional, county and local transportation systems and related stops and stations. The CONSULTANT will prepare sample cross sections, renderings and prototypical façade transformations for selected study corridors and land uses to examine the feasibility of the pedestrian-oriented overlay.

Responsibilities and Deliverables

EDSA – Pedestrian system overlay plan – appropriate section of Technical Memorandum

K&S – Transportation planning

Task 5.3 Develop the Transit Overlay

The CONSULTANT shall identify potential transit access corridors and opportunities for pedestrian-oriented mixed mode corridors within the study area as well as the regional transit linkages referenced in the Scope of Work. Pedestrian-oriented design, vehicle types, routing schedules and power systems will be fully examined. The corridors and opportunities will be evaluated based upon the following criteria:

- Their ability to serve existing and new target markets and transit attractors
- Their ability to meet local transit goals and objectives
- Measures of service performance, such as service effectiveness or cost efficiency
- Service coverage
- Ridership potential
- Compatibility with range and capacity limitations of vehicle technology
- Impacts on existing mobility throughout the study area
- Duplication of or compatibility with existing or planned transit improvements or services
- Community impacts/acceptance
- Feasibility of implementation
- Capital and operating cost requirements

Additional criteria may be developed during the course of the study.

Responsibilities and Deliverables
TGC – Transit overlay planning and feasibility review
K&S – Overview and transit overlay plan and appropriate section of Technical Memorandum

Task 5.4 Examine Vehicle Technology

The CONSULTANT will evaluate a range of different types of transit vehicles for use in this system, including alternative fueled transit vehicles, electric vehicles, electric-hybrid vehicles and nationally or internationally available small transit equipment. The review will include both the advantages and disadvantages of different technologies and an inventory of some currently available vehicles. The review will consider operational and maintenance characteristics of each technology. The CONSULTANT will recommend one or more preferred vehicle types for use in the study area.

Responsibilities and Deliverables
TGC – Research and recommendations
K&S – Overview and appropriate section of Technical Memorandum

Task 5.5 Develop the Infrastructure Improvements and Modifications

The alternatives identified in Task 5.1 will include recommendations of improvements to the existing street network to accommodate modified roadway design, pedestrian and bicycle enhancements, transit infrastructure and transit operations. The transit infrastructure will include transit terminal locations for the storage, stopping and connection points of the system, transit/shuttle stops throughout the study area, transit informational kiosks to display transit schedules and transit shelters and the urban form of adjacent buildings to protect the rider from the elements. The CONSULTANT shall identify the infrastructure modifications and techniques which

can be incorporated into the system alternatives to provide priority traffic flow treatments for the transit overlay.

Task 5.6 Develop the Parking System Components

The alternatives identified in Task 5.1 will include recommendations to modify and/or move the parking supply within the study area. The CONSULTANT shall identify the type of parking transformation envisioned for each alternative to improve the pedestrian orientation using the existing public parking structures, and shall identify the potential sites and design for peripheral mixed use pedestrian-oriented parking structures. The CONSULTANT shall evaluate parking operations for each alternative (as applicable), examining the feasibility of transforming and modifying access to the automobile for improved pedestrian-oriented mobility. The Consultant shall identify how the Broward Boulevard Park and Ride lot and the area along NW 27 Avenue between the African American library and the Tri-Rail Station, could be best utilized to provide remote parking for the study areas and adjacent uses and the transit/commuter rail facilities. The CONSULTANT shall provide the following information or conceptual plan details for each proposed mixed use parking facility:

- The number of parking spaces to be accommodated for each mixed use parking facility
- The conceptual layout of each mixed use parking facility
- The mix of uses for each parking facility with related linear or adjacent buildings
- The vehicular, transit and bicycle circulation plans for each mixed use parking facility, including ingress and egress locations, transit vehicle and bicycle parking areas, storage areas and pick-up/drop-off areas
- The potential impacts to adjacent roadways and traffic signals
- The pedestrian circulation plans for each parking facility, including ingress and egress locations and connections to transit passenger pick-up and drop-off areas and adjacent mixed use linear and adjacent buildings
- The land area needed to accommodate each mixed use parking facility and the methodology of acquiring that land
- The estimated construction and land cost of each proposed facility
- Parking pricing structure, maintenance costs etc. sufficient to identify approximate operating costs for each facility.

Responsibilities and Deliverables

CCF – Research and documentation of need
CAA – Programming and concept design – written program, plans and elevations to illustrate design
EDSA – Appropriate section of Technical Memorandum

Task 5.7 – Develop Evaluation Criteria

The CONSULTANT will develop criteria that will be used to evaluate and compare the performance of each alternative in meeting mobility strategy objectives. These evaluation criteria may include:

- Congestion mitigation factors
  - improved pedestrian mobility
  - reduced vehicle congestion
  - reduced vehicle miles traveled
  - increased transit ridership
  - increased bicycle movements
- Environmental factors
  - improved air quality
  - improved natural habitat
  - social and cultural benefits
- Economic factors
  - reduced demand for parking structures
  - improved property values
  - improved social interactions, reduced incidence of crime and other criteria to evaluate livability of the downtown and adjacent communities
- Financial factors
  - Capital and construction costs and financial impacts to the City
  - maintenance and operation costs
  - revenue potential
  - cost per person using the transportation system

The CONSULTANT shall identify short-term versus long-term mobility plan improvements, using locally available as well as federally accessible funding sources and will address the benefits and impacts of each mobility plan option.

Responsibilities and Deliverables
K&S – Research, documentation and complete initial draft section of Technical Memorandum
EDSA – Comment and propose revisions to evaluation criteria

Task 5.8 Draft Technical Memorandum #5

The CONSULTANT shall prepare Draft Technical Memorandum #5 documenting the mobility plan alternatives. The deliverables will include an overview of the alternatives studied, with pedestrian, transit system and parking details prepared for one preferred alternative.

Responsibilities and Deliverables
K& S – Lead – sections shown above
EDSA – Sections shown above
REF – Provide appropriate sections of the Technical Memorandum as noted above

Task 6.0 - Prepare the Documentation of Purpose and Need

Based on the information, systems and improvements developed in Tasks 1.0 through 4.0, the CONSULTANT will prepare the documentation of purpose and need for the proposed mobility improvements.

Task 6.1 Forecast Mobility Demand

Given the recommended mobility alternatives, the CONSULTANT will project future mobility demand (using opening, interim and design year horizons) for the recommended mobility program. Multi-modal demand forecasts to achieve design year transportation activity will be established using traffic and transit modeling techniques. Projected levels of service will be examined for each travel mode, using current and new practices to establish multi-modal levels of service (where applicable). The multi-modal demand analysis will be consistent with the documentation required to seek federal, state or local funding for system implementation. The CONSULTANT will calculate future mobility demand in the study area (through modeling) and will identify the specific transportation deficiencies experienced, and the mobility benefits derived from the implementation of the proposed mobility system improvements.

Task 6.2 Documentation of Purpose and Need and the Analysis of Alternatives

The CONSULTANT will prepare the documentation justifying the purpose and need of the proposed mobility improvements pursuant to PD&E guidelines, FTA criteria and other credible analysis techniques. Potential mobility impacts and benefits will be identified for the baseline no-build and build alternatives using the criteria developed in Task 5.7 above.

Task 6.3 Environmental Analysis

The CONSULTANT will identify the level of environmental analysis needed to evaluate the infrastructure and operating components which make up the mobility system improvements.

Task 6.4 Analysis of Near Term Demonstration Projects

Analysis of opportunities for near term demonstration of some components of the IMPLEMENTATION PLAN will be undertaken, especially if compatible and helpful to other near term capital projects being undertaken in the study area.

Task 6.5 Draft Technical Memorandum #6

The CONSULTANT shall prepare Draft Technical Memorandum #6 to quantify the purpose and need of the mobility system improvements. The memorandum will document the methodology utilized to calculate future mobility demand in the study area and the mobility benefits derived from the implementation of the proposed mobility system improvements.

Responsibilities and Deliverables

K&S – Research, planning and documentation – Technical Memorandum
TGC – Research and planning

Task 7.0 –Prepare the Financial and Implementation Plan

Task 7.1 Develop Cost Estimates for a Preferred Alternative

The CONSULTANT shall develop cost estimates for the proposed mobility system, including itemized costs for the estimated capital infrastructure, operating costs and maintenance costs for the transit, pedestrian and parking components of the system. The estimated costs should include the following:

- transit capital costs (vehicles);
- transit operating and maintenance costs;
- transit infrastructure improvement costs (transit terminal facilities, shelters, stops or stations and informational kiosks);
- pedestrian and bicycle infrastructure improvement costs (sidewalks, pathways, pedestrian transit connections, lighting, landscaping and other streetscape treatments);
- roadway modifications;
- parking structure and related infrastructure costs (land costs, parking construction and operations);
- intermittent street parking (parallel) and pedestrian-oriented bulb out corridors and public space.

These costs will be based on more detailed estimates of five sample areas and then generalized to the overall Subarea.

Responsibilities and Deliverables
CMS – Preparation of cost estimates
K&S – Preparation of quantity estimates of transportation improvements
TGC – Preparation of quantity estimates for transit improvements
Craven Thompson – Preparation of quantity estimates for infrastructure improvements
EDSA – Preparation of quantity estimates for landscape improvements – appropriate section of technical memorandum
CAA – Preparation of quantity estimates for architecture improvements

Task 7.2 Develop a Funding Program

The CONSULTANT shall develop a capital, operating and maintenance funding program to implement and maintain the improvements and shall identify which federal, state and local funding resources will be requested to support the project.

Responsibilities and Deliverables
TGC – Research, planning and documentation
K&S – Overview and appropriate section of Technical Memorandum

Task 7.3 Develop an Implementation Strategy for the Mobility Plan

The CONSULTANT shall develop an Comprehensive Implementation Strategy for the mobility system including the timetables to implement each phase, the funding initiatives to be used for the project, the legislative initiatives to be undertaken to support the project, and the assignments of responsibilities to various agencies and parties to the improvements. The funding initiatives will include the procedural steps necessary to seek designation as a priority project in the TEA-21 reauthorization, and the procedural steps necessary to request yearly congressional, state or local appropriations or funding.

Responsibilities and Deliverables
TGC – Research, planning and documentation
K&S – Overview and appropriate section of Technical Memorandum

Task 7.4 Draft Technical Memorandum #7

The CONSULTANT shall prepare Draft Technical Memorandum #7 to document the costs to implement the preferred alternative, and the implementation strategies to be used to build the project.

Responsibilities and Deliverables
TGC – Documentation for Technical Memorandum
K&S – Overview and documentation for Technical Memorandum

Task 8.0 – Final Report/Deliverables

Task 8.1 Comprehensive Urban Subarea Mobility Strategy and Implementation Plan

A Comprehensive Urban Subarea Mobility Strategy and Implementation Plan will be prepared merging the findings from Technical Memoranda 1 through 7, consistent with the Scope of Work for the RAC Subarea Mobility Study. Twenty-five copies of the report will be provided to DDA/City staff, along with an unbound hardcopy and an electronic format suitable for reproduction.

Responsibilities and Deliverables
AAA – Review and critique of report drafts
K&S – Final documentation
EDSA – Support in final documentation in urban design and planning issues