CITY OF EL PASO, TEXAS
DEPARTMENT HEAD'S SUMMARY REQUEST FOR COUNCIL ACTION (RCA)

DEPARTMENT: **Engineering**

AGENDA DATE: **December 2, 2008**

CONTACT PERSON/PHONE: **R. Alan Shubert, City Engineer (X4423)**

DISTRICT(S) AFFECTED: 1, 2, 3, 4, 5, 6, 7, 8

SUBJECT:

That the City Manager be authorized to sign the Agreement for Engineering Services by and between the **CITY OF EL PASO** and **JACOBS ENGINEERING GROUP, INC.,** for a project known as **"TRANSIT PLANNING SERVICES: ALTERNATIVES ANALYSIS DEVELOPMENT"** for an amount not to exceed NINE HUNDRED EIGHTY THOUSAND NINE HUNDRED FIFTY ONE AND NO/100 DOLLARS ($980,951.00), and that the City Engineer be authorized to approve up to $50,000.00 in additional services for a total contract amount not to exceed ONE MILLION THIRTY THOUSAND NINE HUNDRED FIFTY ONE AND NO/100 DOLLARS ($1,030,951.00).

BACKGROUND / DISCUSSION:

The City of El Paso is seeking to develop fixed guideway transit services in four high capacity priority corridors. The corridors are:

- Mesa from downtown to Doniphan
- Dyer from US 54 to Sun Valley Drive
- Alameda from downtown to Loop 375
- Montana from downtown to George Dieter

The City is exploring opportunities for federal grant assistance from the Federal Transit Administration (FTA) in implementing the proposed transit corridor improvements. To begin that effort, alternatives analysis is required for each of the corridors leading to the identification and selection of a locally preferred alternative.

PRIOR COUNCIL ACTION:

None

AMOUNT AND SOURCE OF FUNDING:

FY 2009 COB Debt Issuance

BOARD / COMMISSION ACTION:

N/A

********** REQUIRED AUTHORIZATION **********

LEGAL: (if required)_____ **FINANCE:** (if required)_____

DEPARTMENT HEAD: _____

(Example: if RCA is initiated by Engineering, client department should sign also)

Information copy to appropriate Deputy City Manager

APPROVED FOR AGENDA:

CITY MANAGER: _____ **DATE:**_____

RESOLUTION

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

That the City Manager be authorized to sign the Agreement for Engineering Services by and between the **CITY OF EL PASO** and **JACOBS ENGINEERING GROUP, INC.,** for a project known as **"TRANSIT PLANNING SERVICES: ALTERNATIVES ANALYSIS DEVELOPMENT"** for an amount not to exceed NINE HUNDRED EIGHTY THOUSAND NINE HUNDRED FIFTY ONE AND NO/100 DOLLARS ($980,951.00), and that the City Engineer be authorized to approve up to $50,000.00 in additional services for a total contract amount not to exceed ONE MILLION THIRTY THOUSAND NINE HUNDRED FIFTY ONE AND NO/100 DOLLARS ($1,030,951.00).

ADOPTED THIS _____ DAY OF _____ 2008.

APPROVED AS TO CONTENT:

_____
John F. Cook, Mayor

ATTEST:

_____
Richarda Duffy Momsen, City Clerk

APPROVED AS TO FORM:

Mark Shoesmith
Assistant City Attorney

APPROVED AS TO CONTENT

for R. Alan Shubert, P.E.
City Engineer

Procurement Summary

Project Name: Transportation Planning Services – Alternative Analysis Development

District: 1,2,3,4,5,6,7,8

Scope of work

The City of El Paso wants to develop fixed guideway transit services in four high capacity priority corridors that were identified by the El Paso Transit corridors Feasibility Study prepared in 2001. The corridors are:

- Mesa – from downtown, centered along Mesa Street, and continuing along to Doniphan.
- Dyer – from US 54, centered along Dyer, to Sun Valley Drive
- Alameda – from downtown, centered along Alameda, to Loop 375
- Montana – from downtown, centered along Montana, to George Dieter

The City is exploring the opportunity for federal grant assistance from the Federal Transit Administration (FTA) in implementing the proposed transit corridor improvements. To begin that effort, development of alternatives analysis is required for each of the corridors leading to the identification and selection of a locally preferred alternative.

Department Requesting Service: Sun Metro

Procurement Type: Architect/Engineer Selected from Pre-Qualified List of firms

Architect Engineer Selection Committee Members

R. Alan Shubert, P.E., City Engineer
Irene D. Ramirez, P.E., Assistant City Engineer
Sam Rodriguez P.E., Engineering Division Manager
Johanes Makahaube, P.E., Engineering Division Manager

Pre qualified Civil Engineering firms that were evaluated:

List of Pre-Qualified firms attached

Material used to evaluate firms: A/E Firms' Pre-Qualification packages

Date selection was made: November 5, 2008

Firm Selected: Jacobs Engineering

Date finalist was notified: November 5, 2008

Prequalified A/E Firms / Address	E-mail Address / Fax
Achto Consulting Engineers, LLC 2718 Wyoming Avenue El Paso, TX 79903	sergio@achtoeng.com 1-866-767-4602
AIA Engineers, Ltd. 2211 E. Missouri Avenue, Suite N304 El Paso, TX 79903	rprieto@aiainc.com (915) 990-2324
Applied Pavement Technology, Inc. 115 West Main Street, Suite 400 Urbana, Illinois 61801	mcovalt@pavementsolutions.com
Applied Research Associates, Inc. 535 South Mesa Hills Drive, Suite 1615 El Paso, TX 79912	www.ara.com pmacklin@ara.com
Archana, Inc. 1155 Larry Mahan Drive, Suite B El Paso, TX 79925	preddy@archanausa.com (915) 592-4659
Brock & Bustillos, Inc. 417 Executive Center Blvd. El Paso, TX 79902	robust@elp.rr.com (915) 542-2867
Camp, Dresser and Mckee, (CDM) Inc. 4110 Rio Bravo, Suite 201 El Paso, TX 79902	ainsase@cdm.com (915) 544-1345
Carter & Burgess, Inc. 2705 Bee Cave Road, Suite 300 Austin, TX 78746	jose.rodriguez@c-b.com (512) 314-3135
CEA Engineering Group	rchavez@ceagroup.net

Prequalified Civil A/E Firms / Address	E-mail Address / Fax
4712 Woodrow Bean Transmountain Ste. F El Paso, TX 79924	jazcarate@ceagroup.net (915) 544-5233
CH2M Hill 445 Executive Center Blvd., Suite 110 El Paso, TX 79902	sirrinki@ch2m.com (915) 545-2859
Civil Associates, Inc. 5959 Gateway West Suite 511 El Paso, TX 79925	eddie@civilassociates.com (915) 613-4221
Concept Engineers 5100 Westheimer Suite 500 Houston, TX 77056	santley@conceptengrs.com (281) 890-5775
Conde, Inc. 1790 Lee Trevino, Suite 400 El Paso, TX 79936	cconrad@elp.rr.com (915) 592-0286
CQC Testing & Engineering 6802 Commerce, Unit A El Paso, TX 79915	jrojascqc@sbcglobal.net (915) 771-7786
CSA Design Group 1845 Northwestern Drive, Suite C El Paso, TX 79912	jkarlsruher@csaengineers.com (915) 877-4334
Dorado Engineering. Inc. 2717 E. Yandell Street El Paso, TX 79903	doradoengineering@sbcglobal.net (915) 562-7743
ECM International 404 Executive Center Blvd.	tcardenas@ecmintl.com

Prequalified A/E Firms / Address	E-mail Address / Fax
El Paso, TX 79902	(915) 351-1908
EFI Global, Inc. 2211 E. Missouri Avenue, Suite N227 El Paso, TX 79923	walter_miller@efiglobal.com (915) 533-8160
Entech Civil Engineers, Inc. 16360 Park Ten Place Suite 230 Houston, TX 77084	nalanis@entechhou.com (281) 945-0081
ESSCO International 1000 Newman El Paso, TX 79902	rconcha@sbcglobal.net (915) 533-1103
Frank X. Spencer & Associates Inc. 1130 Montana Ave. El Paso, TX 79902	elpaso@fxsa.com vhe@fxsa.com (915) 533-4673
GDC Services 6856 Amposta Drive El Paso, TX 79913-2335	alfredo.gutierrez@gdcservices-ep.com (915) 587-6562
Halff Associates, Inc. 1201 N. Bowser Road Richardson, Texas 75081	gkuhn@halff.com (214-739-0095)
HDR Engineering, Inc. 2155 Louisiana Boulevard NE, Suite 9500 Albuquerque, NM 87110-5483	monica.whitaker@hdrinc.com (505) 830-5454
HNTB Corporation 7500 Viscount, Suite 100 El Paso, TX 79925	jsierra@HNTB.com

Prequalified A/E Firms / Address	E-mail Address / Fax
	(915) 887-0834
Huitt-Zollars, Inc. 5822 Cromo Drive, Suite 210 El Paso, TX 79912	jrodarte@huitt-zollars.com (915) 587-5247
Jacobs Engineering Group, Inc. 2705 Bee Cave Road Suite 300 Austin, TX 78746-5688	jeremy.wyndham@jacobs.com (512) 314-3135
JEA/Hydro-Tech Engineering, Inc. 6825 Manhattan Blvd., Suite 100 Ft. Worth, TX 76120	jea-hydro@jea-hydro.com (817) 451-9003
Kimley-Horn and Associates, Inc. 7878 N. 16th Street, Suite 300 Phoenix, AZ 85020	mike.norby@kimley-horn.com
Lockwood, Andrews & Newnam, Inc. 2925 Briarpark Drive Houston, TX 77042	mafeeney@lan-inc.com (713) 266-3438
Magellan Consulting, Inc. 13901 HWY 105 West, Suite 200 Conroe, TX 77304	sam@magellanconsulting.com
Malcolm Pirnie, Inc. 5959 Gateway West, Suite 530 El Paso, TX 79925	ddodge@pirnie.com (915) 774-9767
Martich Professional Services, PLLC 4352 John B. Oblinger Drive El Paso, TX 79934-3797	kmartich@sbcglobal.net (915) 822-1299

Prequalified A/E Firms / Address	E-mail Address / Fax
Martinez Engineering Group 800 N. Mesa Street, Suite 250 El Paso, TX 79902-4050	martengrp@aol.com (915) 544-4463
Matrix Design Group, Inc. 5450 Hurd Place, Suite A El Paso, TX 79912	ramzi_skaf@matrixdesigngroup.com (915) 225-1408
MM Structural Engineers Inc. 2718 Wyoming Avenue El Paso, TX 79903	macias@mm-engrs.com (915) 546-9010
Moreno Cardenas, Inc. 2505 E. Missouri Avenue, Suite 100 El Paso, TX 79903	rmoreno@morenocardenas.com (915) 542-0307
Ninyo & Moore 4100 Rio Bravo, Suite 302 El Paso, TX 79902	eochoa@ninyoandmoore.com (915) 532-0645
Nomar Engineering, Inc. 5653 Cortina Drive El Paso, TX 79912	ercomnomar@gmail.com
N/S Corporation 235 West Florence Avenue Inglewood, CA 90301	mikeh@nswash.com (310) 412-1196
OMNI Construction Services, LLC 2505 E. Missouri Avenue, Suite 100B El Paso, TX 79903	edrusina@omni-cs.com (915) 542-0307

Prequalified A/E Firms / Address	E-mail Address / Fax
Paragon Project Resources, Inc. 8411 Lockheed, Suite 7 El Paso, TX 79925	manny.rosas@2paragon.com (915) 771-0506
Parkhill, Smith & Cooper, Inc. 810 E. Yandell El Paso, TX 79902	aholloway@team-psc.com mpink@team-psc.com (915) 544-2059
Parsons 7380 Remcon Circle, Suite A El Paso, TX 79912	gbernal@3di.com (915) 225-3457
Quantum Engineering Consultants 414 Executive Center Blvd, Suite 200 El Paso, TX 79902	quantum@qeceng.com (915) 532-7373
Raba-Kistner Consultants (SW), Inc. 7002 Commerce El Paso, TX 79915	bolague@rkci.com (915) 779-8301
RJ Rivera 3200 Steck Avenue Suite 220 Austin, TX 78757	resendiz@rjrivera.com
Roe Engineering, L.C. 601 N. Cotton, Suite 6 El Paso, TX 79902	roeeng@swbell.net (915) 533-4972
R. W. Beck, Inc. 5806 Mesa Drive, Suite 310 Austin, TX 78731	SPasternak@rwbeck.com (512) 450-0515
S & B Infrastructure, Ltd	cvdominguez@sbinfra.com

Prequalified A/E Firms / Address	E-mail Address / Fax
1155 Westmoreland Drive, Suite 114 El Paso, TX 79925	(915) 771-0924
San Antonio Design Group, Inc. 2101 Lockhill Selma Suite 216 San Antonio, TX 78213	tsaucedo@sadesigngroup.com (210) 342-6701
SGB Engineering, Inc. 1131 E. Yandell, Suite 100 El Paso, TX 79902	chavag@swbell.net (915) 565-9220
SLI Engineering, Inc. 6600 Westwind Dr. El Paso, TX 79912	ghalloul@SLI-Engineering.com - (915) 581-7756
Stearns, Conrad, Schmidt Cons. Eng. 1901 Central Drive, Suite 550 Bedford, TX 76021	www.scsengineers.com kyard@scseng.com (817) 571-2188
Structural Engineering Associates 3838 N.W. Loop 410 San Antonio, TX 78229	sea@seatx.com smielke@seatx.com, (210) 735-2074
Systems Intergration/Modeling & Sim. 400 S.W. Atlantic Street Tullahoma, TN 37388-4409	elondon@sim-s.com (931) 455-0834
Telvent Farradyne Inc. 7000A Hollister Road Houston, TX 77040	duane.hartmann@telvent.com (713) 939-0393
URS Corporation 6501 Americas Parkway NE, Suite 900	karen_burt@urscorp.com

Prequalified A/E Firms / Address	E-mail Address / Fax
Albuquerque, NM 87110	
VENCOR Engineering, LLC P.O. Box 13485 Las Cruces, NM 88013	vencor@sbcglobal.net (email address undeliverable) (915) 581-8115
Villaverde, Inc. 1218 E. Yandell Drive, Suite 201 El Paso, TX 79902	ramon@villaverdeinc.com (915) 351-8823
Walter P. Moore and Associates, Inc. 7500 Viscount, Suite 228 El Paso, TX 79925	lcardenas@walterpmoore.com (915) 778-2496
WH Pacific 215 N. Stanton Street, Suite 501 El Paso, Texas 79901	mbrown@ASCG.com mcorpus@whpacific.com (915) 545-1635

THE STATE OF TEXAS)
)
COUNTY OF EL PASO)

AN AGREEMENT FOR PROFESSIONAL SERVICES
(Agreements over $100,000.00)

This Agreement is made this **____ day of _____, 2008** by and between the **CITY OF EL PASO**, a municipal corporation organized and existing under the laws of the State of Texas, hereinafter referred to as the **"Owner"**, and **JACOBS ENGINEERING GROUP, INC.** a Delaware Corporation, hereinafter referred to as the **"Consultant"**.

WHEREAS, the Owner intends to engage the Consultant to perform professional services for a project known as **" TRANSIT PLANNING SERVICES: ALTERNATIVES ANALYSIS DEVELOPMENT"**, hereinafter referred to as the **"Project"**, as further described in **Attachment "A"**; and

WHEREAS, the Consultant has been selected to perform such services as required by the Owner, and the Consultant was selected through the Owner's selection procedure, in accordance with all applicable state and local laws and ordinances;

NOW, THEREFORE, for the consideration set forth in this Agreement and its attachments, the Owner and Consultant agree as follows:

ARTICLE I.
ATTACHMENTS

1.1 The attachments listed herein and attached to this Agreement are incorporated herein by reference for all purposes.

Attachment "A"	Scope of Services and Project Budget
Attachment "B"	Consultant's Fee Proposal and Hourly Rates
Attachment "C"	Consultant's Basic and Additional Services
Attachment "D"	Payment and Deliverable Schedules

ARTICLE II.
PROJECT

2.1 The Owner hereby agrees to retain the Consultant and the Consultant agrees to perform professional services for the Project as professional consultant for the Project. The Project shall consist of the Consultant's completion of the Scope of Services as further described in **Attachment "A".** Such Scope of Services shall be completed in accordance with the identified phases described in **Attachment "D"**.

2.2 In completion of such phases, the Consultant shall comply with the City of El Paso Engineering Department Construction Document Guidelines in effect on the execution date of

this Agreement in the performance of the services requested under the Design Phase of this Agreement. Such Guidelines are available in the Engineering Department.

2.3 The Consultant shall serve as the Owner's professional representative in those phases of the Project to which this Agreement applies and shall give consultation and advice to the Owner during the performance of services.

2.4 The Owner shall provide all available information to the Consultant, as to the Owner's requirements for each construction contract. The Owner shall also provide to the Consultant, all known information pertinent to the Project site, including previous reports and other data relative to design, such as "as-built" drawings or physical conditions now existing at the Project site. In performing its services, the Consultant will be entitled to rely upon the accuracy of the Owner provided information.

2.5 The Owner hereby designates the City Engineer of the City of El Paso as the Owner's representative with respect to the professional services to be provided by the Consultant pursuant to this Agreement. The City Engineer shall have complete authority to transmit instructions, receive information, interpret and define Owner's policies, and decisions with respect to materials, equipment, elements, and systems pertinent to the work covered by this Agreement. City Engineer will render written decisions within a five working days time period.

ARTICLE III.
CONSULTANT FEES AND PROJECT BUDGET

3.1 PAYMENT TO CONSULTANT. The Owner shall pay to the Consultant an amount not to exceed **NINE HUNDRED EIGHTY THOUSAND NINE HUNDRED FIFTY ONE AND 00/100 DOLLARS ($980,951.00)** for all basic services and reimbursables performed pursuant to this Agreement. The Consultant's fee proposal for the performance of all Basic Services and reimbursables is attached hereto as **Attachment "B"**. Payments to the Consultant shall be made pursuant to the schedule enumerated within **Attachment "D"**.

3.2 CONSULTANT'S SERVICES. The Basic Services to be provided by the Consultant for this Agreement are attached hereto as **Attachment "C".** If authorized by the City Engineer, prior to the performance of such services, the Consultant may perform such Additional Services as also enumerated within **Attachment "C"** in an amount not to exceed $50,000.00. Additional Services exceeding $50.000.00 must have prior approval by City Council through written amendment to this Agreement. Owner shall make payment for such Basic and Additional Services at the rates established by Consultant within **Attachment "B".**

3.3 CONSULTANT'S INVOICES. The Consultant shall bill the Owner not more often than monthly, through written invoices pursuant to the schedule established in **Attachment "D"**. Invoices shall indicate the costs for outside consultants with copies of their invoices as back-up materials as well as other authorized direct costs for hourly rate contracts. All invoices shall be made in writing. Within ninety days of substantial completion of construction, all outstanding invoices for all work completed to date by the Consultant shall be submitted to the Owner.

3.3.1 Each invoice shall contain a brief summary indicating, at a minimum, the total Project budget, the total amount authorized for the Consultant, the current invoiced amount and the amount billed to date. In addition to the Summary, each invoice shall provide a Progress Report. The Progress Report shall describe, at a minimum, the progress of the Project to date also indicating the percentage of completion of each phase. The established schedule for completion shall not be revised except by written amendment to this Agreement, executed by both parties.

3.3.2 The Owner agrees to pay invoices for all services performed as soon as reasonably possible but not later than thirty (30) days from receipt. Upon dispute, however, the Owner may, upon notice to the Consultant, withhold payment to the Consultant for the amount in dispute only, until such time as the exact amount of the disputed amount due the Consultant is determined. The total amount paid to Consultant shall not exceed Consultant's fee proposal, except by written amendment to this Agreement, executed by both parties.

3.4 PROJECT CONSTRUCTION BUDGET. The Consultant acknowledges that the construction budget for this Project allocates **N/A AND 00/100 DOLLARS ($0.00)** for the award of a construction contract base bid, which is to include all features essential to the operation of the Project for its intended use as described in the Scope of Services and Project budget in **Attachment "A"**. The Consultant does hereby agree to design the Project such that the Consultant's final agreed cost opinions for the construction of the Project, including all features essential to its intended use, is within the above budgeted amount for the base bid. If the Consultant's cost opinions exceed the Project Budget at any time, the Consultant shall make recommendations to the Owner to adjust the Project's size or quality and the Owner shall cooperate with the Consultant to adjust the scope of the Project. If all responsible bids exceed the City approved Consultant's final cost opinions by more than **ten percent (10%)**, the Consultant agrees, at the direction of the Owner, to redesign the Project without additional charge to the Owner in order to bring the Project within the budgetary limitations.

3.5 COSTS NOT ENUMERATED. Except as specifically set forth in this Agreement and its attachments, all costs related to the completion of the services requested herein shall be borne by the Consultant and not passed on to the Owner or otherwise paid by the Owner, unless a written amendment to this Agreement is executed by both parties allowing for additional costs.

ARTICLE IV.
PERIOD OF SERVICE AND TERMINATION

4.1 PERIOD OF SERVICE. The services called for by each phase shall begin upon the issuance of a Notice to Proceed from the City Engineer. The Consultant shall complete the requested services in accordance with the timelines and schedules outlined in **Attachments "C" and "D"**. **FOR REQUIREMENTS CONTRACTS ONLY:** The term of this Agreement shall be for a period not to exceed **N/A consecutive calendar days**, except as specifically noted herein.

4.2 SUSPENSION. Barring an early termination as provided herein, this Agreement shall remain in force: a) For a period which may reasonably be required for the design, award of construction contracts, and construction of the improvements included in all construction contracts, including extra work and required extensions thereto; or b) Unless construction has not begun within a period of **twelve (12) months** after the completion of the services called for in that phase of work last authorized. However, should the Consultant's services be suspended for a period longer than six months, the City and Consultant may renegotiate remaining fees due to changes in salaries or increased costs that may occur during the suspension period. The Owner may determine that this Agreement will remain in full force past the twelve-month period noted above. Such a determination will be based upon the individual circumstances of this Project and this Agreement.

4.3 TERMINATION. This Agreement may be terminated as provided herein.

4.3.1 TERMINATION BY OWNER. It is mutually understood and agreed by the Consultant and Owner that the Owner may terminate this Agreement, in whole or in part for the convenience of the Owner, upon **fourteen (14) consecutive calendar days** written notice. It is also understood and agreed that upon such notice of termination, the Consultant shall cease the performance of services under this Agreement. Upon such termination, the Consultant shall provide one final invoice for all services completed and reimbursable expenses incurred prior to the Owner's notice of termination. Owner shall compensate Consultant in accordance with this Agreement; however, the Owner may withhold any payment to the Consultant that is held to be in dispute for the purpose of setoff until such time as the exact amount due the Consultant from the Owner is determined. Nothing contained herein, or elsewhere in this Agreement shall require the Owner to pay for any services that are not in compliance with the terms of this Agreement and its attachments.

4.3.2 TERMINATION BY EITHER PARTY. It is further understood and agreed by the Consultant and Owner that either party may terminate this Agreement in whole or in part. Such a termination may be made for failure of one party to substantially fulfill its contractual obligations, pursuant to this Agreement, and through no fault of the other party. No such termination shall be made, unless the other party being terminated is granted: a) written notice of intent to terminate enumerating the failures for which the termination is being sought; b) a minimum of **seven (7) consecutive calendar days** to cure such failures; and c) an opportunity for consultation with the terminating party prior to such termination. However, the Owner retains the right to immediately terminate this Agreement for default if the Consultant violates any local, state, or federal laws, rules or regulations that relate to the performance of this Agreement. In the event of termination by the Owner pursuant to this subsection, the Owner may withhold payments to the Consultant for the purpose of setoff until such time as the exact amount due the Consultant from the Owner is determined.

4.3.3 TERMINATION SHALL NOT BE CONSTRUED AS RELEASE. Termination by either party shall not be construed as a release of any claims that the terminating party may be lawfully entitled to assert against the terminated party. Further,

the terminated party shall not be relieved of any liability for damages sustained by the terminating party by virtue of any breach of this Agreement.

ARTICLE V.
INSURANCE AND INDEMNIFICATION

5.1 INSURANCE. The Consultant shall have **seven (7) calendar days** from date of award to obtain sufficient insurance as required herein. Consultant shall not commence work under this Agreement until the Consultant has obtained the required insurance and such insurance has been approved by the Owner. The Consultant shall maintain the required insurance throughout the term of this Agreement. Failure to maintain said insurance shall be considered a material breach of this Agreement.

5.1.1 WORKERS' COMPENSATION INSURANCE. The Consultant shall procure and shall maintain during the life of this Agreement, Workers' Compensation Insurance as required by applicable Texas law for all of the Consultant's employees to be engaged in work under this Agreement. The Consultant shall provide the following endorsement:

> "The policy is endorsed to provide that insurer waives any right of subrogation it may acquire against the Owner, its partners, agents and employees by reason of any payment made on or account of injury, including death resulting therefrom, sustained by any employee of the insured."

5.1.2 COMMERCIAL LIABILITY, PROPERTY DAMAGE LIABILITY AND AUTOMOBILE LIABILITY INSURANCE. The Consultant shall procure and shall maintain during the life of this Agreement such Commercial General Liability, Property Damage Liability and Automobile Liability Insurance as shall protect the Consultant and the Consultant's employees performing work covered by this Agreement from claims for damages for personal injury, including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by the Consultant or by anyone directly or indirectly employed by the Consultant. The minimum limits of liability and coverages shall be as follows:

a) **COMMERCIAL GENERAL LIABILITY**
Personal Injury or Death
$500,000.00 for one person or occurrence
$1,000,000.00 for two or more persons or occurrences

Property Damage
$500,000.00 per occurrence

General Aggregate
$1,000,000.00

b) **AUTOMOBILE LIABILITY**
Combined Single Limit

$1,000,000.00 per accident

5.1.3 PROFESSIONAL LIABILITY INSURANCE. The Consultant shall procure and shall maintain, at the Consultant's sole expense, Professional Liability Insurance for the benefit of the Owner to cover the errors and omissions of the Consultant, its principals or officers, agents or employees in the performance of this Agreement with a limit of ONE MILLION AND 00/100 DOLLARS ($1,000,000.00) on a claims made basis.

5.1.4 OWNER AS ADDITIONAL INSURED. The Owner shall be named as an Additional Insured on all of the Consultant's Insurance Policies, with the exception of Workers' Compensation and Professional Liability Insurance required by this Contract.

5.1.5 PROOF OF INSURANCE. The Consultant shall furnish the City Engineer with certificates showing the type of insurance coverages, limits on each insurance policy, class of operations covered under each insurance policy, effective dates and expiration dates of policies, insurance companies providing the insurance coverages, name of agent/broker and include confirmation of any endorsement(s) required in this agreement.

5.1.6 GENERAL INSURANCE PROVISIONS. All certificates required herein shall be attached hereto and incorporated for all purposes as **Attachment "E"**. All certificates shall also include the name of the project on the corresponding insurance certificate. Further, each certificate shall contain the following statement:

> "The insurance covered by this certificate will not be canceled, and there will be no change in coverage or deductibles, except after thirty (30) consecutive calendar days written notice of intent to cancel or change said insurance has been provided to the City of El Paso.

5.2 INDEMNIFICATION. To the fullest extent permitted by law, Consultant shall indemnify and hold harmless Owner, and Owner's officers, directors, partners, agents consultants, and employees from and against any claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to the Project, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by any negligent act or omission of Consultant or Consultant's officers, directors, partners, agents, consultants or employees. This indemnification provision is subject to and limited by the provisions agreed to by Owner and Consultant, as noted below. The Consultant shall not be responsible for any acts of any of the City's Independent Project Managers.

To the extent allowed by state law, the Owner will be responsible for its own actions.

5.2.1 CONSULTANT'S LIABILITY LIMITED TO AMOUNT OF INSURANCE REQUIREMENTS. Consultant shall procure and maintain insurance as required by and

set forth in the terms and conditions of this Agreement. Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, the total liability, in the aggregate, of Consultant and Consultant's officers, directors, partners, employees, agents, and consultants (hereafter referred to collectively as "Consultant"), to Owner and anyone claiming by through, or under Owner for any and all claims, losses, costs, or damages, whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract, or warranty express or implied of Consultant (hereafter "Owner's Claims"), shall not exceed the total insurance proceeds paid on behalf of or to Consultant by Consultant's insurers in settlement or satisfaction of Owner's Claims under the terms and conditions of Consultant's insurance policies applicable thereto (excluding fees, costs and expenses of investigation, claims adjustment, defense, and appeal). If no such insurance coverage is provided with respect to Owner's Claims, then the total liability, in the aggregate, of Consultant to Owner and anyone claiming by, through, or under Owner for any and all such uninsured Owner's claims shall not exceed $250,000.00 per person or $500,000.00 per incident with property damage liability limited to $100,000.00 per incident.

ARTICLE VI.
FEDERAL PROVISIONS

6.1 COMPLIANCE WITH APPLICABLE LAWS - FEDERAL FUNDING REQUIREMENTS

Consultant, at Consultant's sole expense, agrees that it will operate and perform its responsibilities and covenants under this Agreement in accordance with applicable laws, rules, orders, ordinances, directions, regulations and requirements of federal, state, county and municipal authorities, now in force or which may hereafter be in force, including, but not limited to, those which shall impose any duty upon the Owner or Consultant with respect to the use of federal funds and nondiscrimination in the administration of contracts which are funded, in whole or in part, with federal funds.

Specifically, and not in limitation of the foregoing, Consultant agrees that to the extent required by any agreement between the Owner and any Federal agency, the laws of the federal government of the United States of America and the rules and regulations of any regulatory body or officer having jurisdiction over this Project, **including but not limited to:**

--The Federal Transit Administration (FTA) through a Grant Agreement or Cooperative Agreement with the Owner, or supported by FTA through a Loan, Loan Guarantee, or Line of Credit with the Owner.

--The Department of Housing and Urban Development through a Grant Agreement or Cooperative Agreement with the Owner.

--The Federal Aviation Administration through a Grant Agreement or Cooperative Agreement with the Owner.

Copies of grant assurances will be made available to Consultant. However, provided copies shall in no way be a limitation on the Consultant's obligation to comply with any Federal agency, the laws of the federal government of the United States of America and the rules and regulations of any regulatory body or officer having jurisdiction over this Project.

6.1.1 CONTRACT ASSURANCE. The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

6.1.2 DBE GOOD FAITH EFFORTS. The requirements of 49 CFR Part 26, regulations of the U.S. DOT, applies to this contract. It is the policy of the Owner to practice nondiscrimination based on race, color, sex or national origin in the award of performance of this contract. All firms qualifying under this solicitation are encouraged to submit proposals. Award of this contract will be conditioned upon satisfying the requirements of this proposal. These requirements apply to all offerors, including those who qualify as a DBE. A DBE contract goal of 0% has been established for this contract. The offeror shall make good faith efforts, as defined in Appendix A, 40 CFR Part 26, to meet the contract goal for DBE participation in the performance of this contract.

The offeror will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm participating; (4) written documentation of the offeror's commitment to use a DBE subconsultant whose participation it submits to meet the contract goal; (5) written confirmation from the DBE that it is participating in the contract as provided in the commitment made under (4); and (6) if the contract goal is not met, evidence of good faith efforts. The offeror shall submit the information with its proposal as a condition of responsiveness.

DBE participation in this contract may be in the form of a prime contract, subcontract, joint venture, or other arrangement that qualifies under 49 CFR Section 26.55 or 26.53(g), both of which will be submitted on a Letter of Intent to the Owner.

6.2 TERMINATION FOR CANCELLATION OF GRANT.

Should this Agreement be terminated as a result of cancellation of federal funds covering this Project, the Owner shall promptly notify the Consultant of the cancellation by certified mail-return receipt requested, whereupon the Consultant shall immediately, on receipt of the letter, cease and desist from performing any other work or services hereunder. In such an event, the Consultant will be paid for professional services performed to such date, upon furnishing the Owner a progress report and an invoice to such date, and upon acceptance of the work by the Owner.

ARTICLE VII.
GENERAL PROVISIONS

7.1 CONTRACT TIME. Consultant understands and agrees to provide all professional services and deliverables requested herein, as expeditiously as is consistent with professional skill and care, and to use its best efforts to complete all phases of this Agreement within the time schedules indicated within **Attachment "D"**. It is acknowledged that the Consultant does not have control over all aspects of the design and construction process and cannot warrant that it will complete all services and deliverables by a certain date. The Consultant shall timely notify the City Engineer of any delay beyond its control and the City Engineer shall extend the time schedule in the event of delays which the City Engineer reasonably determines are beyond the control of the Consultant. The Consultant will perform these services with reasonable diligence and expediency consistent with sound professional practices and consistent with the schedule provided in **Attachment "D"**.

7.2 OPINION OF PROBABLE COST. As a design professional practicing in El Paso the Consultant is expected to be familiar with the cost of construction, labor, and materials in the El Paso area and of bidding and market trends. The cost opinions of construction cost provided by the Consultant, as required herein, are to be made in light of such familiarity and are expected to be within **ten percent (10%)** of the bid for the base bid item expected from the lowest responsible bidder.

The Consultant's final cost opinions for the construction of the Project, shall take into account labor costs which shall be based on the current City of El Paso prevailing wage rates as adopted by the City Council. In the event that the Project is funded with federal funds, the higher of the City of El Paso prevailing wage rates or the Davis-Bacon wage rates shall be utilized by the Consultant in compiling a final cost opinions for the Project.

If the Consultant's most recent cost opinion for any construction contract is in excess of the Project construction budget, the Owner shall give written approval of an increase in the limit, or shall cooperate in revising the Project's scope or quality, or both, to reduce the cost as required. Such revisions shall be made, and Drawings and Specifications modified by the Consultant without further compensation.

As noted herein, if all responsible bids exceed the final cost opinion by more than **ten percent (10%)**, the Consultant agrees, at the direction of the Owner, to redesign the Project without additional charge to the Owner in order to bring the Project within the budgetary limitations.

7.3 CONSULTANT'S QUALITY OF WORK. The Owner's review of any documents prepared by the Consultant is only general in nature and its option to approve and accept the work in no way relieves the Consultant of responsibility for any specific deficiencies in its professional service. The Consultant's services shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the Project and in accordance with the time periods established in **Attachment "D"** and which shall be adjusted, if necessary, as the project proceeds. This schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for

approval of submissions by authorities having jurisdiction over the project. The identified time limits shall not, except for reasonable cause, be exceeded by the Consultant or Owner. Services provided by the Consultant under this Agreement shall be performed in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar circumstances.

7.4 COPYRIGHT AND REPRODUCTION RIGHTS. Upon payment of amounts due, the Drawings, Specifications, concepts and design, and other documents prepared by the Consultant for this Project including, without limitation, those in electronic form (sometimes referred to as the "Instruments of Service") are the property of the Owner, who shall be vested with all common law and statutory rights. The Owner shall have the right to the use of the Drawings, Specifications and other documents for the maintenance, repair, remodeling and renovation of the Project; provided however the Consultant shall have no liability for any use of one or more of the Instruments of Service by the Owner for maintenance, repair, remodeling and renovation of the project. The Owner shall have the consent of the Consultant, provided, however, the Consultant shall have no liability or responsibility for such use of the Drawings, Specifications, concepts and design, and other documents. The rights granted to the Owner herein for the use of the Drawings, Specifications and other documents for additional projects shall not grant the Owner any right to rely upon the Consultant's seal on the Drawings and Specifications or to hold the Consultant responsible for any subsequent use of the Drawings, Specifications and documents. The Consultant shall provide the Owner with copies of the Instruments of Service in both electronic form and in hard copy.

7.5 AUDITING RECORDS FOR THE SPECIFIC PROJECT. Consultant's records subject to audit shall include but not be limited to records which, in the Owner's discretion, have a bearing on matters of interest to the Owner in connection with the Consultant's work on this Project for the Owner and shall be open to inspection and subject to audit and/or reproduction by Owner's agent or its authorized representative to the extent necessary to adequately permit evaluation and verification of (a) Consultant's compliance with contract requirements, and (b) compliance with provisions for computing Direct Personnel Expense with reimbursables, if applicable.

Such records subject to audit shall also include those records necessary to evaluate and verify direct and indirect costs, (including overhead allocations) as they may apply to costs associated with this Agreement. In those situations where Consultant's records have been generated from computerized data, Consultant agrees to provide Owner's representatives with extracts of data files in computer readable format on data disks or suitable alternative computer data exchange format.

The Owner or its designee shall be entitled, at its expense, to audit all of the Consultant's records related to this Project, and shall be allowed to interview any of the Consultant's employees, pursuant to the provisions of this section throughout the term of this contract and for a period of **three (3) years** after final payment or longer if required by law. Such audits may require inspection and photo copying of selected documents from time to time at reasonable times and places.

7.6 SUCCESSORS AND ASSIGNS. This Agreement shall be binding on the Owner and the Consultant, their successors and assigns. Neither party may assign, sublet, or transfer its interest in this Agreement without the written consent of the other.

7.7 VENUE. For the purpose of determining place of Agreement and the law governing the same, this Agreement is entered into in the City and County of El Paso, the State of Texas, and shall be governed by the laws of the State of Texas. Venue shall be in the County of El Paso, Texas.

7.8 GOVERNING LAW. The Consultant shall comply with applicable Federal, State and local laws and ordinances applicable to the work contemplated herein.

7.9 CAPTIONS. The captions of this Agreement are for information purposes only, and shall in no way affect the substantive terms or conditions of this Agreement.

7.10 SEVERABILITY. Should any section, paragraph or other provision of this Agreement be found invalid, such invalidity shall not affect the remaining provisions of this Agreement.

7.11 NOTICES. Any notice, demand, request, consent or approval that either party may or is required to provide to the other shall be in writing and either personally delivered or sent via certified mail, return receipt, to the following addresses:

To the Owner:	The City of El Paso Attn: City Manager 2 Civic Center Plaza El Paso, Texas 79901
With a Copy to:	The City of El Paso Attn: City Engineer 2 Civic Center Plaza El Paso, Texas 79901
To the Consultant:	JACOBS ENGINEERING GROUP, INC. Attn: Robert Clements, Group Vice President 911 Central Parkway North, Suite 425 San Antonio, TX 78232-5052

Changes may be made to the names and addresses noted herein through timely, written notice to the other party.

7.12 CONFLICTING PROVISIONS. Any provision contained in any Attachments to this Agreement, which may be in conflict or inconsistent with any of the provisions in this Agreement shall be void to the extent of such conflict or inconsistency.

7.13 ENTIRE AGREEMENT. This Agreement, including attachments, constitutes and expresses the entire agreement between the parties and supersedes all prior negotiations,

representations or agreements, whether written or oral. This Agreement shall not be amended or modified, except by written amendment, executed by both parties.

WITNESS THE FOLLOWING SIGNATURES AND/OR SEALS:

CITY OF EL PASO:

_____
Joyce Wilson, City Manager

CONSULTANT:
Jacobs Engineering Group, Inc.

By: _____
Roger Clements
Title: Group Vice President

APPROVED AS TO FORM:

Mark Shoesmith
Assistant City Attorney

APPROVED AS TO CONTENT:

for R. Alan Shubert, P.E.
City Engineer

(Acknowledgements on following page)

ACKNOWLEDGEMENTS

THE STATE OF TEXAS §
§
COUNTY OF EL PASO §

This instrument was acknowledged before me on this _____ day of _____, 2008, by **Joyce A. Wilson,** as **City Manager** of the **City of El Paso, Texas**.

_____
Notary Public, State of Texas

My commission expires:

_____

THE STATE OF TEXAS §
§
COUNTY OF El PASO §

This instrument was acknowledged before me on this _____ day of _____, 2008, by **Robert Clements**, as **Group Vice President** of **JACOBS**.

_____
Notary Public, State of Texas

My commission expires:

_____

November 12, 2008

Irene D. Ramirez, PE
Assistant City Engineer
Engineering Department
2 Civic Center Plaza, 4th Floor
El Paso, TX 79901

RE: Transit Planning Services – Alternative Analysis Development

Dear Ms. Ramirez:

With enormous pride and excitement, Jacobs is pleased to submit this scope of services and price proposal to provide Transit Planning Services for the City of El Paso. The City of El Paso is at that proverbial crossroad of selecting the right path for its future and we appreciate the opportunity to partner with the City to provide these services. With our local knowledge, resources and relationships combined with our regional and national project experience, we are confident that the Jacobs Team can be the City's perfect partner in providing a Vision for the future of El Paso's transportation needs.

Jacobs Team – Best Collection of Talent
We have assembled a compact, efficient and highly qualified team with unmatched credentials in terms of local knowledge, data analysis capabilities, and project experience, supported by national experience in developing systems plans for transit agencies and expertise in FTA New Starts regulatory compliance of the Alternatives Analysis, Preliminary Engineering, and Environmental Impact Statement. Jacobs, as the prime consultant, will work from it's local project office at 911 Central Parkway North, Suite 425, San Antonio, Texas 78232-5052, phone 210.494.0088. We have carefully assembled a group of key personnel based on their expertise and skills to deliver quality work accurately, effectively, and efficiently.

People Do Projects, Not Firms!
Jacobs has extensive experience in transit system planning, transportation planning and carrying projects through implementation to a broad range of clients throughout Texas and the United States. As we considered the best personnel for our team, Jacobs recognized that we would need to match specific professionals to El Paso's goals and objectives in order to provide that perfect "partnership." We identified professionals from our firm that can offer:

- Commitment to this project.
- Creativity in developing compromising unanimously supported solutions.
- Expertise in FTA System Planning, Alternatives Analysis, New Starts/Small Starts processes.
- Solid, credible working relationships with FTA staff.
- Creativity in gaining wide-spread public and political support for challenging projects.
- Comprehensive understanding of economic opportunities that can be derived from strategic transit investments.
- Fundamental knowledge of the El Paso region coupled with fresh objectivity.

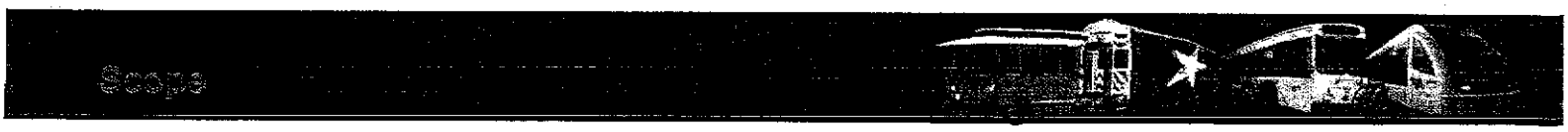
Jacobs looks forward to continue our relationship with the City in developing a proactive, sound, and community accepted Vision of transportation for El Paso. We trust you will find our proposal is fully responsive and that it conveys our enthusiasm, knowledge, experience, and commitment of resources to ensure a successful project.

Please do not hesitate to give us a call if you have any questions.

Respectfully submitted,

Mike McAnelly

Mike McAnelly, FAICP
Project Manager
mike.mcanelly@jacbos.com



Project Understanding

The City of El Paso is seeking to develop fixed guideway transit services in four high capacity priority corridors that were identified by the El Paso Transit Corridors Feasibility Study, prepared by Jacobs (Carter & Burgess) in 2000. The four corridors include the following general alignments:

- **Mesa** – The Mesa Corridor extends northwest from downtown, centered along Mesa Street, and continuing along Doniphan. Mesa is a primary arterial and an alternate route for IH-10. Mesa is typically 2 to 3 lanes in each direction and includes a center median and left turn lanes. Most left turns at signalized intersections are protected. Other key roadways include Paisano and Doniphan, which generally parallel Mesa.
- **Dyer** – The Dyer Corridor extends northeast from downtown, centered along Dyer Street. Dyer generally bisects the corridor north of Fort Bliss (Fred Wilson Road). Between downtown and Fred Wilson Road, Copia Street forms the axis of the corridor. Key access routes to Copia and Dyer from downtown include Paisano, Texas, IH-10, Montana, Rio Grande, and Arizona Streets.
- **Alameda (Phase 1 and Phase 2)** - For purposes of the Alternatives Analysis and Environmental Clearance, the two phases of the Alemeda Corridor will be considered as one combined overall corridor, so the total number of corridors to be included in the Alternatives Analysis is three corridors. The Alameda Corridor extends west and southeast from downtown, centered along Alameda. This is the longest corridor in the El Paso study area; it includes the communities of Soccorro, San Elizario, Clint, Cuadrilla, and Fabens. Between downtown and Fox Plaza, Paisano and Texas provide direct access to Alameda. Other key arterials in the corridor include Loop 375, Trowbridge/North Loop, and IH-10.
- **Montana** - The Montana Corridor extends east from downtown, centered along Montana as shown in Figure 2.6. Between downtown and Bassett Center, the corridor is generally between Paisano and Arizon/SP Railroad. To the east of Bassett Center, the corridor is north of IH 10 and includes the following primary arterials: Viscount, Edgemere, Pebble Hills, Montwood, and Vista del Sol. Other key east-west streets include Trawood, Pellicano, Rojas, and Eastlake. Montana corridor also Horizon City and Sparks.

The City is intending to seek federal grant assistance from the Federal Transit Administration (FTA) in implementing the proposed transit corridor improvements. SAFETEA-LU authorized the FTA to establish a new portion of the Section 5309 Capital Investment Grant funding program for projects of less that $250 million total capital cost and requesting less than $75 million in federal funding. Small Starts creates a simplified process for smaller projects and extends eligibility to include bus corridor improvements described as "Bus Rapid Transit (BRT).

Work Program

Task 1: Consultant Management Plan

Purpose

The Consultant Management Plan will address key factors for managing the AA process. Keys to successfully managing a project are to maintain the appropriate balance between cost, quality, and schedule.

Approach

The El Paso Alternatives Analysis will be a well coordinated, timely and cost-efficient planning process. Jacobs' knowledge of the El Paso region gained from previous studies including the El Paso Transit Corridor Feasibility Study (2001), Camino Real International Transit Terminal Concept Plan (2008) and the Historic Trolley Streetcar Initiative (2008) will provide significant benefit for accomplishing a successful Alternatives Analysis (AA). Experience in successfully completing AAs for the implementation of similar New Starts and Small Starts transit projects will provide a clear philosophy and precise understanding of project goals and objectives in order to ensure a successful AA for El Paso.

Methodology: Jacobs will prepare a Management Plan to manage and guide the AA project to successful completion, consistent with the Federal Transit Administration (FTA) regulations and guidelines for the Small Starts provision of the Section 5309 Capital Investment Grants Program. The Consultant Management Plan will determine the proper order of work tasks, while guiding the selection of a Locally Preferred Alternative (LPA), and deciding how to best use the AA process to meet both FTA requirements and community goals.
Identify Tasks: The Management Plan will outline and explain processes and tasks required to meet the project goals and objectives. The Plan will serve as a detailed guide addressing the effort and schedule for the tasks needed to develop the AA.

Participants: The Management Plan will identify project participants, their roles and responsibilities, and guidelines for effective coordination and communication. *Coordination and communication of project* status and activities will include the City of El Paso, Sun Metro, TxDOT, Federal Transit Administration, other participating governmental agencies, public stakeholder groups, and other interested organizations and individuals.

Project Schedule: The Consultant Management Plan will include a Project Timeline and a Work Breakdown Schedule. The project schedule in the Management Plan will ensure that the project achieves the major milestones according to the desired implementation timing.

Data and File Management System: Jacobs uses an established document management system for all projects that organizes, logs and maintains all pertinent project documentation and correspondence. Jacobs will maintain a centralized project file system with appropriate security and access controls, on network servers.

Status and Progress Reports: Regular progress monitoring and status reporting will include verbal and written reports by Jacobs submitted to the City of El Paso's designated project manager. Jacobs will conduct progress meetings to keep participants up-to-date on the project status, potential issues, needs, and recommended solutions.

Financial Reporting: Jacobs will submit monthly progress reports and invoices showing the financial status of the project, based on percent completion by task, to the City of El Paso.

Quality Assurance/Quality Control: Jacobs will achieve quality management commitments by including a quality control system in the Management Plan.

Reporting Requirements: Jacobs will submit the Consultant Management Plan to the City of El Paso following the initiation of the project.

Task 1 Deliverables;

- Consultant Management Plan

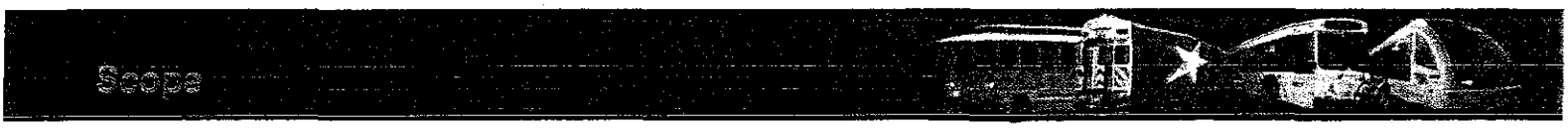
Task 2: Public Participation Plan

Purpose

The purpose of the public and agency involvement program is to inform and obtain input from stakeholders about the proposed alternatives, and building consensus by providing constructive and meaningful opportunities for participation in the AA process.

Approach

Jacobs will prepare a Public Participation Plan (PPP) to achieve public participation and consensus, under the guidance of the city staff and officials of the City of El Paso. The program will center on incorporating public input into the process in



compliance with the FTA requirements. The conduct of public meetings and hearings will be consistent with the City of El Paso's policies for public participation. Jacobs will develop a draft schedule for involvement activities such as stakeholder workshops and public meetings.

Jacobs will develop informational and presentation materials, and will be responsible for presentations at meetings and briefings. Public involvement activities will include public meetings and hearings as well as the following:

- Media Releases
- Project website to post study information, including meeting notices, maps, alternatives, and minutes
- E-mail newsletters

National Environmental Policy Act (NEPA) requirements for review of environmental impacts of the proposed project will be satisfied as part of the Alternatives Analysis, assuming that the project qualifies for a Categorical Exclusion. Jacobs will initiate coordination with governmental agencies during the environmental scoping process, and will inform federal, state, regional, and local agencies of the project. Coordination with other agencies within El Paso and FTA will help to ensure that the study meets local, state, and federal criteria, and addresses local political and community interests.

Task 2 Deliverables:

- Public involvement plan
- E-mail newsletter
- Project website
- Public meeting/hearing announcements
- Media releases about the project
- Technical handouts, exhibits/displays, and agendas for each open house/public meeting/hearing
- Environmental scoping process
- Agency coordination documentation

Task 3: Analysis of Needs and Demand

Purpose

One key to a successful AA is the early establishment of a clear statement of the project purpose and needs, to ensure that the alternatives evaluation process can withstand comment and scrutiny. The purpose of this task is to develop the problem definition and description of purpose and need that the proposed project is to address.

Approach

Jacobs will assemble, organize and analyze information and data on existing conditions in the study area to identify and quantify influences and concerns based on current conditions in the study area. The analysis process and its results will serve to identify key issues related to transportation service, and economic, environmental, and social concerns with the study area. A significant amount of information about the study area is already included in the database assembled by Jacobs during the El Camino Real Transportation Terminal Study, Historic Trolley Streetcar Initiative, and the El Paso Transit Corridor Feasibility Study. Additional information will be added to expand and update the available data for the AA corridors and study area.

An initial half-day workshop will be conducted with key City of El Paso, Sun Metro, Camino Real RMA, and MPO staff to define the issues and needs, and to further refine the methodology and strategy for achieving a successful AA. Additional workshops and coordination meetings will be conducted with the City of El Paso and other agencies to confirm and build consensus on the purpose and needs, alternatives definition, and evaluation criteria and methodology.

Based on assessment of the current conditions, and coupled with input from agencies and stakeholders, Jacobs will prepare a draft "Purpose and Need" problem statement identifying the existing deficiencies and needs, and summarizing the project goals and objectives. Existing transit deficiencies and transportation needs will be identified and analyzed

based on available information and supplemented by additional data collection and needs assessment for further analysis in subsequent tasks. The Purpose and Need Statement will serve as the cornerstone for the AA, and will focus on describing and documenting the primary transportation challenges to be addressed.

Task 3 Deliverables

- Data summaries
- Current conditions including man-made and natural influences
- Purpose and Need Statement

Task 4: Definition of Alternative Mode Technologies and Alignments

Purpose

The purpose of this task is to establish those criteria, evaluation criteria, performance measures, and methods to review the alternatives; and develop conceptual alternatives that meet requirements and objectives set forth by the City of El Paso.

Approach

This task will develop an appropriate range of reasonable alternative modes and alignments for each corridor, along with evaluation criteria and performance measures, to screen and evaluate the alternatives. FTA guidelines for Small Starts allow consideration of a limited number of reasonable alternatives. Alternative modes will include enhancements to current bus service and the potential development Bus Rapid Transit (BRT) service in the corridors. Alternative alignments will include different major streets within the corridors, separated fixed guideways, dedicated lanes in outside lanes or within the median, use of mixed traffic lanes, and other feasible alignments.

The evaluation criteria will fall into categories and subcategories such as transportation, urban design, economic development, socio-economic, environmental, cost-effectiveness, affordability, constructability, operations, intermodal connectivity, safety, mobility, and air quality/energy consumption benefits and dis-benefits. Jacobs will also describe the measures for environmental screening and thresholds for the developed criteria, and review the suggested criteria and categories by comparison with other relevant studies and with the specific local context.

Jacobs will develop a range of initial project alternatives, including the "No Build", Baseline alternative for current service plus Transportation System Management (TSM) measures, and Bus Rapid Transit (BRT) alternatives, including alternative alignments based on current conditions, previous studies, regional transportation needs, and agency and public input. The Build alternative will include bus rapid transit (BRT). FTA requires that the Alternatives Analysis include the identification and consideration of a Baseline TSM Alternative for the corridor(s) for projects that will see federal funding under the Small Starts process. Jacobs will analyze the alternatives to identify environmental impacts, assess the "Purpose and Need" *relative to each alternative*, and carry forward an assessment of benefits and impacts for each alternative.

In addition to measuring performance and assessing impacts of the alternatives, the task will describe the performance of each alternative, and summarize its evaluation results with quantitative and qualitative documentation supporting the alternatives analysis.

Jacobs will consider evaluation criteria and measures as defined in the Small Starts provisions included in current FTA guidance, such as Updated Interim Guidance and Instructions, Small Starts Provision of the Section 5309 Capital Investment Grants Program, July 20, 2007; and Proposed Policy Guidance on Evaluation Measures for New/Small Starts, August 3, 2007.

Task 4 Deliverables:

- Definition of Alternative Modes and Alignments
- Alternatives Evaluation Criteria and Performance Measures

Task 5: Alternative Costs, Impacts, and Rankings

Purpose

The purpose of this task is to develop alternatives that meet the Purpose and Need for the project as established in Task 3, and provide the most cost efficient and productive option, based upon the AA and *including operations planning, capital* costs, operating costs, user benefits and environmental impacts.

The FTA Capital Investment Grants Program evaluates proposed Small Starts projects using two evaluation criteria: effectiveness (mobility and economic development) and cost effectiveness. Jacobs will develop the conceptual alternatives to satisfy the requirements of FTA guidelines and standards for the Small Starts program.

Approach

Based on previous tasks, assessment of local and regional transportation needs, and public and agency input, Jacobs will identify the costs and impacts of the identified alternatives and alignments. These alternatives should include current service conditions with added Transportation System Management (TSM) techniques, and bus rapid transit (BRT). The no-build alternative will also be evaluated for purposes of *NEPA environmental review compliance.*

Jacobs will conduct an environmental analysis, in accordance with FTA and NEPA guidelines, necessary to identify and assess the impacts of alternatives within the corridor(s). Sufficient information and analysis will be prepared and conducted to provide comparison of the No-Build and Transportation System Management (TSM)/Baseline alternatives to the Build Alternative (BRT). The objectives of this task are threefold: (1) to describe the existing social, economic and physical conditions within the corridor; (2) to identify and evaluate the short-term and long-term impacts of the alternatives; and (3) to identify and recommend mitigation measures to be incorporated in the design and/or operation plan for the Locally Preferred Alternative (LPA).

The proposed scope of services and project budget are based on the assumption that the proposed alternative will qualify for a Categorical Exclusion. *Should the initial environmental analysis determine that an Environmental Assessment/* Finding of No Significant Impact, or an Environmental Impact Assessment/Record of Decision is required for the project, these necessary services would be performed as Additional Services, including requirements for additional professional fee and extended project schedule.

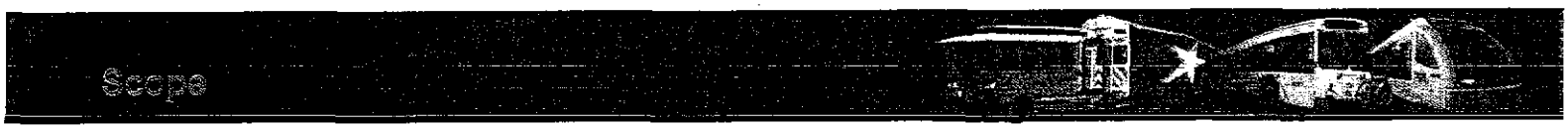
Jacobs will use both qualitative and quantitative criteria in the evaluation of alternatives. While qualitative measures will be utilized primarily in initial steps of the evaluation process, quantifiable criteria will be included for secondary and final screening evaluations. The following describes the screening process.

- *Phase 1: Initial Screening* – this step will seek to find specific, well defined issues that render proposed alternatives infeasible based on potential environmental impacts, cost or compatibility with local or regional plans. *Further, this step will focus on the effects of implementing an alternative* in the built environment, providing required access, and meeting community needs and system design standards.
- *Phase 2: Detailed and Quantitative Criteria* – the second screening step will include a qualitative examination of alternatives considering physical and geometric requirements, level of service, and multi-modal compatibility and access. This step of the screening process will focus on quantitative review and comparison of expected impacts and costs.

The result of the evaluation will be the selection of a Locally Preferred Alternative (LPA) that will be included in the submittal to the FTA for funding consideration under the New Starts program.

Task 5 Deliverables

- Summaries and graphics for public review and comment
- Draft and Final Screening Results Report



Task 6: Operating Plan and Standards

Purpose

The purposed of this task is the development of an operating plan for the alternatives considered. Defining a service concept or operating plan for each corridor involves a clear understanding of the service objectives and the target market, as well as how the service will be utilized, how it will interact with other routes, and how the service will be managed by Sun Metro.

Approach

The first step in defining the service concept is gaining an understanding of the target user markets. Previous tasks will enhance knowledge of the corridors, the surrounding areas and the ultimate user of the service. Major destinations, trip generators and travel patterns within the corridor(s) will be identified. A service concept/plan will be designed that meets the needs of the users, while serving demand in a cost-effective manner.

Jacobs will design the service concept/operating plan to meet user needs within the corridor(s). This plan will optimize the capacity and level of service to the anticipated demand flows based on ridership forecasts. It will be important to identify related impacts on the supporting bus service operating parameters, i.e., will the feeder bus routes require service changes to adequately support the proposed project?

Develop Alternative Service Operating Plans: Service operating plans will be developed for the No Build Alternative, Baseline or TSM (Baseline) Alternative, and the Build Alternative. Each of these service plans will consist of a series of assumptions related to modifications to the existing bus system. The service plans will identify the operating requirements (for each Alternative) to be used in the development of annual operating and maintenance (O&M) costs and used as inputs to the travel demand forecasting model.

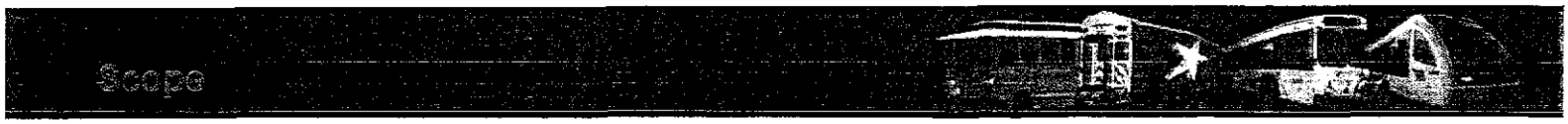
The following are brief descriptions of the three service plans and what will be required within each plan.

No-Build Alternative: The No-Build Alternative service plan will consist of existing transit service and committed improvements to the service that ware identified within the Transportation Improvement Program (TIP), and other improvements identified and funded by the City of El Paso between today and the proposed opening day of the Build Project. The No-Build Alternative establishes the base condition from which the Baseline or TSM Alternative and the Build Alternative is developed and compared.

Baseline/TSM Alternative: The baseline alternative is defined as the "best that can be done" to improve transit service in the corridor without a major capital investment in new infrastructure. The baseline alternative must be defined so that comparisons with the build alternative project isolate the costs and benefits of the proposed transit capital investment. The baseline must include all reasonable cost-effective transit improvements short of major capital investment.

Build Alternative: The Build Alternative will consist of Bus Rapid Transit (BRT) alignments as identified as part of the AA process. Jacobs will develop operating pans in sufficient detail to provide peak, daily and annual operating requirements needed to develop annual O&M costs, and ridership forecasts to be provided by TTI under a separate contract. The Build Alternative operating plan requirements will be adjusted to meet ridership demand after ridership estimates are estimated. The Build Alternative will be defined in sufficient detail to support the Alternatives Analysis. Further design details would be identified in the subsequent phase of project development.

The draft and final Operations Plan Report will be produced documenting the sources of data used, assumptions made and descriptions of the three project alternatives (No Build, Baseline and Build Alternatives). This report will provide the detail required for the development of capital costs, annual O&M cost estimates and ridership forecasts for the initial year of operation in accordance with FTA Small Starts guidance.



Task 6 Deliverables:

- Draft and Final Service Concept and Operating Plan

Task 7: Ridership Forecasts and Economic Analysis

Purpose

The purpose of ridership is to provide timely "real-world" information pertaining to the transportation system and the travelers that use the system. Results from ridership figure into the work of other tasks including capital costing to size facilities, estimating fleet requirements, setting service levels and estimating operating costs. Forecasts also figure in the assessment of environmental impacts ranging from air quality changes and congestion relief, to mobility and user benefits.

FTA requires that ridership forecasts for Small Starts submitted in support of a request to enter project development (PD) be based on travel data sufficient to describe current ridership patterns. FTA considers the adequacy of data based on existing ridership patterns on a case-by-case basis.

The proposed scope of services and budget are based on the assumption that necessary ridership forecasts will be provided by the Texas Transportation Institute (TTI) under a separate contract with the City of El Paso. Such services would comply with FTA requirements and guidelines and would be provided in a timely manner by TTI.

Approach

For Small Starts projects such as proposed fixed guideway or corridor-based bus improvements that serve markets which are not typically well captured by regional travel demand models, the application of alternative tools and methods for estimating transportation benefits may be desirable. In addition, where enhanced bus service is proposed in corridors already served by transit, and where good data exists on existing ridership patterns and travel speeds in those corridors, "elasticity" or "pivot-point" analysis may be sufficient to estimate the transportation benefits of such projects. FTA is open to alternative travel forecasting approaches for Small Starts projects and invites project sponsors to discuss such techniques with technical staff from the FTA Office of Planning and Environment.

In addition, sponsors of Small Starts projects should discuss with FTA the appropriate year of travel demand forecasting and impact analysis to be carried in alternatives analysis studies and any required documentation required by NEPA. SAFETEA-LU requires that the cost effectiveness of Small Starts projects be estimated using an opening year ridership forecast. As many Small Starts projects would not be expected to result in significant long-term environmental impacts, limiting ridership (and ridership-induced impacts) analyses to an opening year forecast in subsequent NEPA documents may be sufficient, thus abrogating a commonly perceived inconsistency between SAFETEA-LU and NEPA. FTA is developing guidance on the conditions under which an opening year travel forecast would be sufficient for NEPA, and expects to issue it shortly.

Task 7 Deliverables

- Methodology Report
- Ridership forecasts

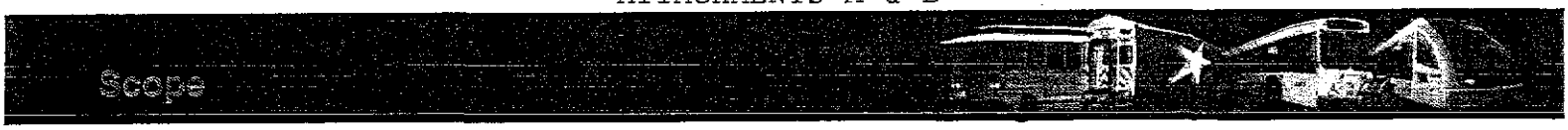
Task 8: Estimated Capital and Operating Costs of Alternative Technologies

Purpose

The purpose of this task is the development of capital and operating cost estimates for the alternatives. The cost estimates will be developed in accordance with published FTA Standardized Cost Category format with approved contingency factors and annualization factors.

Approach

The development of capital and operating cost estimates is an important part of Alternatives Analysis because it is the



basis for determining cost-effectiveness and overall funding requirements. Jacobs uses a standard format for estimating capital and operating costs that is consistent with FTA accepted procedures. The preparation of realistic, comparative capital and operating cost estimate will use (1) estimates prepared for similar projects around the nation, (2) contract bids and final cost for similar projects and (3) historical cost data for other projects recently completed in other cities.

Capital costs will include estimated amounts for vehicles, route length for exclusive lanes or mixed traffic; ROW acquisition (if needed); demolition; utility upgrades or relocation; vault removal; pavement reconstruction for full depth, mill and overlay, curb-to-curb, and bus lane only; bus pads and stations; signals and ITS; maintenance facilities;and for design, construction management and other soft costs.

O&M cost estimates are a critical factor in the determination of an alternative's cost-effectiveness. Jacobs will estimate annual O&M costs for the alternatives. Bus O&M costs will be based on current unit cost data from Sun Metro and estimated future operating statistics for the alternatives. Route-specific operating statistics (peak bus, bus-hours and bus-miles) will be developed based on operating plans developed in Task 6. BRT O&M costs will include costs for any BRT-specific features, such as potential for higher maintenance costs for unique BRT buses and potential Ticket Vending Machine (TVM) maintenance costs.

Potential funding strategies and a financial implementation plan will be identified. A combination of multiple funding sources is characteristic of successful financial strategies for Small Starts projects.

The draft and final Capital and O&M Cost Estimates Report will be produced for documentation of incremental annual O&M costs for the three project alternatives (No Build, Baseline and Build Alternatives).

Task 8 Deliverables:

- Draft and Final Capital and O&M Cost Estimates Report

Task 9: Evaluation Leading to Identification of Locally Preferred Alternative

Purpose

The Alternatives Analysis will develop information on the benefits, costs, and impacts of alternative strategies to address transportation problems or opportunities in the corridor, leading to the adoption of a Locally Preferred Alternative (LPA).

Approach

Jacobs will use the evaluation criteria and prescribed methods and assumptions for screening and detailed evaluation of the identified alternatives. A cost effective methodology that recommends a level of effort appropriate for an AA and to the specific phase within the AA will be used.

The task will describe each alternative's performance and summarize its evaluation results, recommendations, and quantitative and qualitative documentation supporting the elimination and recommendation of alternatives. Costs, benefits, and trade-offs will be identified and analyzed to determine effectiveness in meeting the stated goals and objectives, including level of impact, cost effectiveness, and financial feasibility.

A Locally Preferred Alternative (LPA) will result from the supporting analysis and evaluation of alternatives. A final recommendation will be based on technical and cost data in conjunction with a full range of qualitative benefits. Funding sources and implementation steps will be identified. Jacobs working with City of El Paso staff will recommend a LPA to the El Paso City Council/Mass Transit Board for approval. The public participation process described in Task 2 will be coordinated and integrated with the alternatives analysis and evaluation.

Task 9 Deliverables

- Technical Evaluation Methodology

- Comparison Evaluation Format/Form
- Documentation of LPA

Task 10: Final/Locally Preferred Alternative Report

Purpose

FTA requires that the LPA must be selected from among the alternative strategies evaluated in Task 4, and formally adopted and included in the Metropolitan Transportation Plan. The purpose of this task is to document the selection of the LPA.

Approach

Once the City of El Paso staff and the consultant team have selected a recommended LPA at the conclusion of the detailed evaluation of alternatives, Jacobs will produce a series of graphic and presentation materials for meetings presenting the LPA recommendation. It is expected that meetings will be conducted with the El Paso City Council/Mass Transit Board, and a public meeting to present the recommended LPA selection for review and comment.

A Draft AA Report and Executive Summary will be prepared documenting the purpose and need for the project, goals and objectives, the initial alternatives, the evaluation process, and selection of the LPA. Once the public meetings are held on the LPA selection, all public comments during the public involvement program will be documented. Final reports will be prepared incorporating review comments.

Reports will be provided in both hard copy and electronic formats.

Task 10 Deliverables

- Presentation graphics for meetings of LPA selection process
- Draft AA Report and Executive Summary (10 copies)
- Final AA Report and Executive Summary (20 copies)
- Electronic files
- GIS data files

Task 11: Preliminary Project Management Plan

Purpose

The Project Management Plan (PMP) is a federal requirement for receiving financial assistance for a major capital project. Development of the PMP starts in the planning/AA phase and evolves as the project advances through preliminary engineering, environmental review, and final design phases.

Approach

The preliminary project management and financial plan will be prepared for the preferred alternative. The PMP will provide the following minimum requirements according to the FTA regulations and guidelines:

1. Recipient staff organization, reporting relationships, functional responsibilities, job descriptions, and job qualifications;
2. Budget covering the project management organization, appropriate consultants, property acquisition, utility coordination, systems demonstration, audits and other expenditures;
3. Construction schedule;
4. Document control procedure and record-keeping system;
5. Change order procedure;
6. Organizational structures, management skills and staffing levels required throughout the construction phase;
7. Quality control and quality assurance functions, procedures and responsibilities;
8. Materials testing policies and procedures;

9. Internal plan implementation and reporting requirements
10. Criteria and procedures to be used for testing the operational system and its components
11. Procedures for periodic updates of the PMP;
12. Recipient's commitment to make submittals of project budget and project schedule to the FTA Region.

Some sections will be place holders for additional information to be added in later phases of project development.

Task 11 Deliverables

- Project Management Plan for Locally Preferred Alternative

Task 12: Financial Plan for the Preferred Alternative

Purpose

Local financial commitment is a requirement for obtaining federal assistance through the Small Starts program. The local agency financial plan must demonstrate the stability and reliability of the local funding commitment to fund the capital and operating costs of the LPA.

Approach

The financial plans for capital and operating funding are important considerations for a successful Small Starts project. In order to achieve a "high" project rating by FTA, the financial plan needs to demonstrate that the project proposes no higher then 50% of the capital costs from the federal Small Starts program, that the City of El Paso has a reasonable plan to secure the local share funding of capital costs; that the additional operating and maintenance costs of the project are less than five percent of the agency's operating budget; an the agency is in good operating condition.

The financial plan will likely include a variety of several funding sources committed to the local share funding sources committed to the local share funding of capital and operating costs. Potential local funding sources may include revenues from sales tax, transit fares, sponsorships, promotions, tax increment, improvement district, joint development, parking, general fund, and other sources. A financial plan will be developed to show the City of El Paso's projected revenues, capital expenses and operating costs. Sound assumptions will be clearly documented for estimating capital costs and projecting operating expenses and revenues, as they are critical to determining that the LPA can be constructed and operated while continuing to operated and maintain the existing Sun Metro system, which is required by SAFETEA-LU.

Deliverables

- Financial Plan for the Locally Preferred Alternative

Task 13: Plan for a Before and After Study (BAS)

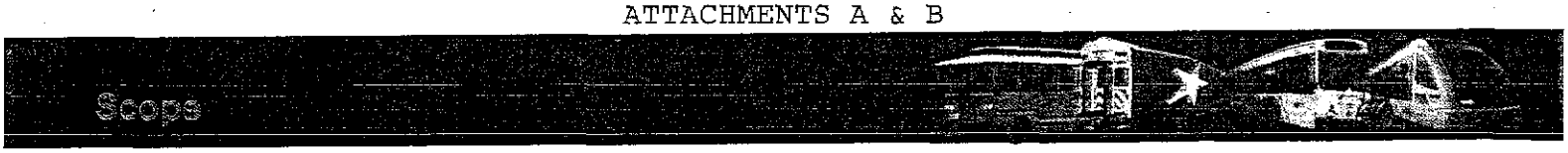
Purpose

A Before and After Study (BAS) identifies the actual costs of the project and its impact on transit service and ridership by comparing the conditions that prevail after project implementation. The BAS also examines the accuracy of the predictions by comparing the conditions that prevail after project implementation to the costs and impacts predicted for the project in each phase of the planning and project development process.

Approach

Jacobs will develop a Before and After Study plan, as required by Section 5309(g)(2)(c). A plan for BAS is one of the requirements for application for Full Funding Grant Agreement (FFGA). The plan for BAS will include provisions to assess the impacts of the project, including the actual costs of the project and ridership after two years after opening, and identify the sources of differences between predicted and actual outcomes.

The actual BAS will be performed in later phases of project implementation.



Task 13 Deliverables

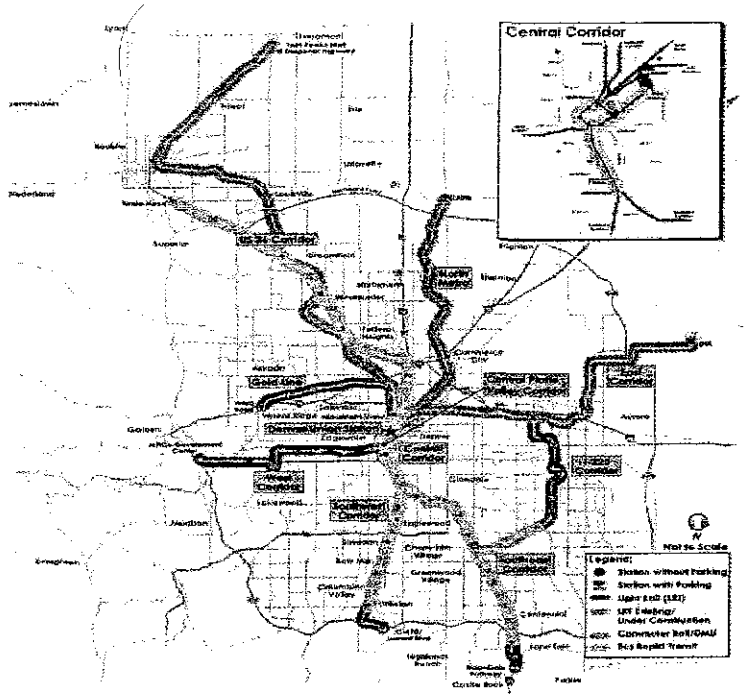
- Technical memorandum: Plan for Before and After Study

Our price proposal for the services described above can be found on page 32 of this proposal. The intent of the following notes is to describe the frame or parameters that define our price proposal.

1. Estimated labor hours and direct cost includes economies provided by Conducting the Alternatives Analysis for all Corridors at the same time. If a single Corridor Analysis is to be conducted by itself separate from other corridors the hours and direct cost will be higher and the cost estimate will have to be revised.

2. Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Analysis is to be conducted by itself separate from other corridors the hours and direct cost will be higher and the cost estimate will have to be revised.

3. The estimated direct labor hours and costs assume that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.



RTD FASTRACKS PROGRAM

Denver, Colorado

Contact: Regional Transportation District; Liz Rao - 303.299.2585

FasTracks is the Colorado Regional Transportation District's (RTD) 12-year, $6.1-billion comprehensive plan for high-quality transit service and facilities in the Denver metropolitan region. FasTracks will construct over 119 miles of new rail transit, 18 miles of bus rapid transit, a major multimodal transit hub at Denver Union Station, and enhance the bus network to support investments in rail, serve suburb-to-suburb trips, and provide local and regional bus service. Jacobs's role includes serving as the Program Support Consultant (PSC) as an extension of the RTD staff to guide the program. Our staff has management roles in corridor planning, environmental management, project controls and management systems and GIS.

Program Management

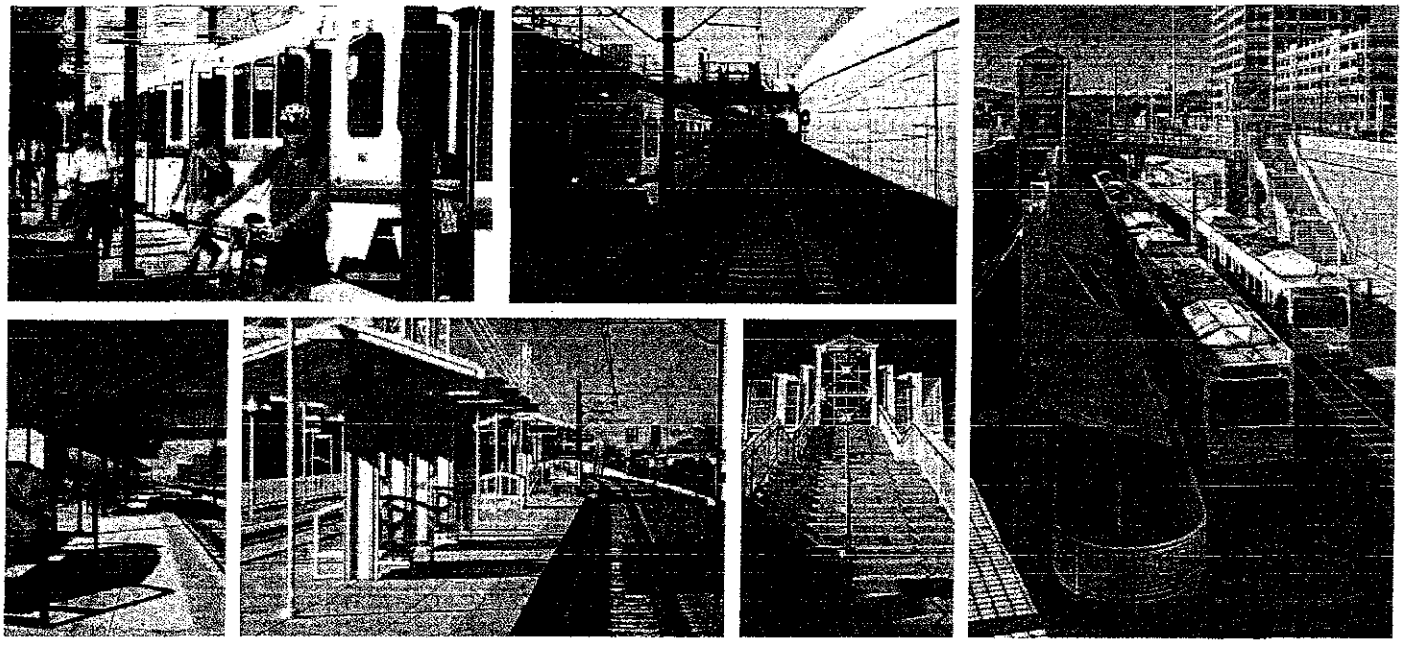
- Project Management Plan (PMP)
- Resource planning
- Project management training for staff
- Identification and tracking of critical issues
- FTA strategy

Program Environmental Management

Jacobs is responsible for providing management oversight for the planning and environmental studies on nine rapid transit corridors, Denver Union Station, and light rail and commuter rail maintenance facilities. The work entails developing standard methodologies, standard agency coordination programs, training RTD staff and corridor consultants in NEPA and SAFETEA-LU, developing quality oversight procedures, providing quality oversight, developing standard NEPA impact sections and standard mitigation sections, preparing a cumulative impact assessment for the entire FasTracks program, and preparing templates for agency consultation purposes.

Corridor Planning and NEPA Oversight

Our staff is serving in a Project Management Consultant role of Corridor Planning Manager and as NEPA liaison to the US 36 Corridor EIS, I-225 Corridor EIS, West Corridor EIS, and Denver Union Station EIS. We are providing NEPA oversight, NEPA document review, NEPA process development, and state and federal agency coordination. We prepared a supplemental Environmental Assessment for the West Corridor, a Categorical Exclusion for the replacement of a bridge over the West Corridor LRT tracks, and a Section 404 permit application for the West Corridor.



T-REX TRANSPORTATION EXPANSION PROJECT
Denver, Colorado
Contact: Colorado Department of Transportation; Jim Bumanglag - 303.357.8574

T-REX is a landmark collaboration between CDOT, RTD, FHWA and FTA creating a new streamlined multi-modal approach to project delivery. CDOT, in partnership with the Denver RTD, is reconstructing 16 miles of two interstate highways in the Denver metropolitan area and adding 19 miles of new LRT, including 13 stations. The $1.67 billion design-build program is gaining recognition for delivering highway and transit improvements. It was shaped by extensive input from the community, and it is on budget and ahead of the schedule created during the NEPA process.

The LRT line will connect to RTD's two existing light rail lines, providing a direct link between the two major employment centers (Downtown Denver and the Denver Technological Center) and the employment bases of Southeast and Southwest Denver. The project involves 63 major structures including 12 double-track aerial guideways and several long transit ways traversing eight structures.

Jacobs has been responsible for a wide range of services beginning with the MIS and continuing into today's role acting as an extension to CDOT and RTD's staff performing oversight services for the design-build contractor. The EIS addressed air quality, noise, stations, wetlands, and historic buildings. These issues were resolved through tight agency coordination.

NEPA clearance (DEIS/FEIS/ROD) was gained in less than 22 months, successfully negotiated a $525 million Full Funding Grant Agreement, and conducted a public involvement program. Phase I (EIS/PE) was completed 12-percent under budget and four months ahead of schedule. Phase II (Procurement Oversight) was completed 18.75-percent under budget and four months ahead of schedule. Phase III, is estimated to complete $2 million under budget for the first two years of the 5.5-year design-build oversight contract.

Firm's Experience

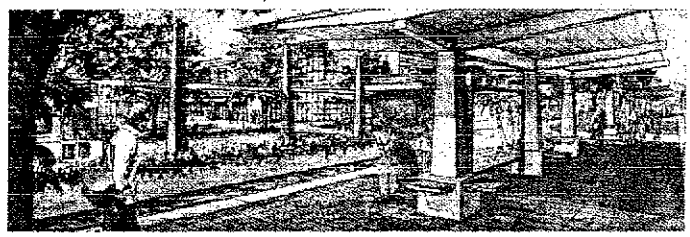
PE/EIS AND PROGRAM MANAGER FOR FINAL DESIGN AND CONSTRUCTION

Houston, Texas

Contact: METRO; Tony Venturato - 713.739.6922

Jacobs prepared the environmental documentation and preliminary architectural and engineering plans for the METRO New Start LRT System. The 7.5-mile double track system, with an approximate cost of $425 million, traversed the city from the University of Houston Downtown Campus to south of Reliant Stadium. We managed the subconsultants, including systems, architectural, and structural, on this fast-track design project, as well as providing survey services and performing track and pavement design. Along with the preliminary design, we assisted METRO in updating the Environmental Assessment for the project in preparation for obtaining a FONSI from the FTA. One of the greatest challenges facing this project was Houston's busy streets. The light rail system was designed to run along Main Street, through the heart of downtown, cross over Fannin and San Jacinto Streets, through the Museum District, Hermann Park, the Texas Medical Center, and the Reliant Complex. Downtown Houston and the Texas Medical Center were key areas where access to facilities was crucial.

Jacobs used an innovative fast-track project delivery system to implement this project. In order to meet a challenging schedule, the firm's design team prepared the utility relocation plans to final design and remainder of the project to the 30 percent level. At this point, five line section final design consultants were selected, and construction contracts and bids were awarded. Upon notice-to-proceed, the contractors started the utility relocation work while the final design of the street, guide way, stations and maintenance facility was completed. As portions of the design were completed, separate work authorization packages were given to the contractor. Jacobs managed the design oversight of the line section design firms during the final design.



AUSTIN/SAN ANTONIO COMMUTER RAIL DISTRICT

Austin/San Antonio, Texas

Contact: Austin-San Antonio Intermunicipal Commuter Rail District; Sid Covington - 512.558.7360

Jacobs provided planning, environmental, and preliminary engineering services to advance the project to the 30% design phase. Jacobs prepared environmental documentation, assisted with the Federal Transit Administration's "New Starts" application, station area planning, railroad coordination, operations/maintenance, and conceptual design and engineering services.

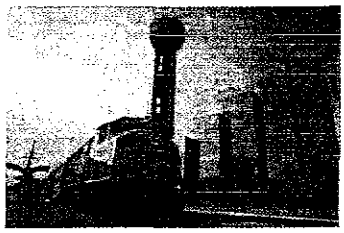
Jacobs assisted the District in writing the project management plan as required by the Federal Transit Association (FTA) to show how the project would be funded and managed to ensure that the plan would be sufficiently detailed to use in applying for federal funds as the project progresses.

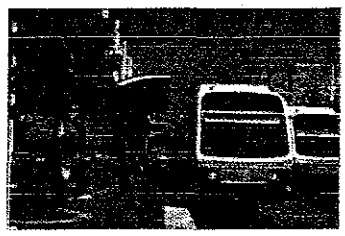
The updated final report showed cost benefits and confirmed that the project is feasible based on an anticipated total cost of $500 million, with approximately 50% of funding coming from federal sources and 50% coming from local sources, including a 1/8-cent sales tax across the municipalities to be served by the commuter rail system.

The commuter rail system proposed is designed to travel through, rather than along the outskirts of, the cities it will serve. Jacobs recommended such a plan based on the potential for the commuter rail stations to drive economic development in the immediately surrounding areas. As the proposed commuter rail is also expected to be an attraction to new businesses. Jacobs's study and report investigated the potential of the rail to bring new businesses into the area based on workers' ease of commuting.

Jacobs's preliminary station designs called for minimal footprints, and anticipated that most stations would be approximately 300-feet long and would provide some additional overhead shading. Jacobs's preliminary site suggestions took into account data in updated ridership studies, and also considered input from meetings with city officials in all areas where stations were proposed.

Firm's Experience





> "The joint venture's combined construction expertise is essential for DART to continue completing projects on time and on budget. It was equally important for DART to select a contractor that properly reflects all segments of the community. The ACT21 Joint Venture is experienced and diverse. Together, we're going to do great things for the region."
>
> - Gary Thomas, DART President/ Executive Director

DART - GENERAL ENGINEERING CONSULTANT

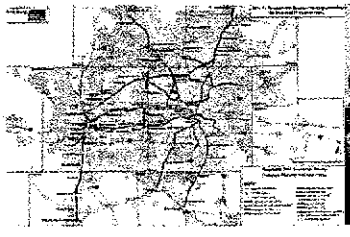
Dallas, TX

Contact: Dallas Area Rapid Transit (DART); Eduardo Ugarte, PE - 214-749-2934

DART selected ACT 21, A Joint Venture between Jacobs, STV Incorporated, and KAI/Alliance, LLC, as its General Engineering Consultant to manage Phase 2 of the Light Rail Transit Build-Out. Phase 2 will add over 47 miles of new lines to DART's LRT network. Those lines will serve Deep Ellum, Fair Park, South Dallas and Pleasant Grove to the southeast; and the new American Airlines Center, Medical/Market Center, Love Field Airport, Farmers Branch, Carrollton, North Irving, Las Colinas Urban Center and DFW International Airport to the northwest. Other projects the GEC will manage include new rail maintenance facilities including the expansion of DART's principal rail Service and Inspection Facility near Fair Park, and design and construction of a second rail maintenance facility in northwest Dallas for a 100-car expansion of the fleet.

Jacobs provided project management for the joint venture and system-wide engineering design services; and led efforts to continue DART's successful rail station development. The five-year contract, estimated at $200 million, will support DART's $2.3 billion capital expansion program that will double the size of the current light rail system.

Jacobs services include program management, design management, architecture/station area development, trackwork and systemwide element design services; and managing DART's non-rail capital projects. The GEC services also included real estate acquisition support services; corridor design management; line section design; and construction management services for the 47-mile light rail expansion.

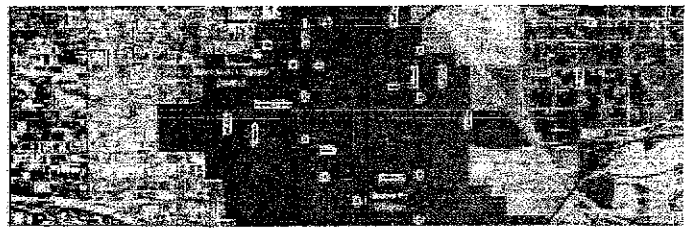


NCTCOG REGIONAL RAIL FEASIBILITY STUDY

Dallas/Fort Worth, Texas

Contact: North Central Texas Council of Governments Michael Morris - 817.695.9240

Assessed the feasibility of implementing commuter rail service along railroad corridors. Studied as an alternative to peak-period automobile travel. Jacobs conducted the feasibility assessment of more than 800 line-miles in a five-step process: screening potential corridors based on "fatal flaw" criteria, data collection of existing conditions, technical assessment including geometric determinations, station facility needs, joint freight and commuter rail usage, ridership analysis, speed and travel time determinations and line combination linkages. After the technical assessment, an overall financial assessment was conducted of the selected corridors including construction cost estimating, fare revenue estimates, operating expenses and cost-benefit analysis.



FIXED GUIDEWAY TRANSIT STUDY

Oklahoma City, Oklahoma

Contact: Central Oklahoma Transportation and Parking Authority; Rick Cain - 405.297.2484

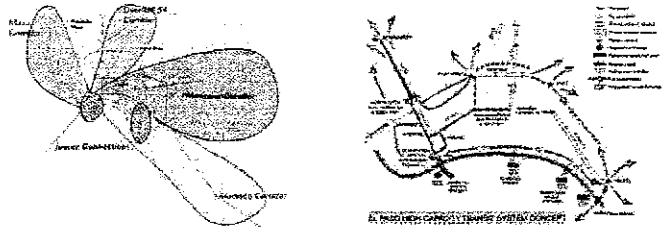
The Central Oklahoma Transportation and Parking Authority undertook the Fixed Guideway Transit Study to determine future transportation needs for the Oklahoma City Metropolitan Area. Transportation corridors were analyzed to identify fixed guideway transit options including enhanced bus service, high occupancy vehicle lanes, bus rapid transit, commuter rail, light rail, and modern streetcar service. Potential alignments, estimated capital and operating costs, and ridership forecasts were developed for each corridor alternative. Feasible alternatives were combined in a System Plan to present a multimodal vision of future transit services for the Oklahoma City area.

DART SOUTHEAST CORRIDOR MIS/PE/EIS

Dallas, Texas

Contact: Dallas Area Rapid Transit (DART); Doug Allen - 214.749.2750

This project included a 10.5- mile extension of the Light Rail Transit system. Jacobs was responsible for alternatives definition, alternatives evaluation, public involvement, preliminary environmental analysis and recommendation of the locally preferred investment strategy. Alternatives include busways, HOVs, light rail transit, commuter rail, and ITS/TSM/TDM strategies. The public involvement program includes policy, neighborhood and executive work groups, public meetings, newsletters and a web site. Once the MIS was successfully completed, Jacobs prepared preliminary engineering plans and an Environmental Impact Statement. A critical feature of the Southeast Corridor MIS was the development of a far-reaching Public Involvement Plan that coalesced many different social, income, and ethnic communities within the corridor.



EL PASO METROPOLITAN PLANNING ORGANIZATION, TRANSIT CORRIDOR FEASIBILITY STUDY

El Paso, Texas

Contact: El Paso Metropolitan Planning Organization; Ricardo Dominguez - 915.591.9735

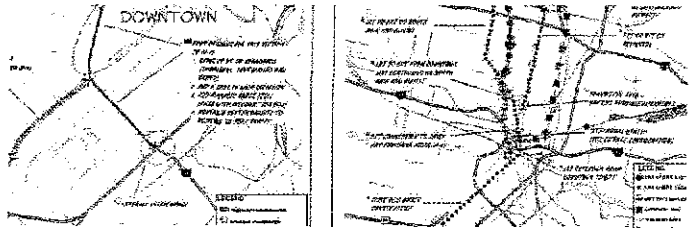
This project assessed opportunities and evaluated high capacity transit modes and alignments for the El Paso region. The study explored the application and appropriateness of a variety of travel modes and congestion management measures. The project recommendation described integrated, multi-modal strategies that addressed projected short and long-term travel needs within primary travel corridors that were adopted as the transit element of the region's long-range transportation plan. A long range system plan was developed including Bus Rapid Transit, Express Bus/High Occupancy Vehicle Lanes, and Light Rail Street car.

TRANSIT ALTERNATIVES ANALYSIS/ENVIRONMENTAL ASSESSMENT

Fort Worth, Texas

Contact: City of Fort Worth; Dana Burghdoff - 817.871.8018

Jacobs prepared an Alternatives Analysis identifying new opportunities for public transportation improvements and completed a Corridor Systems Study, to connect the 29 Growth Centers identified in 2000 Comprehensive Plan. This provided multi-modal public transportation options to serve the metropolitan area's corridors and growth centers. An environmental assessment was completed for the Locally Preferred Alternative, a 7.6-mile Light Rail Streetcar Starter Project. A New Starts Application for approval to enter into Preliminary Engineering was completed and submitted to FTA. Our team worked closely with the City of Fort Worth and NCTCOG staff to assess transit ridership potential for the Corridor Systems Study and the analysis of alternatives.



NORTH HARDY CORRIDOR ALTERNATIVES ANALYSIS

Harris and Montgomery Counties, Texas

Company: METRO; Cyndi Robinson - 713.739.6014

This project involved a comprehensive assessment that identified and evaluated both highway and transit alternatives to improve the person-carrying capacity of the IH 45 and Hardy Toll Road travel corridor. Tasks included the development of the purpose and need statement, evaluation criteria, engineering concepts, environmental screening, analysis of travel demand results, and extensive involvement by citizens, stakeholders, and policy makers. Transit alternatives included consideration of LRT, BRT, and the underlying bus network for multiple alignments. Highway alternatives included the addition of general purpose lanes, two-way high occupancy vehicle lanes, and managed lanes. The challenge for the potential highway alternatives was very limited right-of-way with active public opposition to widening the right-of-way.

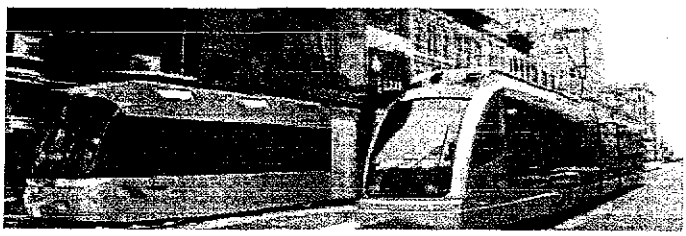
Firm's Experience

UNIVERSITY CORRIDOR DEIS/FEIS AND NEW STARTS

Houston, Texas

Contact: METRO; Ujari Mohite - 713.739.3713

Jacobs prepared the Draft Environmental Impact Statement (DEIS) describing the transportation and environmental impacts associated with the construction and operation of a fixed guideway project to improve transit service. The DEIS was prepared in 12 months. The effects of the No Build, Baseline, and Build Alternatives were evaluated and compared across a range of subject areas related to both natural and man-made environments. Build Alternatives included Light Rail and Bus Rapid Transit technologies. Federal Highway Administration (FHWA) was a cooperating agency for the development of the DEIS because several Build Alternatives proposed used federal aid highway right-of-way. Development of the DEIS included proactive citizen, stakeholder, and elected official involvement. The FEIS will be prepared after a Locally Preferred Alternative is selected and will include responses to comments received on the DEIS.



NORTH CORRIDOR DEIS/FEIS AND NEW STARTS

Houston, Texas

Contact: METRO; Cyndi Robinson - 713.739.6014

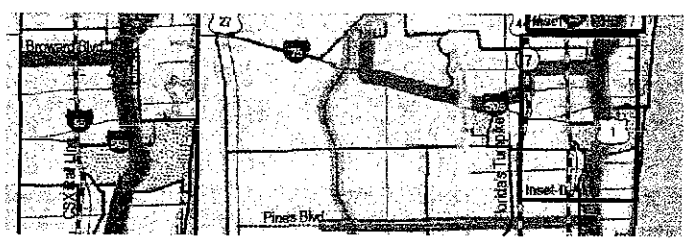
Prepared the Draft Environmental Impact Statement (DEIS) describing the transportation and environmental impacts associated with the construction and operation of an extension of the existing Main Street Light Rail Transit (LRT) project. The effects of the No Build and Build Alternatives were evaluated and compared across a range of subject areas related to both natural and man-made environments. These included transportation systems, land use, socioeconomic conditions, air quality, noise, vibration, visual, ecosystems, water resources, historic resources, archeological resources, parklands, geology, hazardous/regulated materials, and safety and security. Build Alternatives included Light Rail and Bus Rapid Transit technologies. The FEIS was to be prepared after a Public Hearing was held on the DEIS including responses to comments received on the DEIS. Also under this work authorization, Jacobs assisted with the preparation of the New Starts submittals on the minimum operable segment (MOS) of the transit component of the Locally Preferred Investment Strategy for the North-Hardy Corridor.

TRANSIT 2025 VISION

San Antonio, Texas

Contact: VIA Metropolitan Transit; Bill Barker, AICP - 210.308.5862

Jacobs assisted with the Transit 2025 Vision Task Force, commissioned by the VIA Board of Trustees to produce a vision for San Antonio/Bexar County public transportation needs for the 21st Century. The Task Force of 21 Bexar County residents was tasked to examine the projected Bexar County environment in 2025, define the type of public transportation capabilities needed to meet the needs in that environment and offer its recommendations on directions, initiatives and investments necessary to produce those capabilities.



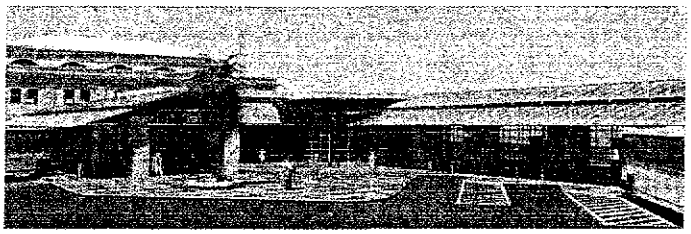
STRATEGIC REGIONAL TRANSIT PLAN

Fort Lauderdale, FL

Contact: South Florida Regional Transportation Agency (SFRTA); Joe Quinty - 954.788.7928

Providing general transportation/transit planning services to SFRTA for a wide variety of tasks including system planning, station and site plan review. Services include short- and long-range transportation planning, transit facilities planning and development, alternative analysis, major investment studies, and station area/transit-oriented development. Includes oversight, project control and management, financial planning & analysis, preparation of New Starts Reports, public involvement coordination, environmental analysis, and preliminary project planning and conceptual site planning for a three-year term. Assisted Broward County Transit in identifying potential sites for maintenance activities by outlining project justification, developing preliminary evaluation criteria, identifying initial facility site candidates, and performing preliminary evaluation.

Firm's Experience

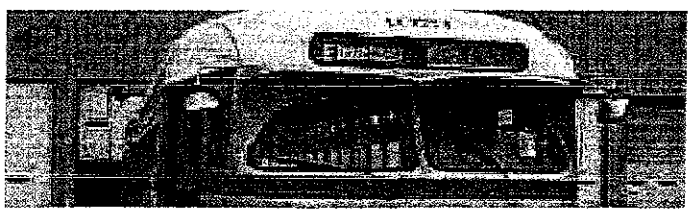


EL PASO CAMINO REAL ITT
El Paso, Texas
Contact: Sun Metro; Tim Omick - 915.534.5810

The City of El Paso and Sun Metro Transit are developing an multimodal transportation terminal for intercity and international buses serving the Greater El Paso metropolitan area. Jacobs performed an assessment of potential sites for the terminal and recommended the site of the Historic Union Depot in downtown El Paso. The 1904 Union Depot was designed by Daniel Burnham and is on the National Register of Historic Places. The concept plan for the Camino Real International Transportation Terminal respects the architectural integrity of the historic structure, adding the new terminal facility to an adjoining building that was constructed in 1980s as an expansion of the original terminal. The project included a survey of Intercity/International Bus Providers Needs, a site location evaluation, recommendation of preferred site location, preparation of a conceptual site development plan, a preliminary construction cost estimate, and an assessment of potential joint development opportunities.

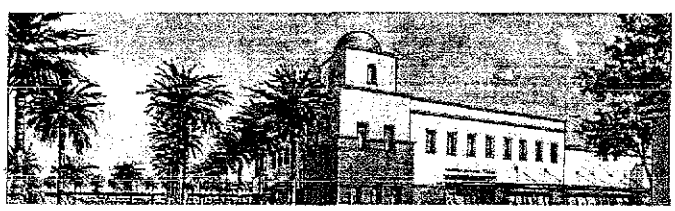
EL PASO UNION PLAZA TT
El Paso, Texas
Contact: City of El Paso; Irene Ramirez, PE - 915.541.4331

The City of El Paso contracted Jacobs to prepare a site development concept plan, preliminary cost estimate, and preliminary time schedule for the Union Plaza Transit Terminal. The City and Sun Metro Transit considered the relocation of the existing San Jacinto Transit Transfer Center at San Jacinto Plaza, to the Union Plaza Transit Terminal. A Bus Operations analysis was performed for the Union Plaza Transit Terminal based upon the existing routes and schedules that Sun Metro was operating at San Jacinto Plaza. A needs assessment was performed to identify the program requirements for development of the relocated transit transfer center. The suitability of the Union Plaza Transit Terminal site to accommodate the proposed relocation of the Transit Transfer Center was evaluated to determine the site suitability for serving the current and planned future Sun Metro Transit operations. A proposed transit operations plan was outlined for the Union Plaza Transfer Terminal.



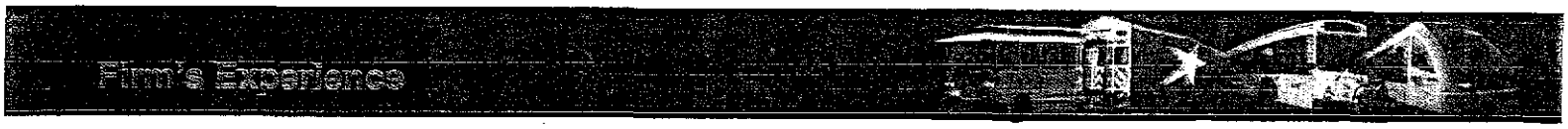
EL PASO HISTORIC TROLLEY STREETCAR INITIATIVE
El Paso, Texas
Contact: City of El Paso; Irene Ramirez, PE - 915.541.4431

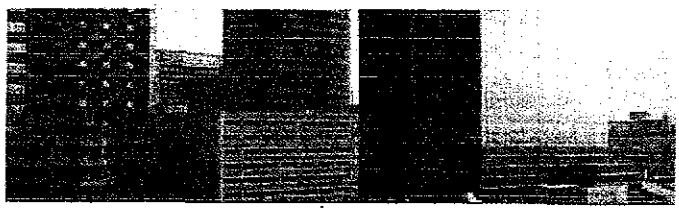
El Paso was the last city in the United States to shut down its historic Presidents Conference Committee (PCC) streetcar railway system. City of El Paso and Sun Metro Transit officials are researching and studying the steps required for implementing and restoring this mode of transportation in their community, reconstructing the streetcar railway system that ran in the City of El Paso and Ciudad Juarez from 1950 to 1974. The City of El Paso selected Jacobs to obtain and develop the preliminary cost estimate to help decision makers determine whether it is feasible to further investigate the possibility of restoring the old streetcar system. The study identified the estimated cost and a conceptual plan for rehabilitating nine historic PCC (Presidents Conference Committee) streetcars and developing all necessary infrastructure required to bring back the historic streetcars in downtown El Paso.



BROWNSVILLE MMT
Brownsville, Texas
Contact: Brownsville Urban System (BUS); Norma Zamora - 956.541.4881

Jacobs performed a feasibility investigation and site location study for the development of a new multimodal transportation terminal to consolidate the numerous public transit, inter-city and international bus services. The facility is centrally located, attractive, and functionally efficient facility that accommodates paratransit and fixed route transit services, intercity bus, taxi, airport shuttles, charter buses, pedestrians, bicyclists, automobiles, and other modes. The feasibility study included needs assessment, site analysis, program requirements and conceptual plan, cost estimate and financial implementation plan. Community involvement and public participation activities included a transportation providers workshop, briefing for federal and state officials, meetings with community organizations, and a public workshop. Jacobs prepared the preliminary design, environmental assessment and financial implementation plan for the multimodal terminal.



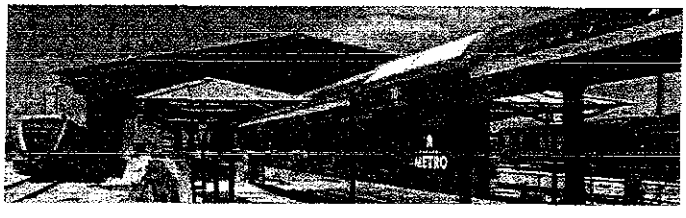


SAN ANTONIO DOWNTOWN ALTERNATIVES ANALYSIS

San Antonio, Texas

Contact: VIA Metropolitan Transit; Bill Barker, AICP - 210.308.5862

The Alternatives Analysis was initiated to address travel needs within the heavily used east-west corridor. The study entailed an evaluation of multi-modal alternatives to determine solutions to best meet corridor travel needs, selection of a preferred alternative and initiation of the process to secure federal funding for the design and construction of recommended transportation improvements. The alternatives explored potential improvements for a variety of travel modes (automobiles, buses, rail, etc.) while focusing on developing a multimodal system to serve many trip types. The Alternatives Analysis will also take into account the unique needs of downtown and the people traveling through it, including local and express riders traveling to or through downtown; tourists, conventioneers and local entertainment patrons; auto travelers destined for downtown or traveling through; and downtown residents, workers, shoppers, students, and medical patients.

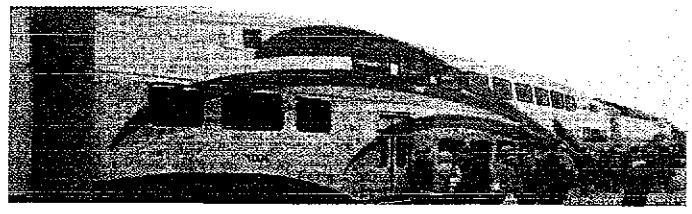


CAPMETRO TRANSIT SYSTEM PLAN AND NETWORK DEVELOPMENT

Austin, Texas

Contact: Austin Capital Metro; Roberto Gonzalez - 512.389.7400

Jacobs developed the Transit System Plan for 54 miles of fixed guideway alignment, including a line from downtown Austin to the new Austin Bergstrom Airport. The project scope included developing estimates of costs and benefits of light rail and providing the public with an understanding of the need for and viability of light rail. Jacobs refined the locations of the route and alignment, passenger stations, park-and-ride lots, conducted cost/benefit analysis, performed required environmental studies and assisted Capital Metro in building consensus within the community about light rail. Study considerations included land use, existing transportation systems, and the local environmental and political situation. *Jacobs updated the current Five Year Plan based on* ridership data from the origin-destination survey and demographic changes.



NEW MEXICO DOT TRANSIT PLANNING SERVICES

Santa Fe, NM

Contact: NMDOT; Frank Sharpless - 505.827.0906

The Transit/Rail Bureau of the New Mexico DOT selected Jacobs to develop a Statewide Rail Policy and Procedures Manual and a Public Transit-Human Services Transportation Plan. Task Orders performed under the Support and Engineering Services included researching policy, procedures, and best practices adopted by peer commuter rail systems to identify recommended policies for RailRunner Commuter Rail System and developing a handbook with guidelines, processes and procedures and policy recommendations relating to hazardous materials movement, advertising and future personnel needs. The Public Transit - Human ServicesTransportation Plan included developing a locally-based, coordinated public transit-human services transportation plan for six Regional Planning Organizations. Each of the six regional plans included an assessment of available services that identifies current public, private, and non-profit transit providers.

Firm's Experience

A HISTORY OF SUCCESS ON U.S. TRANSIT SYSTEMS

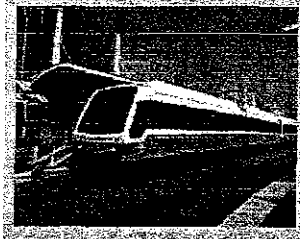
The Jacobs team has extensive experience performing Major Investment Studies/Alternatives Analyses and Environmental Assessments/Impact Statements for transit and highway projects. We have been involved as a consultant in many of the successful fixed guideway transit development programs in the State of Texas, as well as major programs in other states. These relationships and assignments have evolved with transit's growth and expansion throughout the country. Our experience spans the diverse range of modes and technologies, including Light Rail, Commuter Rail, People Mover, Streetcar, Bus Rapid Transit, and fixed route bus and paratransit services. We have a proven track record of completing NEPA documents in a timely manner. We have experts in public involvement, station planning and design, transit oriented development, land use planning, economic development, transportation modeling and forecasting, traffic engineering, and other specialties. Each partner brings value-added services and provides a depth of knowledge in their area of expertise.

OVERALL REPUTATION OF THE FIRM

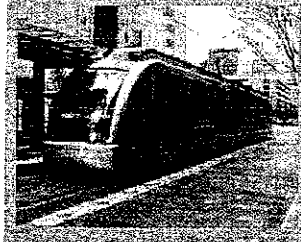
Jacobs offers the largest pool of national and local transit resources to their clients – our resources include over 160 local and 55,000 nationwide and global staff including 7,000 Infrastructure employees. We have demonstrated our ability to effectively plan and implement transit development and improvement programs for DART, Houston METRO, Fort Worth 'The T', Austin Capital Metro, Denver RTD, Salt Lake UTA, BART, Orange County Transit, Los Angeles County MTA, Puget Sound Transit, Santa Clara VTA, and other transit agencies. Our firm's reputation is that of a leader in today's transit industry, known for providing workable, cost-effective solutions, performance that exceeds aggressive agency schedules, providing comprehensive planning, design, programming and construction services, and for our expertise in managing multidisciplinary teams.

WHAT LESSONS HAS THE FIRM LEARNED IN PREVIOUS PROJECTS?

Important to our clients is that we bring lessons learned and key staff who have the requisite expertise and experience to enhance their planning for public transportation. The Jacobs team, through our ongoing relationships with transit agencies nationwide, brings an in-depth understanding of the unique challenges and opportunities inherent in a multidisciplined planning program. The lessons we have learned and the challenges we have overcome in dealing with multifaceted



For ***Dallas Area Rapid Transit (DART)***, our firm led the planning efforts and environmental clearance permitting for the Northeast, North Central, and Southeast Corridors, totaling almost 33 miles of Light Rail Transit (LRT) service. We are part of the ACT 21 Joint Venture currently managing the design and construction of the Phase 2 Build Out of the DART LRT System.



The ***Houston METRO*** 7.5 mile light rail transit starter segment traverses the city from the University of Houston Downtown Campus to the Astrodome. Our firm led the preliminary architectural and engineering efforts for the starter project and also designed all elements of the project, including passenger stations, guideway and trackwork, systems elements including vehicles, the yard and shop. The starter segment of the system operates entirely at grade on existing streets, minimizing the need for new rights of way. Jacobs updated the Environmental Assessment and obtained a Finding of No Significant Impact (FONSI) from the FTA.

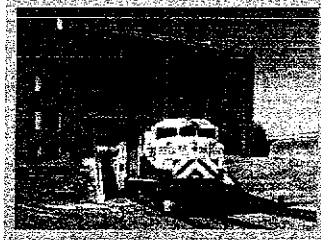
The ***TREX*** (Transportation Expansion) project is a landmark collaboration between CDOT, RTD, FHWA and FTA, creating a new streamlined multimodal approach to project delivery. The project includes the reconstruction of 16 miles of two Interstate Highways in the Denver metropolitan area and the addition of 19 miles of new light rail transit (LRT) including 13 stations. The $1.67 billion design-build program was shaped by extensive input from the community, and is on budget and ahead of the schedule created during the NEPA process (also performed by our firm).

- Phase I EIS/PE was completed 12% under budget and four months ahead of schedule;
- Phase II Procurement Oversight was completed 18% under budget and four months ahead of schedule;
- Phase III Design/Construction is anticipated to be completed $7 million (13 percent) under budget for the 5.5 year design-build oversight contract; and,
- The Light Rail line opened on November 17, 2006, six weeks ahead of schedule.

bus, BRT, streetcar, LRT and commuter rail system planning are key strengths our team brings to our client.

Seven (7) key principles that we have developed include the following lessons learned:

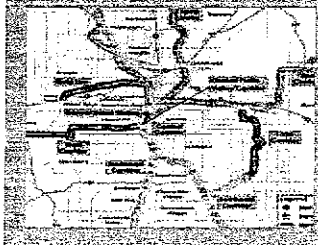
1. We understand the importance of having and developing champions who are leaders within the community and will help to support the vision and plan for improving public transportation now and in the future.
2. Coordination with community leaders, other agencies and stakeholders is a critical element in building consensus on the vision and plans for our clients' future transit services.
3. Proactive communications are critical to maintaining public trust and ensure efficient program implementation. Building and maintaining public and stakeholder trust and confidence is one of the most important measures of project success. It requires proactive, unambiguous and effective communication both internally and externally to ensure schedule achievement and to reduce or eliminate surprises.
4. We understand the processes, technical analyses and coordination required to shepherd a project from a feasibility study, to the preliminary planning and environmental phases, to a New Starts/Small Starts submittal and grant agreement, through to final detailed design, construction management and initiating operation.
5. We know how to engage agency directors and managers, board members, and staff in effective planning that focuses on agency goals, identifies realistic needs, and establishes the priorities and funding opportunities for implementation.
6. Much of our experience has been performed as an extension to agency staff, allowing our team to develop a cooperative and responsible relationship with the client, other agencies and community stakeholders, and third party interests.
7. The Jacobs team personnel have developed trusting, productive relationships with local, state and federal agencies through our previous projects. These working relationships provide the foundation for developing the vision and plans for continuing future improvement and expansion of public transportation service for clients' service area.



The ***Fort Worth Transportation Authority*** (The T) called upon our firm to develop Phase 2 of the Trinity Railway Express commuter rail system connecting Downtown Dallas and Downtown Fort Worth. Our services included feasibility studies and conceptual, preliminary and final design, as well as construction management of three commuter rail stations and a three-mile rail line and station complex in downtown Fort Worth with tracks going through a historic building.

FTA Project Management Oversight Consultant

The rebirth of the World Trade Center is anchored by a new $2 billion Port Authority Trans Hudson (PATH) transportation hub being developed at ground zero. As the Project Management Oversight (PMO) consultant to the Federal Transit Administration, our firm is responsible for reviewing, auditing, monitoring and reporting to the FTA on the reconstruction of the World Trade Center PATH station as part of the Lower Manhattan Recovery Office project. The PMO consultant is responsible for ensuring that the project program is adequately managed and effectively implemented, including whether the project is on-time, within budget, in conformance with design criteria. Another key responsibility is ongoing development of risk assessment for the project to quantify the uncertainty in ultimate project costs and schedule, and thus cost-effectively control risks to the extent possible.



FasTracks is the single largest build-out of a transit system in U.S. history. The Denver Regional Transportation District (RTD) selected the Program Management Consultant team led by our firm to serve as an extension-of-staff assisting the RTD in delivering FasTracks, which includes construction of over 119 miles of new rail transit, 18 miles of bus rapid transit, and enhancing the bus network to support investments in rail, serve suburb-to-suburb trips, and provide local and regional bus service.

ATTACHMENTS A & B

EXAMPLES OF THE FIRM'S EXPERIENCE IN THE 18 FOCUS AREAS

The matrix of relevant projects and the 18 focus areas shown in the table on the following page provides an overview of the comprehensive services our team has provided for transit agencies in Texas and nationwide.

Task Services	Project Experience: Regional Transportation District (RTD) - FasTracks Program	Colorado DOT - T-REX Transportation Expansion Project	Houston METRO- PE/EIS and Program Manager for Final Design and Construction	Austin/San Antonio Commuter Rail District	Dallas Area Rapid Transit (DART) - General Engineering Consultant	North Central Texas Council of Governments (NCTCOG) - Regional Feasibility Study	Central Oklahoma Transportation and Parking Authority - Fixed Guideway Transit Study	Dallas Area Rapid Transit (DART) - Southeast Corridor MIS/PE/EIS	El Paso Metropolitan Planning Organization - Transit Corridor Feasibility Study	City of Fort Worth - Transit Alternatives Analysis/Environmental Assessment	Houston METRO - North Hardy Corridor Alternatives Analysis	Houston METRO - University Corridor DEIS/FEIS and New Starts	Houston METRO - North corridno DEIS/FEIS and New Starts	VIA Metropolitan Transit - Transit 2025 Vision	South Florida Regional Transportation Agency Strategic Regional Transit Plan	Sun Metro - El Camino Real ITT	El Paso Union Plaza TT	El Paso Historic Streetcar Trolley Initiative	Brownsville Urbain System - Brownsville Multimodal Transportation Terminal	VIA Metropolitan Transit - San Antonio Alternatives Analysis	New Mexico DOT - Transit Planning Services	Austin Capital Metro - Transit System Plan and Network Development
Alternative Alignment and Mode Analysis	■	■	■	■		■	■	■	■	■	■	■	■	■	■				■		■	■
Environmental Analysis	■	■	■	■				■		■		■	■									
Conceptual Cost Estimation (Facilities Planning)				■	■		■	■		■		■				■	■		■		■	
Geographic Information Systems	■	■	■	■	■	■		■	■	■	■	■	■		■	■	■		■	■	■	■
Fixed Route Transit Planning			■						■								■					
Major Investment Studies (Alternatives Analysis)	■	■				■		■		■	■			■					■		■	
Paratransit Service Planning							■														■	
Ridership Projections		■	■	■		■	■	■	■	■	■	■	■		■				■		■	■
Station Location Analysis		■	■	■		■	■	■	■	■	■	■	■		■	■	■		■	■	■	■
Transit Friendly Design Concepts		■	■	■		■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Travel Demand Estimation		■	■	■		■	■	■	■	■	■	■	■		■		■	■	■	■	■	■
Transportation Modeling (TranPlan, TransCAD)		■	■	■		■	■	■	■	■	■	■	■		■		■	■	■	■	■	■
Transportation Planning (Short and Long Range)		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■
Transit Operations Planning		■	■	■		■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Traffic Analysis								■		■	■	■			■	■		■				
Visual Stimulation								■								■	■	■				
Transit Oriented Development		■	■	■		■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■
Financial Planning		■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■

MIKE McANELLY, FAICP
PROJECT MANAGER

JACOBS

Education

M.S., Regional Resources Planning, Colorado State University, 1974

B.S., Range Science (with specialization in Forestry), Texas A&M University, 1969

Certificate, Zoning Institute, Planners Training Service, AICP

Continuing Professional Development Certificate, American Institute of Certified Planners\

Professional Registrations

Fellow of the American Institute of Certified Planners, #3608

Professional Transportation Planner (PTP), #69

Mike McAnelly has 33 years of professional planning and project management experience, including 26 years as a planning consultant and seven years with regional planning councils in Houston, Texas and Columbia, South Carolina. Areas of technical specialization include urban and regional transportation planning, parking and traffic access studies, comprehensive land use and development planning, environmental planning, and financial / economic feasibility studies.

Relevant Project Experience

Downtown Parking Management Program, City of San Antonio, Texas; Project Manager. Comprehensive parking management program including relation between parking and economic development, parking supply-demand analysis for all public-use parking in downtown San Antonio, best management practices for municipal parking system, recommendations for parking rates, 10-year capital replacement proforma and financial plan, recommendations for upgrading parking revenue control equipment, and public involvement program.

Fixed Guideway Study, Oklahoma City, OK; Planning Manager. The Central Oklahoma Transportation and Parking Authority sponsored the Fixed Guideway Study to determine future transportation needs for the Oklahoma City Metropolitan Area. Transportation corridors were analyzed to identify fixed guideway transit options including enhanced bus service, high occupancy vehicle lanes, bus rapid transit, commuter rail, light rail, and modern streetcar service. Potential alignments, estimated capital and operating costs, and ridership forecasts were developed for each corridor alternative. Feasible alternatives were combined in a system plan to present a multimodal vision of future transportation services for the OKC area. Institutional and financial implementation recommendations were prepared.

Multimodal Transit Terminal Feasibility Study, Brownsville, TX Feasibility and Site Location Study, Preliminary Design, Environmental Review, and Financial Planning; Project Manager. Proposed downtown multimodal terminal will serve to consolidate these transportation services in facility that would accommodate paratransit and fixed route transit services, intercity bus, taxi, airport shuttles, charter buses, pedestrians, bicyclists, automobiles and other modes.

Parking Demand and Traffic Modeling Study for Downtown San Antonio and Medical Center, San Antonio, TX; Project Manager. Served as project manager for comprehensive parking study and traffic modeling study including the Central Business District (CBD) and the South Texas Medical Center. Study included feasibility assessment for proposed municipal parking garage near Market Square in the west CBD and analysis of parking needs for planned Convention Center Headquarters Hotel in Hemisfair area in the east CBD. Traffic modeling for Medical Center included analysis of roadways, transit and pedestrian facilities using Synchro and VISSIM micro-simulation models. Medical Center parking needs assessment included 42 hospitals, MOBs and related institutions to assess existing and future parking supply / demands and recommend coordinated improvement program.

MIKE McANELLY, FAICP
(Continued)
PROJECT MANAGER

JACOBS

Regional Rail Corridor Study, North Central Texas Council of Governments, TX; Project Manager. Served as project manager for the Regional Rail Corridor Study (RRCS) in the North Central Texas region, to assess feasibility of future passenger rail in the corridors on regional basis. Jacobs is responsible for assessment of the Union Pacific corridor between downtown Fort Worth and Dallas (includes Dorothy Spur), Fort Worth and Western / Cotton Belt from Southwest Fort Worth to Tarrant County Line (Dallas-Fort Worth International Airport), Trinity Railway Express from Fort Worth to Tarrant County Line and Burlington Northern Santa Fe from Fort Worth to Crowley, Burleson, Joshua and Cleburne.

Cattleman Square Redevelopment Transportation Plan*, San Antonio, TX. Redevelopment plan for west end of San Antonio CBD included recommendations for better east-west circulation, improvements for Buena Vista and Commerce Street Bridges over SP and UP Railroads and street improvements to serve new Bexar County Jail, City Employees Federal Credit Union and other developments.

Comprehensive Downtown Parking Study*, Austin, TX; Project Manager. Served as project manager for comprehensive parking inventory, utilization survey, supply / demand analysis, needs identification and parking improvement program for Downtown Austin, including the Central Business District, South Congress Avenue and East 11th / East 12th Streets Corridors.

Hemisfair Plaza Redevelopment Economic Feasibility, San Antonio, TX. Patronage forecasts and financial feasibility were analyzed for improvements to San Antonio's Hemisfair Convention Center and Arena Complex. Analyzed historic trends and developed projections for Hotel-Motel Occupancy Tax receipts, including 950-room hotel ground lease payments and income and operating expenses for 1,400-space parking structure constructed for the city.

**Experience prior to Jacobs*

JAVIER ARGÜELLO, ASSOC. AIA
CORRIDOR/FACILITY PLANNING

JACOBS

Education

MS, Planning, University of Southern California, School of Urban Planning and Development

M.Arch., Architecture, University of Southern California, School of Architecture

B.Arch and Urban Design, Universidad Iberoamericana Mexico City, Mexico

Mr. Argüello has more than 20 years of experience in transportation planning, facilities design, construction management with public agencies and the private sector. He has participated in all stages of planning, design development and implementation of transit projects including participation in the development of Draft and Final Environmental Impact Statements. He has developed planning strategies, conceptual facility layouts, programming, preliminary engineering and final design for light rail stations, commuter rail stations, bus transit centers, multimodal terminal stations, maintenance facilities for bus and rail. Mr. Argüello has recently completed consulting services for VIA Metropolitan Transit in San Antonio TX, managing the construction of VIA's Fueling Service Station Expansion/Renovation.

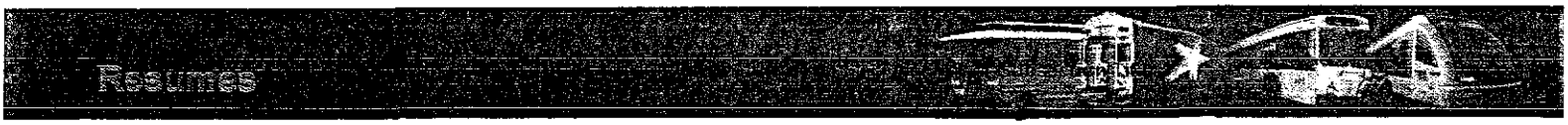
Relevant Project Experience

Central Broward DEIS, Fort Lauderdale, FL; *Station Area Planning/ Station Preliminary Design.* The purpose of the study was to develop and evaluate a series of transit corridors and modes in Central Broward County (Fort Lauderdale) to determine the most effective way to accommodate future east-west travel demand. This Alternatives Analysis study will follow Federal Transit Administration guidelines and will result in an identification of the most-effective corridor and transit mode that can be carried forward into the Preliminary Engineering phase of study. A detailed analysis was undertaken utilizing the VISSIM microsimulation software to simulate and evaluate the traffic and transit operations along the Broward Boulevard and SR 7 corridors given the preferred alternative.

Capital Metro Train Stop Engineering Project, Austin, TX; *Project Manager.* Providing full architectural, civil, transportation, and landscape design/ permitting for the Martin Luther King, 4th Street and Lamar Street Train Stops, which are three (3) of the nine (9) proposed stations along the future CMTA Commuter Rail program. Includes due diligence, conceptual layouts, architectural designs of platforms, canopies, passenger amenities; civil design of surface parking, sawtooth bus bays, structural foundations, water, wastewater, drainage, and public street infrastructure; as well as permitting and construction phase services. Also included vehicular, pedestrian and bicycle access; storm water drainage, storm water quality, site lighting, landscaping, passenger amenities, signage, and graphics.

I-595/Central Broward East-West Transit Alternatives Analysis/DEIS, Fort Lauderdale, FL; *Station Area Planning/Station Preliminary Design.* Selected by FDOT District Four to lead the next phase of the Central Broward East-West Transit Analysis project. It includes preparation of a Draft Environmental Impact Statement for a 20-mile light rail line. Other major tasks in the project include identification of 16 station locations, conceptual engineering, evaluation of Minimum Operable Segment alternatives, and preparation of a New Starts submittal to enter into Preliminary Engineering. The budget for the project is approximately $3.5 million. The notice to proceed was issued in October 2006. The project has a 36-month schedule.

Capital Metropolitan Transit Authority (CMTA), Capital MetroRail, Austin, TX; *Project Manager.* Mr. Argüello is overseeing the Design Development of three of the nine stations of the urban commuter rail project of CMTA:



JAVIER ARGÜELLO, ASSOC. AIA
(Continued)
CORRIDOR/FACILITY PLANNING

JACOBS

N. Lamar, ML King Jr. and Downtown Convention Center Station. Mr. Argüello is coordinating this work from concept development plans to final construction documents. Mr. Argüello has assisted CMTA staff with station site planning and community presentations as well as coordinating design issues with stakeholders and community leaders. Total construction budget $3.6 Million.

Miami-Dade Transit, East-West Corridor Study, Miami, FL; *Senior Architect.* As a sub to HNTB, leading the preparation of supplemental draft environmental impact statement for a 10-mile extension of metrorail service from the Miami International Center to Florida International University. Also responsible for conceptual station designs, support station and alignment evaluation and support preliminary engineering. Total construction costs will be $1.1 billion.

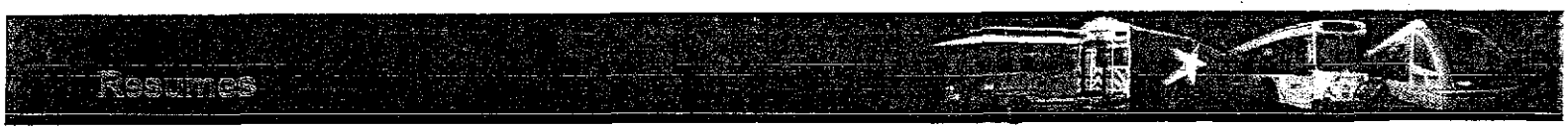
VIA Metropolitan Transit, San Antonio, TX*; *Construction Manager.* Managed the planning and programming efforts of three major studies for VIA, involving bus parking facilities, maintenance facilities, and the relocation of an existing Transit Center. Mr. Argüello is also serving as Construction Manager for the Fueling Service Station.

BRW Inc./Facilities Planning and Design, Dallas, TX*; *Sr. Project Manager.* Managed the planning and design development of rail projects and bus corridor studies for Dallas Area Rapid Transit (DART) through BRW's General Planning Consultant Services contract. Supported the efforts of DART's Northwest Corridor Major Investment Study with technology assessment and station area planning.

Los Angeles Metropolitan Transit Authority, (LACMTA), Los Angeles, CA*; *Project Manager.* Participated as a lead designer and assistant coordinator in all the architectural tasks involved in the development of the preliminary engineering and final design drawings for the Segment 3 (underground) Metro Red Line Stations.

DART - Northwest Corridor Light Rail Extension / Planning Consultant Services, Dallas, TX*; *Senior Project Manager.* Assisted DART Planning Department with station facilities planning, preliminary design and final construction documents.

** Experience prior to Jacobs.*



LEE NICHOLS
PLANNER

JACOBS

Education
MS, City & Regional Planning
University of Texas at Arlington

BS, Forest Science Texas A&M
University College Station

Mr. Nichols brings more than seven years of transportation and transit planning and computer based skills experience. He has performed needs analysis, managed and created relational databases and applied geographic information systems (GIS) to the creation of spatial analysis and data interpretation. His background also includes the NEPA/environmental process evaluating the impact of transportation activities, transportation surveys and data collection, transportation impacts analysis, evaluating multi-modal alternatives for transit developments and safety studies. Prior to joining Jacobs, Mr. Nichols spent 1.5 years with the VIA Metropolitan Transit Authority. There he oversaw the creation and maintenance of a GIS Database.

Relevant Project Experience

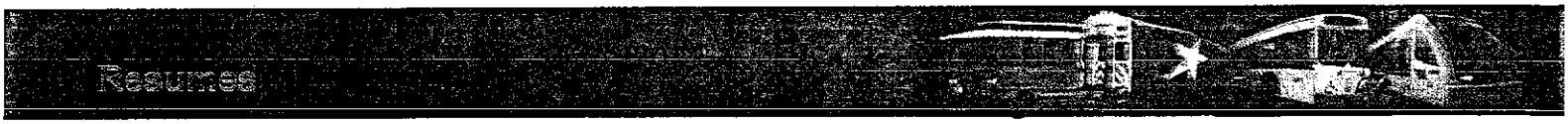
METRO University Corridor DEIS/FEIS and New Starts, Houston, TX; Planner. Participated in the preparation of the Draft Environmental Impact Statement (DEIS), the Final Environmental Impact Statement (FEIS), and preparation of input to the FTA New Starts submittal.

Fixed Guideway Study, Oklahoma City, OK; Planner. Participated with the Central Oklahoma Transportation and Parking Authority in their sponsorship of the Fixed Guideway Study to determine future transportation needs for the Oklahoma City Metropolitan Area. Transportation corridors were analyzed to identify fixed guideway transit options including enhanced bus service, high occupancy vehicle lanes, bus rapid transit, commuter rail, light rail, and modern streetcar service. Potential alignments, estimated capital and operating costs, and ridership forecasts were developed for each corridor alternative. Feasible alternatives were combined in a system plan to present a multimodal vision of future transportation services for the OKC area.

Transportation & Housing Study, San Antonio, TX; Deputy Project Manager. Conducted comprehensive study of the household and transportation costs for the eight county study area, focusing on the transportation challenges faced by residents in the region, particularly those residing in rural areas.

Multimodal Transit Terminal Feasibility Study / Preliminary Engineering, Brownsville, TX; Planner. Feasibility investigation, Programming and Preliminary Design to 30% level for the development of a new centrally located multimodal transportation terminal in Brownsville. The proposed multimodal terminal will serve to consolidate transportation services in a centrally located, attractive, and functionally efficient facility that will accommodate paratransit and fixed route transit services, intercity bus, taxi, airport shuttles, charter buses, pedestrians, bicyclists, automobiles, and other modes. The feasibility study includes needs assessment, site analysis, program requirements and conceptual plan, cost estimates and financial implementation plan for the proposed multimodal transit terminal. Community involvement and public participation activities included a transportation providers workshop, briefing for federal and state officials, meetings with community organizations, and a public workshop.

Downtown San Antonio Parking/ Traffic, San Antonio, TX; Task Leader. Developed a Comprehensive Parking Management Program to create a long-term strategy for the City's parking operations that is in the best interest of the downtown residents, businesses, and visitors. The study focuses on a 125-block, 732-acre area in downtown San Antonio. The program is designed to effectively manage the City's parking assets, stimulate economic development,



LEE NICHOLS
(Continued)
PLANNER

JACOBS

and integrate best management practices. A complete inventory of public and private parking in downtown San Antonio and utilization counts, and parker interviews were performed to determine parking characteristics, accumulation, and turnover rates.

Parking Demand and Traffic Modeling Study for Downtown San Antonio and Medical Center, San Antonio, TX; Planner. Planner for comprehensive parking study and traffic modeling study including the Central Business District and the South Texas Medical Center. Study included the feasibility assessment for proposed municipal parking garage near Market Square in the west CBD and analysis of parking needs for planned Convention Center Headquarters Hotel in Hemisfair area in the east CBD. Traffic modeling for Medical Center included analysis of roadways, transit and CBD. Traffic modeling for Medical Center included analysis of roadways, transit and pedestrian facilities using Synchro and VISSIM micro-simulation models. Medical Center parking needs assessment included 43 hospitals, MOBs and related institutions to assess existing and future parking supply/demands and recommend coordinated improvement program.

Regional Rail Corridor Study - North Central Texas Council of Governments, TX; Planner. Planner for the Regional Rail Corridor Study (RRCS) in the North Central Texas region, to assess feasibility of future passenger rail in the corridors on regional basis. Jacobs was responsible for assessment of the Union Pacific corridor between downtown Fort Worth and Dallas (includes Dorothy Spur), Fort Worth and Western/Cotton Belt from Southwest Fort Worth to Tarrant County Line (Dallas-Fort Worth International Airport), Trinity Railway Express from Fort Worth to Tarrant County Line and Burlington Northern Santa Fe from Forth Worth to Crowley, Burleson, Joshua and Cleburne.

City of Brownsville Urban System (BUS) Multimodal Transit Terminal Feasibility Study, Brownsville, TX; Planner. Performed a feasibility investigation for the development of a new centrally located multimodal transportation terminal. Numerous public transit, inter-city and international bus service providers are currently operating. The proposed multimodal terminal will serve to consolidate these transportation services in a facility that would accommodate paratransit and fixed route transit services, intercity bus, taxi, airport shuttles, charter buses, pedestrians, bicyclists, automobiles, and other modes. The study included needs assessment, site analysis, program requirements and conceptual plan, cost estimate and financial implementation plan for the proposed multimodal transit terminal.

City of El Paso Transit Corridor Feasibility Study, El Paso, TX; Planner. Transit corridor feasibility study to identify and define transit corridors in El Paso Metropolitan Planning Organization region, develop and evaluate transit technologies and alignments, and provide recommendations for transit improvements. The study explored the application and appropriateness of a variety of travel modes and congestion management measures. The project recommendation described integrated, multi-modal strategies that address projected short and long-term travel needs within primary travel corridors.

MYRNA VALDEZ
COMMUNITY PLANNING

JACOBS

Myrna Valdez is responsible for providing vision, guidance and management for the ongoing programs, as well as for client development and project research and pursuits. She is a highly experienced project manager and has directed large and complex transportation systems studies, including Alternatives Analyses and Environmental Impact Studies for the Federal Transit Administration and the Federal Highway Administration on programs nationwide. She can coordinate multifaceted project teams and has successfully negotiated solutions for a wide variety of issues with transportation systems, with particular focus on the transit planning industry.

Ms. Valdez has managed Alternatives Analyses and Environmental Impact Statements for an extensive list of programs, including one 65-mile corridor that consisted of two counties, two metropolitan planning organizations and more than 20 cities.

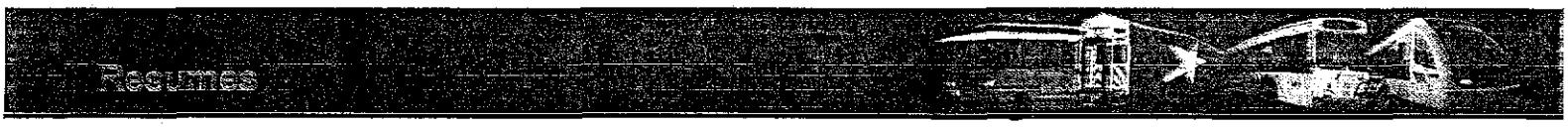
Relevant Project Experience

San Francisco County Transportation Authority (SFCTA) Geary BRT AA/ DEIS/R; *Project Manager.* Jacobs was responsible for the preparation of an FTA-sponsored alternatives Analysis and Draft Environmental Impact Statement/Report.

FDOT Regional Transit Master Plan / West Central Florida; *Program Manager.* The program manager will oversee the preparation of a Master Plan, Operations Plan and Implementation Plan that will guide the future of transit in the West Central Florida region. This will include providing strategic direction to the client and the Jacobs Project Manager. Additional studies may be completed, including Alternatives Analyses and Environmental Impact Statements consistent with Federal Transit Administration New Starts requirements. The plans will be prepared for five corridors previously identified and include identifying and studying specific transit alternatives for each corridor. Ms. Valdez is providing strategic advisory services to the PM and the client as it relates to qualifying for federal funding and completing required documentation.

Exposition Authority for the Exposition Corridor Transit Project Phase 2, Los Angeles, CA; *Project Director.* Ms. Valdez has been retained by the Authority as Project Director to oversee the Expo Authority consultant work and review key Federal Transit Administration (FTA) deliverables prepared by the EIS consultant team to ensure that FTA requirements are fully addressed. This will both streamline and expedite the project review process.

BART Extension Study to San Jose / Santa Clara, San Jose, CA; *Project Manager.* Managed fast track feasibility study. The purpose of the study was to update and refine ridership forecasts, capital costs and land-use data in a rapidly changing 24-mile corridor linking two counties and four cities. Ridership was enhanced using updated demographic projections and by conducting an assessment of transit oriented development around key station areas. Conceptual drawings depicting enhanced land uses and station site plans were developed for each key station, including the Diridon / Arena station. Alternative BART station locations at that site were identified and pedestrian / intermodal access issues were addressed in the conceptual drawings.



MYRNA VALDEZ
(Continued)
COMMUNITY PLANNING

JACOBS

California High Speed Rail Project, California High Speed Rail Authority, CA*; *Environmental Task Manager.* Provided program management for this assignment sponsored by the FRA and California High Speed Rail Authority. Responsibilities included overseeing the environmental planning efforts to be conducted by six consultants for the Authority and providing the technical guidance and oversight required to prepare consistent environmental documents and coordinate the interaction with regulatory agencies.

Central Subway Segment - Third Street Light Rail Project, Federal Transit Administration and City and County of San Francisco Municipal Transportation Agency, San Francisco, CA*; *Task Manager.* Managed the preparation of a Supplemental Environmental Impact Statement and Report sponsored by FTA and the City and County of San Francisco Municipal Transportation Agency. Managed the preparation of the Supplemental EIS / EIR that included the No Project, the original 1998 EIS / EIR alternative, and a revised 4th Street alternative. Prepared updates to all elements of EIS / EIR including an extensive public involvement component. The new alternative being considered was a mined deep-tunnel option along a slightly different alignment than the original alternative, including three stations, two of which offered opportunities for transit oriented development. Unique elements to this work included working with the various publics in the redeveloping south of Market area, the dense downtown shopping area and Chinatown. Unique issues included portal placement, noise and vibration, historic and archeological resources and public buy-in.

Charlotte North Corridor Major Investment Study, Federal Transit Administration and Charlotte Area Transportation System (CATS), Charlotte, NC*; *Project Manager.* Managed an MIS sponsored by the FTA and the Charlotte Area Transportation System (CATS). Alternatives under study in this 30-mile corridor included no-build; transportation systems management, commuter rail, light rail and bus rapid transit alternatives. This MIS extended through two counties and several cities. Key to this MIS was the emphasis on station area land use and transit oriented development. Conducted the technical work and provided support for all public involvement activities, including preparing and delivering presentations and workshops to the technical advisory committee.

Eastside Transit Corridor Re-Evaluation / Major Investment Study, DEIS / R, and FEIS / R, Los Angeles, CA;* *Task Leader.* Led the evaluation of alternatives in the Phase 1 Re-Evaluation / MIS. This study focused on the expanded 14-mile Eastside Corridor from Downtown Los Angeles to the City of Whittier. Led an extensive refinement and screening of more than 50 previously studied alternatives, as well as refined new alternatives brought forth through the official FTA / MTA Scoping process.

** Experience prior to Jacobs.*

City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
JACOBS

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2. Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will need to be revised.
3. The estimated direct labor hours and costs assum that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.

Tasks	Estimated Hours								
	Project Manager Corridor 1/ Alameda	Senior Transit Planner(s) Corridor 1 Alameda	Senior Engineer/ Architect(s) Corridor 1 Alameda	Transit Planner(s) Corridor 1 Alameda	Ridership Modeler(s) Corridor 1 Alameda	Public Inv. Specialist(s) Corridor 1 Alameda	GIS/CADD Technician Corridor 1 Alameda	Clerical/ Secretary Corridor 1 Alameda	TOTAL
1 Consultant Management Plan	48	32	24	0	0	0	20	40	144
2 Public Participation Plan	32	32	24	22	0	126	0	0	230
3 Analysis of Needs and Demand	48	56	24	80	0	0	0	40	248
4 Definition of Alternatives and Technologies	32	56	32	80	0	0	64	24	288
5 Project Costs, Impacts, and Rankings	32	64	48	148	0	0	64	24	380
6 Operating Plan and Standards	52	48	48	32	0	0	0	0	180
7 Ridership Forecasts and Economic Analysis	24	36	0	0	0	0	0	0	60
8 Estimated Capital/Operating Costs	20	56	48	32	0	0	16	8	180
9 Identification of Locally Preferred Alternative	40	56	44	32	0	0	40	8	220
10 Final/Locally Preferred Alternative Report	40	56	44	24	0	0	16	40	208
11 Preliminary Project Management Plan for LPA	24	30	24	0	0	0	0	16	94
12 Financial Plan for Preferred Alternative	40	56	24	0	0	0	0	8	128
13 Plan for a Before and After Study	8	32	8	0	0	0	0	0	50
Total Hours	460	600	380	990	0	126	220	216	2328
Direct Labor x Hourly Rate	$26,294	$18,144	$23,343	$18,911	$0	$3,629	$8,620	$6,294	$105,235
Total Direct Labor Cost (DL)	$26,294	$18,144	$23,343	$18,911	$0	$3,629	$8,620	$6,294	$105,235
Overhead (OH) Cost (173% of DL)	$45,488	$31,389	$40,384	$32,715	$0	$6,278	$14,913	$10,889	$182,056
Sub-Total	$71,782	$49,533	$63,727	$51,626	$0	$9,907	$23,533	$17,183	$287,290
Fixed Fee (FF) Profit (10% of DL + OH)	$7,178	$4,953	$6,373	$5,163	$0	$991	$2,353	$1,718	$28,729
Sub-Total (DL+OH+FF)	$78,960	$54,486	$70,100	$56,789	$0	$10,897	$25,886	$18,902	$316,019

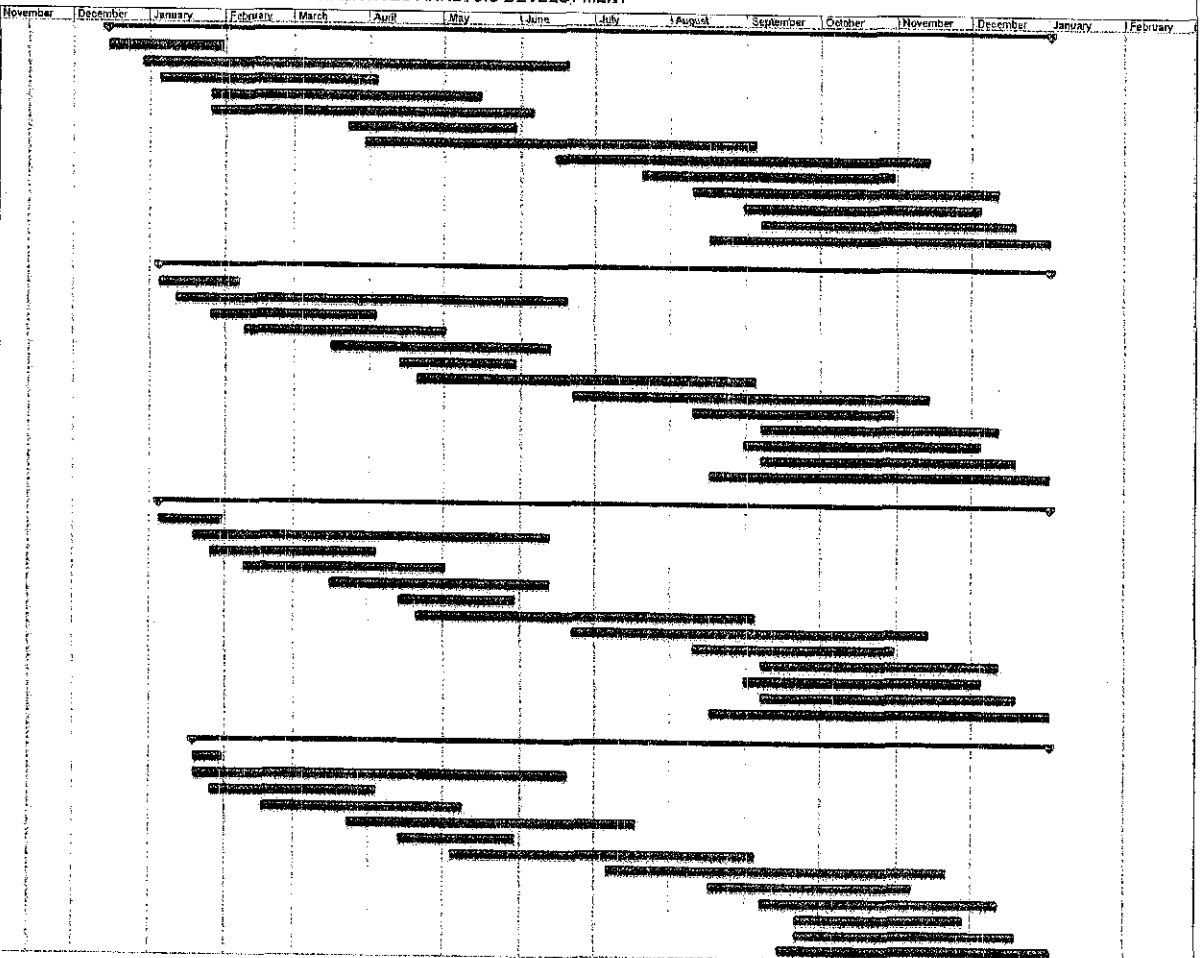
ATTACHMENTS A & B

JACOBS

CITY OF EL PASO
TRANSIT PLANNING SERVICES - ALTERNATIVES ANALYSIS DEVELOPMENT

JACOBS

ID	Task Name	Duration	Start	Finish
1	Alameda Corridor	275 days?	Mon 12/15/08	Fri 1/7/10
2	Consultant Management Plan	35 days?	Mon 12/15/08	Fri 1/30/09
3	Public Participation Plan	125 days?	Mon 12/29/08	Fri 6/19/09
4	Analysis of Need and Demand	65 days?	Mon 1/5/09	Fri 4/3/09
5	Definition of Alternatives	60 days?	Mon 1/26/09	Fri 5/15/09
6	Project Cost Impacts and Rankings	95 days?	Mon 1/26/09	Fri 6/5/09
7	Operating Plan & Standards	50 days?	Mon 3/23/09	Fri 5/29/09
8	Ridership forecasts and Economic Analysis	115 days?	Mon 3/30/09	Fri 8/14/09
9	Estimated Capital Operation Costs	110 days?	Mon 5/18/09	Fri 11/13/09
10	Identification of Locally Preferred Alternative	75 days?	Mon 7/20/09	Fri 10/30/09
11	Final/Locally Preferred Alternative	80 days?	Mon 8/10/09	Fri 12/11/09
12	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
13	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
14	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/7/10
15				
16	Montana Corridor	260 days?	Mon 1/5/09	Fri 1/1/10
17	Consultant Management Plan	25 days?	Mon 1/5/09	Fri 2/6/09
18	Public Participation Plan	115 days?	Mon 1/12/09	Fri 6/19/09
19	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
20	Definition of Alternatives	60 days?	Mon 2/9/09	Fri 5/1/09
21	Project Cost Impacts and Rankings	85 days?	Mon 2/16/09	Fri 6/12/09
22	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
23	Ridership forecasts and Economic Analysis	100 days?	Mon 4/20/09	Fri 9/4/09
24	Estimated Capital Operation Costs	105 days?	Mon 6/22/09	Fri 11/13/09
25	Identification of Locally Preferred Alternative	60 days?	Mon 8/10/09	Fri 10/30/09
26	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
27	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
28	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
29	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/7/10
30				
31	Mesa Corridor	260 days?	Mon 1/5/09	Fri 1/1/10
32	Consultant Management Plan	20 days?	Mon 1/5/09	Fri 1/30/09
33	Public Participation Plan	105 days?	Mon 1/19/09	Fri 6/12/09
34	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
35	Definition of Alternatives	60 days?	Mon 2/9/09	Fri 5/1/09
36	Project Cost Impacts and Rankings	85 days?	Mon 2/16/09	Fri 6/12/09
37	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
38	Ridership forecasts and Economic Analysis	100 days?	Mon 4/20/09	Fri 9/4/09
39	Estimated Capital Operation Costs	105 days?	Mon 6/22/09	Fri 11/13/09
40	Identification of Locally Preferred Alternative	60 days?	Mon 8/10/09	Fri 10/30/09
41	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
42	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
43	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
44	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/1/10
45				
46	Dyer Corridor	250 days?	Mon 1/19/09	Fri 1/1/10
47	Consultant Management Plan	10 days?	Mon 1/19/09	Fri 1/30/09
48	Public Participation Plan	110 days?	Mon 1/19/09	Fri 6/19/09
49	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
50	Definition of Alternatives	60 days?	Mon 2/16/09	Fri 5/8/09
51	Project Cost Impacts and Rankings	85 days?	Mon 3/23/09	Fri 7/17/09
52	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
53	Ridership forecasts and Economic Analysis	80 days?	Mon 5/4/09	Fri 8/14/09
54	Estimated Capital Operation Costs	100 days?	Mon 7/6/09	Fri 11/20/09
55	Identification of Locally Preferred Alternative	60 days?	Mon 8/17/09	Fri 11/6/09
56	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
57	Preliminary Project Management Plan for LPA	80 days?	Mon 9/21/09	Fri 1/27/09
58	Financial Plan for Preferred Alternative	85 days?	Mon 9/21/09	Fri 12/18/09
59	Plan for a Before and After Study	80 days?	Mon 9/14/09	Fri 1/1/10



Project: Proposed Schedule
Date: Thu 11/13/08

Task — Progress — Summary — External Tasks — Deadline
Split — Milestone — Project Summary — External Milestone

Page 1

ATTACHMENTS A & B

City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
JACOBS

NOTES:

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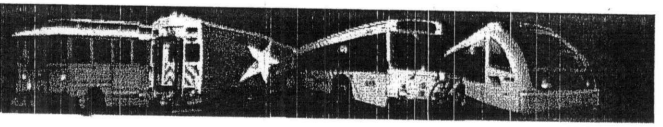
2. Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will need to be revised.
3. The estimated direct labor hours and costs assum that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.

Tasks	Project Manager Corridor 2 Montana	Senior Transit Planner(s) Corridor 2 Montana	Senior Engineer/ Architect(s) Corridor 2 Montana	Transit Planner(s) Corridor 2 Montana	Ridership Modeler(s) Corridor 2 Montana	Public Inv. Specialist(s) Corridor 2 Montana	GIS/CADD Technician Corridor 2 Montana	Clerical / Secretary Corridor 2 Montana	TOTAL
1 Consultant Management Plan	28	24	16	0	0	0	0	28	96
2 Public Participation Plan	24	24	16	18	0	40	0	0	122
3 Analysis of Needs and Demand	40	38	16	80	0	0	0	28	182
4 Definition of Alternatives and Technologies	24	54	18	80	0	0	38	16	190
5 Project Costs, Impacts, and Rankings	30	38	32	32	0	0	38	16	186
6 Operating Plan and Standards	28	38	34	24	0	0	0	0	122
7 Ridership Forecasts and Economic Analysis	20	28	0	0	0	0	0	0	48
8 Estimated Capital/Operating Costs	16	46	34	24	0	0	16	8	144
9 Identification of Locally Preferred Alternative	30	32	34	24	0	0	32	8	158
10 Final/Locally Preferred Alternative Report	36	32	28	18	0	0	16	32	162
11 Preliminary Project Management Plan for LPA	16	24	18	0	0	0	0	8	66
12 Financial Plan for Preferred Alternative	30	40	18	0	0	0	0	8	94
13 Plan for a Before and After Study	8	32	8	0	0	0	0	8	52
Total Hours	330	490	270	280	0	40	140	154	1624
Direct Labor x Hourly Rate	$18,883	$13,003	$16,586	$14,048	$0	$1,210	$6,034	$4,489	$74,231
Total Direct Labor Cost (DL)	$18,883	$13,003	$16,586	$14,048	$0	$1,210	$6,034	$4,489	$ 74,231
Overhead (OH) Cost (173% of DL)	$32,633	$22,496	$28,694	$24,303	$0	$2,093	$10,439	$7,763	$ 128,420
Sub-Total	$51,495	$35,499	$45,280	$38,350	$0	$3,302	$16,473	$12,251	$ 202,651
Fixed Fee (FF)/ Profit (10% of DL + OH)	$5,150	$3,550	$4,528	$3,835	$0	$330	$1,647	$1,225	$ 20,265
Sub-Total (DL+OH+FF)	$56,645	$39,049	$49,808	$42,186	$0	$3,632	$18,120	$13,476	$ 222,916

ATTACHMENTS A & B



City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
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3. The estimated direct labor hours and costs assum that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.

Tasks	Project Manager Corridor 3 Mesa	Senior Transit Planner(s) Corridor 3 Mesa	Senior Engineer/ Architect(s) Corridor 3 Mesa	Transit Planner(s) Corridor 3 Mesa	Ridership Modeler(s) Corridor 3 Mesa	Public Inv. Specialist(s) Corridor 3 Mesa	GIS/CADD Technician Corridor 3 Mesa	Clerical / Secretary Corridor 3 Mesa	TOTAL
1 Consultant Management Plan	28	24	16	0	0	0	0	28	96
2 Public Participation Plan	24	24	16	18	0	40	0	0	122
3 Analysis of Needs and Demand	40	38	16	60	0	0	0	28	182
4 Definition of Alternatives and Technologies	24	34	18	60	0	0	38	16	190
5 Project Costs, Impacts, and Rankings	30	38	32	32	0	0	38	16	186
6 Operating Plan and Standards	28	36	34	24	0	0	0	0	122
7 Ridership Forecasts and Economic Analysis	20	28	0	0	0	0	0	0	48
8 Estimated Capital/Operating Costs	16	48	34	24	0	0	16	6	144
9 Identification of Locally Preferred Alternative	30	32	34	24	0	0	32	6	158
10 Final/Locally Preferred Alternative Report	36	32	28	18	0	0	16	32	162
11 Preliminary Project Management Plan for LPA	18	24	18	0	0	0	0	8	68
12 Financial Plan for Preferred Alternative	30	40	18	0	0	0	0	6	94
13 Plan for a Before and After Study	6	32	6	0	0	0	0	8	52
Total Hours	330	430	270	260	0	40	140	154	1624
Direct Labor x Hourly Rate	$18,863	$13,003	$16,586	$14,048	$0	$1,210	$6,034	$4,488	$74,231
Total Direct Labor Cost (DL)	$18,863	$13,003	$16,586	$14,048	$0	$1,210	$6,034	$4,488	$74,231
Overhead (OH) Cost (173% of DL)	$32,633	$22,496	$28,694	$24,303	$0	$2,093	$10,439	$7,763	$128,420
Sub-Total	$51,495	$35,499	$45,280	$38,350	$0	$3,302	$16,473	$12,251	$202,651
Fixed Fee (FF)/ Profit (10% of DL + OH)	$5,150	$3,550	$4,528	$3,835	$0	$330	$1,647	$1,225	$20,265
Sub-Total (DL+OH+FF)	$56,645	$39,049	$49,808	$42,186	$0	$3,632	$18,120	$13,476	$222,916

City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
JACOBS

NOTES:

1. Estimated labor hours and direct cost includes economies provided by Conducting the Aleternatives Analysis for all Corridors at the same time. If a single Corridor Alternative Analysis is to be conduoted by itself separate from other corridors the hours and direct cost will be greater higher and the cost estimate will have to be revised.
2. Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will need to be revised.
3. The estimated direct labor hours and costs assum that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.

Tasks	Project Manager Corridor 4 Dyer	Senior Transit Planner(s) Corridor 4 Dyer	Senior Engineer/ Architect(s) Corridor 4 Dyer	Transit Planner(s) Corridor 4 Dyer	Ridership Modeler(s) Corridor 4 Dyer	Public Inv. Specialist(s) Corridor 4 Dyer	GIS/CADD Technician Corridor 4 Montana	Clerical/ Secretary Corridor 4 Dyer	TOTAL
1 Consultant Management Plan	16	16	12	0	0	0	0	16	64
2 Public Participation Plan	16	32	12	14	0	40	0	0	114
3 Analysis of Needs and Demand	24	24	16	52	0*	0	0	18	134
4 Definition of Alternatives and Technologies	16	28	14	52	0*	0	28	16	154
5 Project Costs, Impacts, and Rankings	30	28	20	32	0*	0	28	16	154
6 Operating Plan and Standards	20	24	20	20	0*	0	0	0	84
7 Ridership Forecasts and Economic Analysis	20	28	0*	0*	0*	0*	0*	0*	48
8 Estimated Capital/Operating Costs	18	48	28	14	0*	0	10	6	124
9 Identification of Locally Preferred Alternative	30	28	24	14	0*	0	22	6	124
10 Final/Locally Preferred Alternative Report	30	24	18	12	0*	0	16	22	122
11 Preliminary Project Management Plan for LPA	16	24	18	0	0*	0	0	6	64
12 Financial Plan for Preferred Alternative	50	68	16	0	0*	0	0	4	108
13 Plan for a Before and After Study	6	30	4	0	0*	0	0	6	48
Total Hours	270	380	200	210	0	40	10	126	1340
Direct Labor x Hourly Rate	$15,433	$11,794	$12,286	$11,346	$0	$1,210	$4,741	$3,497	$80,307
Total Direct Labor Cost (DL)	$15,433	$11,794	$12,288	$11,346	$0	$1,210	$4,741	$3,487	$80,307
Overhead (OH) Cost (173% of DL)	$26,699	$20,403	$21,255	$19,629	$0	$2,093	$8,202	$6,049	$104,330
Sub-Total	$42,133	$32,197	$33,541	$30,975	$0	$3,302	$12,943	$9,548	$184,637
Fixed Fee (FF)/ Profit (10% of DL + OH)	$4,213	$3,220	$3,354	$3,098	$0	$330	$1,294	$955	$18,464
Sub-Total (DL+OH+FF)	$46,346	$35,416	$36,895	$34,073	$0	$3,632	$14,237	$10,501	$181,100

ATTACHMENTS A & B

City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
JACOBS

NOTES: Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will need to be revised.

Other Direct Costs (ODC)	
Travel Expenses (Air, Hotel, Rental Car, Meals)	$24,000
Web Sites (URL Address)	$1,000
Newsletters Printing and Postage	$5,000
Public Meeting Logistics (Space Rental, A/V, Beverages, etc.)	$2,500
Report & Exhibit Reproduction	$5,000
Courier, FedEx	$500
TOTAL Other Direct Cost	**$38,000**

City of El Paso
Transit Corridors Alternatives Analysis
Personnel Hours and Cost Proposal
JACOBS

NOTES:
1. Estimated labor hours and direct cost includes economies provided by Conducting the Alternatives Analysis for all Corridors at the same time. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will be greater higher and the cost estimate will have to be revised.
2. Other direct cost for travel and other project expenditures are shown for the total project including all four (4) corridors. If a single Corridor Alternative Analysis is to be conducted by itself separate from other corridors the hours and direct cost will need to be revised.
3. The estimated direct labor hours and costs assume that the modeling and ridership forecasts will be provided by others under separate contract. The City of El Paso has an existing contract with the Texas Transportation Institute (TTI) to provide such services on an on-call basis.

Estimated Hours

Tasks	Project Manager Corridor 1 Alameda	Project Manager Corridor 2 Montana	[illegible]	Project Manager Corridor 4 Dyer	Senior Transit Planner(s) Corridor 1 Alameda	Senior Transit Planner(s) Corridor 2 Montana	Total
1 Consultant Management Plan	40?	34	[illegible]	16	32?	51	400
2 Public Participation Plan	32	24	[illegible]	18	[illegible]	24	368
3 Analysis of Needs and Demand	46?	40	[illegible]	21	68?	36	749
4 Definition of Alternatives and Technologies	52	34	[illegible]	18	69?	34	822
5 Project Costs, Impacts, and Rankings	32	50	[illegible]	30?	41?	20	818
6 Operating Plan and Standards	32?	28	[illegible]	20	40?	16	500
7 Ridership Forecasts and Economic Analysis	32?	20	[illegible]	30?	[illegible]	70	384
8 Estimated Capital/Operating Costs	30?	16	[illegible]	18	[illegible]	40	532
9 Identification of Locally Preferred Alternative	30	20	[illegible]	30	[illegible]	22	360
10 Final Locally Preferred Alternative Report	40	28	[illegible]	30	[illegible]	22	654
11 Preliminary Project Management Plan for LPA	24?	12	[illegible]	16	30?	24	294
12 Financial Plan for Preferred Alternative	40	20	[illegible]	30	59?	40	427
13 Plan for a Before and After Study	8	6	[illegible]	6	[illegible]	32	208
Total Direct Labor Hours	340?	330	[illegible]	270	300?	430	8014
Direct Labor x Hourly Rate	$28,284	$18,803	$18,893	$15,133	$18,144	$13,003	$311,003
Total Direct Labor Cost (DL)	$29,201	$18,803	$18,893	$15,133	$18,144	$13,003	$314,003
Overhead (OH) Cost (173% of DL)	$45,189	$32,603	$32,633	$26,099	$31,380	$22,496	$543,235
Sub Total	$71,182	$51,405	$51,495	$47,133	$49,433	$35,499	$857,329
Fixed Fee (FF)/ Profit (10% of DL + OH)	$7,179	$5,150	$5,150	$4,715	$4,953	$3,550	$85,723
Sub-Total (DL+OH+FF)	$78,860	$56,615	[illegible]	$48,248?	[illegible]	$38,649	$944,051
Total by Corridor	Corridor 1 - Alameda		$116,019				
Other Direct Costs (ODC)							
Travel Expenses (Air, Hotel, Rental Car, Meals)							$24,000
Web Site (URL Address)							$1,000
Newsletters Printing and Postage							$5,000
Public Meeting Logistics (Space Rental, A/V, Beverages, etc.)							$2,500
Report & Exhibit Reproduction							$4,000
Courier, FedEx							$500
Total Project Cost (Labor, OH, Profit + Expenses)							$980,961?

Corridor 2 - Montana: $227,916

ATTACHMENTS A & B

JACOBS

CITY OF EL PASO
TRANSIT PLANNING SERVICES - ALTERNATIVES ANALYSIS DEVELOPMENT

JACOBS

ID	Task Name	Duration	Start	Finish
1	Alameda Corridor	275 days?	Mon 12/15/08	Fri 1/1/10
2	Consultant Management Plan	35 days?	Mon 12/15/08	Fri 1/30/09
3	Public Participation Plan	125 days?	Mon 12/29/08	Fri 6/19/09
4	Analysis of Need and Demand	85 days?	Mon 1/5/09	Fri 4/3/09
5	Definition of Alternatives	80 days?	Mon 1/26/09	Fri 5/15/09
6	Project Cost Impacts and Rankings	65 days?	Mon 1/26/09	Fri 4/24/09
7	Operating Plan & Standards	50 days?	Mon 3/23/09	Fri 5/29/09
8	Ridership forecasts and Economic Analysis	115 days?	Mon 3/30/09	Fri 9/4/09
9	Estimated Capital Operation Costs	110 days?	Mon 6/15/09	Fri 11/13/09
10	Identification of Locally Preferred Alternative	75 days?	Mon 7/20/09	Fri 10/30/09
11	Final/Locally Preferred Alternative	90 days?	Mon 8/10/09	Fri 12/11/09
12	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
13	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
14	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/1/10
15				
16	Montana Corridor	280 days?	Mon 1/5/09	Fri 1/1/10
17	Consultant Management Plan	25 days?	Mon 1/5/09	Fri 2/6/09
18	Public Participation Plan	115 days?	Mon 1/12/09	Fri 6/19/09
19	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
20	Definition of Alternatives	90 days?	Mon 2/9/09	Fri 6/12/09
21	Project Cost Impacts and Rankings	65 days?	Mon 3/16/09	Fri 6/12/09
22	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
23	Ridership forecasts and Economic Analysis	100 days?	Mon 4/20/09	Fri 9/4/09
24	Estimated Capital Operation Costs	105 days?	Mon 6/22/09	Fri 11/13/09
25	Identification of Locally Preferred Alternative	80 days?	Mon 8/10/09	Fri 10/30/09
26	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
27	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
28	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
29	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/1/10
30				
31	Mesa Corridor	280 days?	Mon 1/5/09	Fri 1/1/10
32	Consultant Management Plan	20 days?	Mon 1/5/09	Fri 1/30/09
33	Public Participation Plan	105 days?	Mon 1/19/09	Fri 6/12/09
34	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
35	Definition of Alternatives	80 days?	Mon 2/9/09	Fri 5/29/09
36	Project Cost Impacts and Rankings	65 days?	Mon 3/16/09	Fri 6/12/09
37	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
38	Ridership forecasts and Economic Analysis	100 days?	Mon 4/20/09	Fri 9/4/09
39	Estimated Capital Operation Costs	105 days?	Mon 6/22/09	Fri 11/13/09
40	Identification of Locally Preferred Alternative	80 days?	Mon 8/10/09	Fri 10/30/09
41	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
42	Preliminary Project Management Plan for LPA	70 days?	Mon 8/31/09	Fri 12/4/09
43	Financial Plan for Preferred Alternative	75 days?	Mon 9/7/09	Fri 12/18/09
44	Plan for a Before and After Study	100 days?	Mon 8/17/09	Fri 1/1/10
45				
46	Dyer Corridor	260 days?	Mon 1/19/09	Fri 1/1/10
47	Consultant Management Plan	10 days?	Mon 1/19/09	Fri 1/30/09
48	Public Participation Plan	110 days?	Mon 1/19/09	Fri 6/19/09
49	Analysis of Need and Demand	50 days?	Mon 1/26/09	Fri 4/3/09
50	Definition of Alternatives	80 days?	Mon 2/16/09	Fri 5/8/09
51	Project Cost Impacts and Rankings	65 days?	Mon 3/23/09	Fri 7/17/09
52	Operating Plan & Standards	35 days?	Mon 4/13/09	Fri 5/29/09
53	Ridership forecasts and Economic Analysis	80 days?	Mon 5/4/09	Fri 9/4/09
54	Estimated Capital Operation Costs	100 days?	Mon 7/6/09	Fri 11/20/09
55	Identification of Locally Preferred Alternative	60 days?	Mon 8/17/09	Fri 11/6/09
56	Final/Locally Preferred Alternative	70 days?	Mon 9/7/09	Fri 12/11/09
57	Preliminary Project Management Plan for LPA	50 days?	Mon 8/21/09	Fri 11/27/09
58	Financial Plan for Preferred Alternative	65 days?	Mon 9/21/09	Fri 12/18/09
59	Plan for a Before and After Study	80 days?	Mon 9/14/09	Fri 1/1/10

November | December | January | February | March | April | May | June | July | August | September | October | November | December | January | February

Project: Proposed Schedule
Date: Thu 11/13/08

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

Page 1

ATTACHMENTS A & B

ATTACHMENT "C"
AGREEMENT FOR CONSULTING SERVICES

For the Project known as **"Transit Planning Services: Alternatives Analysis Development,"** hereinafter referred to as the Project, the Consultant will provide the Basic and Additional Services as described in **Attachment "A"** and as noted herein.

BASIC SERVICES OF THE CONSULTANT

GENERAL

1. The Consultant agrees to perform professional services in connection with the Project as hereinafter stated.

2. The Consultant shall comply with the City of El Paso Engineering Department Construction Document Guidelines, which are in effect at the time of this Agreement and are available in the City Engineering Department, in the performance of the services requested under the design phases of this Agreement.

3. The Consultant shall serve as the Owner's professional representative and shall give consultation and advice to the Owner during the performance of services.

4. The Owner is relying upon the skill, reasonable care and knowledge of the Consultant to furnish the Owner with a project within the allocated budget. The Owner's review of any documents prepared by the Consultant is only general in nature and its obligation to approve and accept the work in no way relieves the Consultant of responsibility for any specific deficiencies in the project.

ADDITIONAL SERVICES OF THE CONSULTANT

GENERAL

If authorized in writing by the Owner, through written amendment, the Consultant shall perform or obtain Additional Services as required, which are not covered within the Agreement. No claim for Additional Services or cost shall be allowed unless the same was done pursuant to a written authorization dated prior to the Additional Services or cost and which was authorized pursuant to the policies and procedures of the Owner (i.e., passage by City Council). The Owner shall pay for such Additional Services as indicated in the Agreement.

ATTACHMENT "D"
PAYMENT AND DELIVERABLE SCHEDULES

For the Project known as "(**TRANSIT PLANNING SERVICES: ALTERNATIVES ANALYSIS DEVELOPMENT**)", hereinafter referred to as the Project, the Owner will compensate the Consultant an amount not to exceed (**NINE HUNDRED EIGHTY THOUSAND NINE HUNDRED FIFTY ONE) 00/100 DOLLARS ($980,951.00**) for all Basic Services and reimbursables noted within the Agreement and attachments.

PAYMENT SCHEDULE

Basic services for each design shall include the corridors listed below at the fixed fee shown for each corridor.

Phase	Corridor	Deliverable Due Date	Fixed fee Payment to the Consultant
Report	Mesa	January 29, 2010	$222,916
Report	Alameda	January 29, 2010	$316,019
Report	Montana	January 29, 2010	$222,916
Report	Dyer	January 29, 2010	$181,100

Payment for each corridor shall be made on a monthly basis. The Owner shall make payments upon the written presentation by the Consultant to Owner of a detailed invoice and accompanying Summary and Progress Report and the Owner's written approval of the invoice and Report.

Each corridor includes thirteen tasks common to each and each corridor has a final deliverable date of January 29, 2010.

Tasks and Deliverables

1 Consultant Management Plan
- Consultant Management Plan

2 Public Participation Plan
- Public involvement plan
- E-mail newsletter
- Project website
- Public meeting/hearing announcements
- Media releases about the project
- Technical handouts, exhibits/displays, and agendas for each open house/public meeting/hearing
- Environmental scoping process
- Agency coordination documentation

3 Analysis of Needs and Demand
- Data summaries

- Current conditions including man-made and natural influences
- Purpose and need statement

4 Definition of Alternative Mode Technologies and Alignments
- Definition of Alternative Modes and Alignments
- Alternatives Evaluation Criteria and Performance Measures

5 Alternative Costs, Impacts and Rankings
- Summaries and graphics for public review and comment
- Draft and Final Screening Results Report
-

6 Operating Plan and Standards
- Draft and Final Service Concept and Operating Plan

7 Ridership Forecasts and Economic Analysis
- Methodology Report
- Ridership forecasts

8 Estimated Capital and Operating Costs of Alternative Technologies
- Draft and Final Capital and O&M Cost Estimates Report

9 Evaluation Leading to Identification of Locally Preferred Alternative
- Technical Evaluation Methodology
- Comparison Evaluation Format/Form
- Documentation of LPA

10 Final/Locally Preferred Alternative Report
- Presentation graphics for meetings of LPA selection process
- Draft AA Report and Executive Summary (10 copies)
- Final AA Report and Executive Summary (20 copies)
- Electronic files
- GIS data files

11 Preliminary Project Management Plan
- Project Management Plan for Locally Preferred Alternative

12 Financial Management Plan
- Financial Plan for the Locally Preferred Alternative

13 Plan for a Before and After Study
- Technical memorandum: Plan for Before and After Study

Task Number	Mesa	Alameda	Montana	Dyer
1	02/27/09	02/27/09	02/27/09	02/27/09
2	02/27/09	02/27/09	02/27/09	02/27/09
3	04/09/09	04/17/09	04/24/09	05/01/09
4	05/15/09	05/21/09	05/29/09	06/05/09
5	07/24/09	07/31/09	08/07/09	08/14/09
6	06/05/09	06/12/09	06/19/09	06/26/09
7	9/11/09	09/18/09	09/25/09	10/02/09
8	11/13/09	11/20/09	11/25/09	12/04/09
9	11/25/09	12/04/09	12/11/09	12/18/09
10	12/11/09	12/18/09	12/30/09	01/08/10
11	01/15/10	01/15/10	01/15/10	01/15/10
12	01/15/10	01/15/10	01/15/10	01/15/10
13	01/29/10	01/29/10	01/29/10	01/29/10