



# Attachment "6" - Individual Key Personnel Data

STATE OF ARIZONA

Solicitation No. ADSP011-00000704

Agency: Arizona Department of Administration

Description: State Redistricting Mapping Services

Customer: Arizona Independent Redistricting Commission

Offeror's Name: TerraSystems Southwest, Inc.

Instructions: Complete one of these forms, and attach a digital photograph for each individual identified as a key person in your "Key Personnel form". Complete all information required on this Attachment "5" and maintain this format. In addition, submit a résumé for every person identified in Attachment "4" – List of Key Personnel.

## 1 INDIVIDUAL.

1.1 Name: Howard Ward

1.2 E-mail address: hlward@terrasw.com

1.3 Phone number(s): 520-322-0334

1.4 Photo (insert here):



## 2 INDIVIDUAL'S ROLE(S) AND RESPONSIBILITIES. Describe the role(s) and responsibilities in any contract that may be awarded as a result of this Solicitation and which shall be related to the fulfillment of Work set forth under this Solicitation.

Mr. Ward's role as a co-project manager include the following responsibilities-

- Provide input on highly technical issues
- Develop QA/QC procedures
- Supervise project management, budget issues and similar critical decision making aspects of the project

## 3 INDIVIDUAL'S RELATIONSHIP TO OTHER KEY PERSONNEL. Describe relationship of this individual to other Key Personnel's Roles and Responsibilities-

As a principal at TSSW, Mr. Ward is a co-team leader/project manager. He will oversee and supervise the rest of the team during the course of the project.

## 4 INDIVIDUAL'S TRAINING AND EDUCATION. List training and education related to the fulfillment of Work set forth under this Solicitation.

Mr. Ward has over 23 years of experience as a GIS professional. He is a Certified Geographic Information Systems Professional (GISP) with a-

- Masters of Business Administration, University of Arizona
- BS, Natural Resources Planning, Humboldt State University

Mr. Ward served as the GIS Manager for the Pima County Department of Transportation for five years. While at PCDOT, he directed the creation of the multi-million dollar parcel and street network databases, and developed and marketed the Pima County Land Information System (PCLIS) CD. As principal of TSSW, Mr. Ward has



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conducted hundreds of GIS support projects since 1998, ranging from simple data acquisition and conversion to complex application development. Mr. Ward is active in several statewide GIS professional organizations and has developed an extensive network of public and private GIS experts and data providers throughout Arizona and the United States. He is currently the private sector representative to the Arizona Geographic Information Council, a Governor-appointed position charged with statewide GIS Coordination.

Mr. Ward began his career as a long range planner for Pima County Planning and Development Services. He has participated in the research, preparation and presentation of land use studies and general plans and their updates in Arizona, California, and New Mexico.

**5 INDIVIDUAL’S EXPERIENCE.** Describe experience related to the fulfillment of Work set forth under this Solicitation.

**State of Arizona – Arizona Broadband Mapping Project.** Beginning in late 2009, TerraSystems was selected to provide GIS services for this leading-edge nationwide project. TSSW is responsible for a variety of complex database design and progressing tasks. It has required extensive coordination with technical staff as the National States Geographic Information Council and the National Telecommunications Information Administration to refine the initial NSGIC geodatabase model to be compatible with Congressional requirements for the submittal of broadband information. TSSW has developed, tested, refined and documented a very detailed workflow to process data coming from scores of different broadband providers into a standardized series of tables and geodatabase feature classes. This workflow includes procedures to track and document data processing steps. TSSW continues to develop various data validation (internal) and verification (external) processes to provide feedback to data providers and ensure the data submitted to the Federal Government is as accurate as possible. We have documented our work in a series of working papers, checklists and programs to ensure repeatability when the State takes over the maintenance of the broadband database. The database design, tracking mechanism, documentation and related analyses TSSW developed have recently been acknowledged by the Geospatial Information Officer (GIO) of the Federal Communications Commission as an important contribution to the development and maintenance of the National Broadband Map.

**Arizona State Land Department, Conceptual Land Use Planning.** Over the past nine years, Mr. Ward and TerraSystems have provided GIS data conversion and technical analysis for numerous Arizona State Land Department Conceptual Land Use Conceptual projects. As a sub-consultant to Community By Design and The WLB Group, Mr. Ward has researched, collected, processed, analyzed, mapped and documented GIS data sets for ASLD projects in the Arroyo Grande, Eloy, Coolidge, Stanfield, Peoria, Prescott, Lake Havasu, Marana, and greater Tucson areas.

**Central Arizona Association of Governments, GIS Support Services.** Over the past three years, Mr. Ward has provided GIS management and on-call GIS support for CAAG. Work includes the creation of a job and population build out model, creation of numerous data processing and analysis utility applications, and production of an updated Pinal County land use layer and Census 2000 geography re-aligned to GIS roads, parcels and imagery. Mr. Ward also provides database design and conversion assistance to CAAG staff for each of the dozen or so socio-economic database CAAG maintains and technical guidance for annual aerial imagery acquisition through commercial providers. Through this project, Mr. Ward has established numerous data contacts throughout the State and Pinal County.

**Maricopa Association of Governments - GIS Database Enhancement Project.** From early 2000 through 2003, Mr. Ward provided administrative oversight and technical assistance to the Maricopa Association of Governments GIS Database Enhancement Project, a large scale GIS data conversion and automation project that culminated in the creation of a new street network file and a number of socio-economic and land use datasets for Maricopa County. TSSW coordinated the work of four independent subcontractors to MAG, including project scheduling and quality assurance of deliverables. TSSW also performed a street network update for MAG on a separate contract to bring the 2000 work current to 2003 using aerial imagery.



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**Global Climate Change Program, Prescott College – Spatial Growth Model.** Mr. Ward, together with the Global Climate Change Program at Prescott College, designed, developed and implemented the Spatial Growth Model, and interactive application developed to assist communities in predicting future growth patterns by applying “growth rules” determined through public input at interactive participation forums. Mr. Ward as a project team member received the National Partnership for Reinventing Government – Innovative Use of Technology “Hammer Award” from Vice President Gore’s office at the annual International ESRI Conference held in San Diego, CA.

### Community by Design – Ongoing GIS Support.

TSSW and Mr. Ward have provided Community by Design, a nationally recognized and accomplished planning firm in the area of dynamic urban design and sustainable communities, with GIS services since 2000. From data research and acquisition, to complex spatial analyses and modeling, TSSW routinely provides responsive service with the anticipation and flexibility of a seasoned staff member. Projects includes Taos County, Colorado Growth Management Plan; La Plata County, Colorado Comprehensive Community Plan; Galisto, New Mexico Village Plan; Las Vegas, New Mexico Downtown Action Plan; Los Duranes Sector Development Plan (Albuquerque, New Mexico); Lovington, New Mexico Downtown Master Plan; Sawmill Land Trust/Wells Park Metropolitan Redevelopment Plan (Albuquerque, New Mexico); Silver City Downtown Action Plan (Silver City, New Mexico); Virden Comprehensive Plan (Virden, New Mexico); and numerous Arizona State Land Department (ASLD) Conceptual Plans for the greater Tucson and southern Arizona area.

## 6 INDIVIDUAL’S POLITICAL AFFILIATIONS, ACTIVITY, CONTRIBUTIONS AND FUNDING.

6.1 Provide the following information for the ten-year period preceding the offer:

6.1.1 List this individual’s political affiliation(s): **Democrat**

6.1.2 Describe the individual’s political activity and/or services performed, whether voluntary or for a fee, for a political candidate, as an officer of a political committee, or as a campaign worker or fundraiser: **None**

6.1.3 Describe services performed by this individual, whether voluntary or for a fee, as a lobbyist or consultant for any political party, interest group or other entity that has supported, donated money to, or raised money for, or provided in-kind support for a candidate for public office or taken a position on a ballot initiative or sought to influence the redistricting process: **None**

6.1.4 Provide the date, nature and amount of political contributions by this individual: **None**

## 7 INDIVIDUAL’S RELATIONSHIPS.

7.1 Describe and explain any personal, family, or financial relationships or commitments this individual has that a reasonable person would consider likely to improperly influence someone making a redistricting decision. **None**