

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

DEPARTMENT: MPO
AGENDA DATE: July 22, 2008
CONTACT PERSON/PHONE: Ricardo Dominguez (915) 591-9735 Ext. 19
DISTRICT(S) AFFECTED: N/A

SUBJECT:

That the City Manager be authorized to sign a Second Amendment And Extension To Interlocal Agreement by and between THE CITY OF EL PASO, a municipal corporation situated in El Paso County, Texas, in its capacity as the designated Metropolitan Planning Organization for the El Paso Urban Transportation Study Area, hereinafter referred to as "CITY", and THE REGENTS OF NEW MEXICO STATE UNIVERSITY, hereinafter referred to as "NMSU", wherein NMSU agreed to conduct the Urbanism 2002 Base Year Database & Model Development & Urbanism Training, Phase I, for the El Paso Metropolitan Planning Organization.

BACKGROUND / DISCUSSION:

UrbanSim is a modeling program that will be used for model estimation and calibration. Local characteristics will be incorporated to develop alternative growth scenarios and provide demographic and growth projections by Traffic Analysis Zone (TAZ) for travel demand modeling. A critical piece of data that UrbanSim will use to forecast land use is the 2002 base year database.

PRIOR COUNCIL ACTION:

None.

AMOUNT AND SOURCE OF FUNDING:

Account 502215, Fund 05040, Grant G780801, Dept. 68150009

BOARD / COMMISSION ACTION:

The Transportation Policy Board for the MPO approved this item on February 22, 2008.

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

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

Sylvia Borunda Firth, Asst. City Attorney

OTHER: Patrick T. Abeln, A. A. E., Director of Aviation _____

(Example: if RCA is initiated by Purchasing, 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 a Second Amendment And Extension To Interlocal Agreement by and between THE CITY OF EL PASO, a municipal corporation situated in El Paso County, Texas, in its capacity as the designated Metropolitan Planning Organization for the El Paso Urban Transportation Study Area, hereinafter referred to as "CITY", and THE REGENTS OF NEW MEXICO STATE UNIVERSITY, hereinafter referred to as "NMSU", wherein NMSU agreed to conduct the Urbanism 2002 Base Year Database & Model Development & Urbanism Training, Phase I, for the El Paso Metropolitan Planning Organization.

ADOPTED this ____ day of _____, 2008.

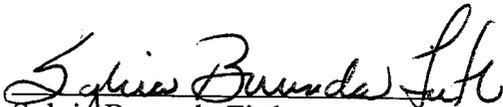
CITY OF EL PASO:

John Cook
Mayor

ATTEST:

Richarda Duffy Momsen
City Clerk

APPROVED AS TO FORM:


Sylvia Borunda Firth
Senior Assistant City Attorney

APPROVED AS TO CONTENT:


Roy Gilyard, Executive Director
Metropolitan Planning Organization

**THE CITY OF EL PASO, as Fiscal Agent for
METROPOLITAN PLANNING ORGANIZATION**

By:

Joyce Wilson
City Manager

ATTEST:

Richarda Duffy Momsen
City Clerk

APPROVED AS TO FORM:



Eduardo Miranda
El Paso MPO Legal Counsel

APPROVED AS TO CONTENT:

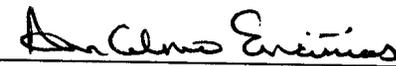


Roy Gilyard, Executive Director
Metropolitan Planning Organization (MPO)



Sylvia Borunda Firth
Senior Assistant City Attorney

**THE REGENTS OF NEW MEXICO STATE
UNIVERSITY ("NMSU")**

By:  7/2/08

 Neta Fernandez Date

Director, Office of Grants and Contracts

Title: _____

EXHIBIT "A-2"

PROPOSAL

**EL PASO METROPOLITAN PLANNING ORGANIZATION
URBANSIM 2002 BASE YEAR DATABASE
& MODEL DEVELOPMENT
&
URBANSIM TRAINING**

PHASE I



Prepared by

**New Mexico State University
Department of Geography
Spatial Applications & Research Center**

**Christopher Brown, PhD, Principal Investigator
Quinn Korbolic, Co-Principal Investigator
Breland Hall Room 176
Las Cruces, NM 88003
Voice (505)646-5755
Fax (505) 646-7430
Email: brownchr@nmsu.edu
korbolic@nmsu.edu**

May 2008

Spatial Applications & Research Center

The Spatial Applications and Research Center (SpARC) provides a variety of services including planning and research, GIS, image processing, modeling and training. The lab was established in 1982 as a contract applied research laboratory for the NMSU Geography Department. The original purpose of the lab was to undertake externally funded projects under the direction of geography faculty and employ students within the department. Twenty years and over \$3,000,000 in projects later, the lab continues to do project related work. It has employed more than 100 students, and provided assistance to more than 20 faculty members inside and outside the Geography Department.

The primary clients of the lab have been government agencies. A number of local, regional, and federal agencies have utilized SpARC's services. These agencies include the New Mexico Department of Transportation, the New Mexico Department of Agriculture, the United States Environmental Protection Agency, the Department of Housing and Urban Development, Federal Highway Administration, Dona Ana County, The El Paso Metropolitan Planning Organization (EPMPO), and many local and county government offices.

Scope of Work for El Paso MPO UrbanSim 2002 Base Year Database Development & Training: Phase I

Principal Investigator: Dr. Christopher Brown, Associate Professor
Co- Principal Investigator: Quinn Korbolic, GIS Coordinator
Project Name: Training & Development of 2002 Base Year Database for UrbanSim: Phase I
Project Customer: El Paso MPO
Project Time Frame: July 2008 – July 2009

Staff Estimates (Phase I & II):

	Number	Hours
GIS Technician	1	1030
Graduate Student	1	1000
GIS Coordinator	1	900
TOTAL:	3	2900

Project Description:

The El Paso Metropolitan Planning Organization is expanding its modeling capabilities to incorporate land use into its already extensive transportation modeling capabilities. The land use forecasting model UrbanSim was adopted to fill this role. UrbanSim is a land use micro-simulation model that can be used to model or forecast the effects of various land use scenarios such as the implementation of Transit Oriented Developments (TODs) or reduction of development in flood zones. Scenarios can be analyzed using hundreds of variables for their effect on adjacent land uses, regional land use and travel demand as well as land value, population, and environmental considerations. The main data that UrbanSim uses to forecast land use is the base year database, of which two of the main tables, *jobs* and *gridcells*, have already been developed. The remaining tables will be developed by NMSU. The primary objective of this project is to train El Paso MPO staff in the use of the UrbanSim model. A secondary objective is to aid El Paso MPO staff in the completion of the UrbanSim database for the El Paso MPO Study Area. The completed 2002 base year database will allow the El Paso MPO to begin to use UrbanSim with its current travel demand model. The role of the Spatial Applications Research Center laboratory is to produce the remaining UrbanSim base year database tables and to train El Paso MPO Staff in the use of the UrbanSim model. Ultimately, this project seeks to advance the use of urban simulation in El Paso to an operational status so it can be used as an effective tool in the hands of planners and policy makers.

This project will be implemented in two phases. The initial phase will include the training of El Paso MPO staff in the use of the UrbanSim model as well as the initial steps in developing the *households* table. This proposal is for Phase I of the project.

Objectives:

- Synthesize *households* for study area.
- Train El Paso MPO Staff in the use of UrbanSim.

Deliverables:

1. UrbanSim Base Year Tables.

- a. SpARC will take initial steps in developing the *households* table for use with UrbanSim by synthesizing households for the El Paso MPO study area.

2. UrbanSim Training

- a. SpARC will provide training sessions¹ during and after the development of the database.

The training will include:

- Familiarization with UrbanSim:
 - o Data structure and database relationships (2 sessions)
 - o Models (2 sessions)
 - Integration into the UrbanSim users community (1 session)
 - How to estimate model coefficients (2 sessions)
 - How to run the model and follow its progress (2 sessions)
 - Fixing model and data errors (1 session)
 - Visualizing Model output and computing indicators (2 sessions).
 - Updating UrbanSim (1 session)
- c. SpARC will provide maintenance, updates, and support as needed for the duration of the contract.

¹ All sessions are expected to be from 2-4 hours in the morning or afternoon at the El Paso MPO or at NMSU's Spatial Applications & Research Center.

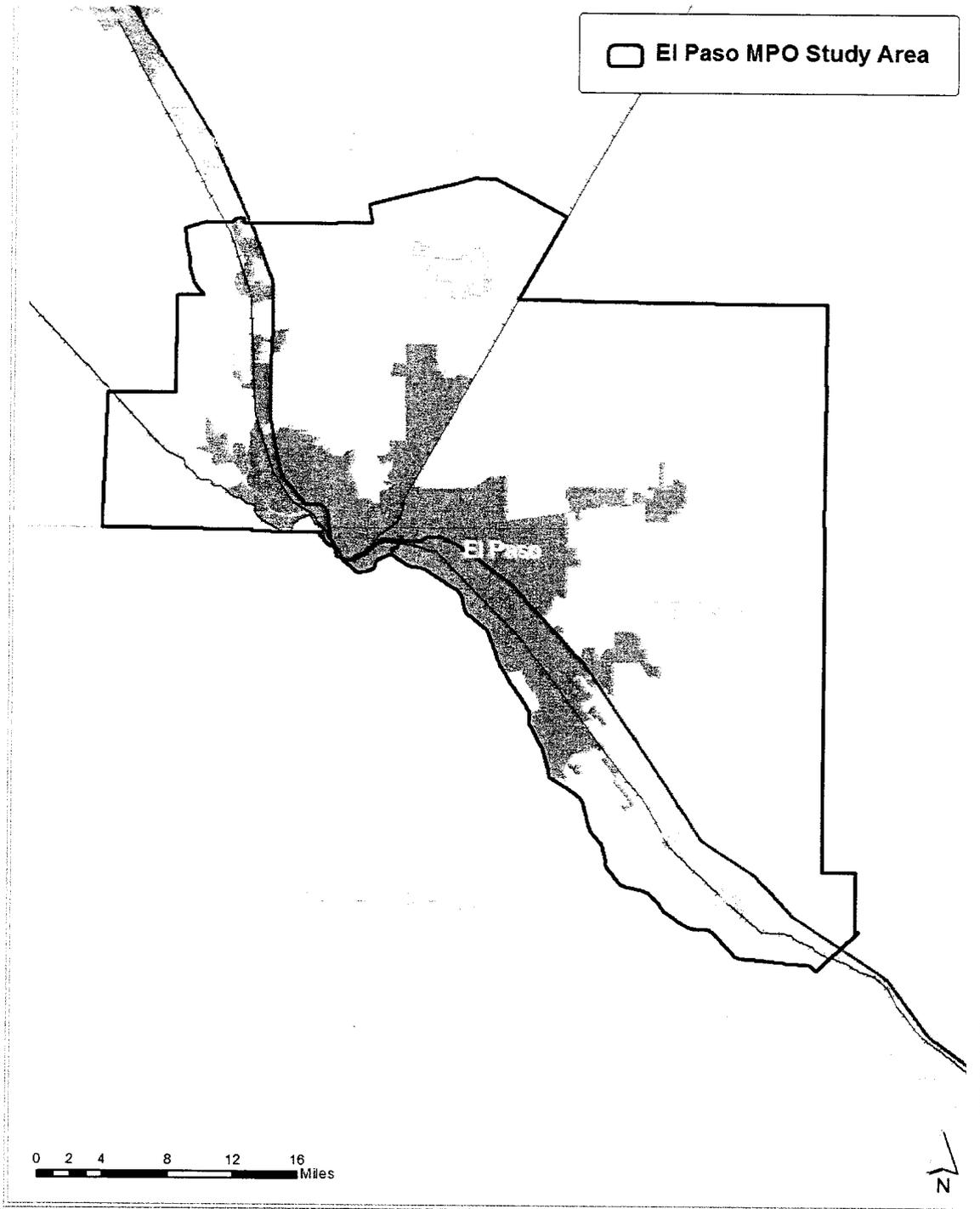


Figure 1 – El Paso MPO Study Area

EXHIBIT "B-2"

Projected Budget for Phase 1

PERSONNEL COSTS	Monthly	No.	%	Cost	TOTAL
	Base	Mos.	Time		
GIS Coordinator, Mr. Korbolic	\$3,307	5	20%	\$3,307	\$3,307
Graduate Student		0			\$0
		Hrly.	No.	Cost	
Undergrad Proj Aide		Rate	Hrs.		
Calendar yr		\$9.00	340	\$3,060	
Total Salary					\$3,060
Total Personnel Costs					\$6,367
FRINGE BENEFITS					
Summer Salaries @ 16%					\$529
Staff Salaries @ 29%					\$959
Student Salaries @ .5%					\$15
Total Fringe Benefits					\$1,503
TOTAL PERSONNEL COSTS AND FRINGE BENEFITS					\$7,870
TRAVEL, Domestic					
Travel to El Paso MPO	Units	Unit	No.	No.	Cost
Per diem:	0	\$0	0	0	\$0
Mileage:	108	\$0.49	1	4	\$210
Other Domestic Travel					\$0
Total Domestic Travel					\$210
OTHER DIRECT COSTS					
Negotiated computer fee					\$1,020
Supplies					\$0
Equipment					\$2,980
TOTAL DIRECT COSTS					\$12,080
FACILITIES AND ADMINISTRATION @ 26.4%					\$2,920
TOTAL PROJECT COSTS					\$15,000