Appendix A. Resumes

AppGeo presents resumes for the following staff who will be assigned to the Town of Raymond for management and performance of services including a mix of onsite and offsite GIS consulting. The core team for serving the Town of Raymond will be:

Project Manager/GIS Analyst: Morgen Healy

Assistant Project Manager/GIS Analyst: Laura Doty

GIS Data Technician: Guido Stein

GPS and GIS Data Technician: Michael Thompson

Principal in Charge: Michael Terner, GISP, Executive Vice President

Supporting these staff as needed, AppGeo has a deep bench of technical expertise covering programming, data development, map production, GIS analysis, custom cartography, or anything else GIS or GIS/IT related.

MORGEN HEALY, SENIOR PROJECT MANAGER

Morgen Healy is a Senior Project Manager for the State and Local Government Team in AppGeo's Boston office. Ms. Healy has 9 years of experience as a GIS professional including experience as a consultant and as a County GIS Technician. At AppGeo, she manages and leads implementation for a wide range of GIS projects, including website design and development, utility Geodatabase design and automation, parcel automation and maintenance, ongoing implementation assistance and staff training. She has expertise with ArcGIS and Open Source GIS Software. She is a graduate of Colgate University with a double major in Mathematics and Geography.

Education:

BA Mathematics and Geography, 2002, Colgate University

Work History:

- 2009, Applied Geographics, Inc., *Project Manager/Senior GIS Analyst*
- 2007-2009, Rockland County, NY, *GIS Technician*
- 2002-2007, Applied Geographics, Inc., *Project Manager/GIS Analyst*
- 2002, Colgate University, *GIS Intern*
- 2002, Adirondack Park Agency, *GIS Intern*

Selected Project Experience:

City of Gloucester, Massachusetts – *GIS Consulting Support, Application Development, Data Development*

AppGeo has provided GIS consulting support to the City for many years covering data development, application development, cartography, and technical support.

Ms. Healy is currently the Project Manager in charge of supervising, scoping, and managing all aspects of GIS consulting support to the City.

MetroGIS, Metropolitan Council, Minneapolis, Minnesota - *Shared Services Needs Assessment for Street Centerline Data, 2011*

AppGeo has worked with MetroGIS to investigate options for a shared services model for maintenance of street centerlines data for a multi-county region encompassing the Twin Cities.

Ms. Healy prepared a survey for stakeholders, supported the stakeholder workshop, prepared recommendations and solutions options, and helped to draft the final work plan.

National Recreation and Parks Association (NRPA) – *National Parks, Trails, and Recreation Facilities Geospatial Data Model and Web Mapping Application, 2010-2011*

AppGeo has worked with NRPA to help realize its vision for a web-based system for the management and visualization of parks and park facilities for its membership. This started with the definition and testing of a data model for parks, trails and facilities, followed by development of an application for data loading and web-based display of park data.

Ms. Healy has worked closely with NRPA to define a nationwide data standard and model and test it, and she managed the effort to design and development of a web-based mapping application for parks, trails and recreation facilities mapping.

Other Areas of Experience:

Ms. Healy has worked on the following state broadband availability data and application development projects that are part of the State Broadband Initiative Grant Program of the NTIA:

- Connecticut - Support for design, portal setup, support for metadata and data post-processing, support for data processing workflow development and improvement, development of web testing plan, oversight for data compilation

- Georgia – support for broadband application design and review, support and review of NTIA data submissions

- Oklahoma – design and design documentation, creation of map layers, , implementing open source GIS software (PostGIS, Geoserver, GWC) for web mapping, templates and styling, data processing for projection and coordinate system consistency, project management and progress reporting, quality review of data, management of data layers, application testing, researching browser compatibility issues, Section 508 compliance and accessibility testing, data compilation for cloud hosting (Amazon S3), management oversight for tile caching, management oversight for data compilation and submittals to NTIA, webinars and presentations to client

- Vermont - initial data setup, data loading, cartography, symbology and map layer development

- Washington – development of online survey instrument, management and weekly progress reporting, data research and data integration, design development and documentation, establishment of map data layers including symbology and cartography, database review, testing in Beta and host environments, monitoring data processing, web demos and testing, metadata, issue resolution

- Washington DC – design for various web-based applications and portals, application design documentation, establishment of map services, cartography and styling for map layers, definition of login roles, data loading

Ms. Healy has worked on the following local government GIS consulting projects:

- City of Lebanon, NH- Ms. Healy worked with the City's GIS Coordinator to assist in steering the GIS program, including Website Design, Utility Automation, and custom GIS and document management solutions for various City departments.

- Town of Dedham, MA - Ms. Healy worked with the Engineering department and DPW on all aspects of the town's extensive GIS program. This included General Implementation Assistance for all GIS projects in the town, the GIS and DPW websites, custom web applications, Sewer and Stormwater data QAQC and upkeep, Flyover project management and QA/QC, ongoing parcel updates, and as-needed mapping for town initiatives.

- Manchester-by-the-Sea, MA - Ms. Healy managed the town's GIS website and data, annual parcel updates, as-needed GIS data layer development, as well as automation of Sewer, Water and Stormwater.

- City of Quincy, MA - Ms. Healy worked with the City's engineering department and in addition to training and tech support, she has completed Stormwater and Parcel automation and GIS Website Development.

- Town of Plymouth, MA - Ms. Healy has worked with the Engineering department on various Utility Automation and Geodatabase design projects for Sewer, Storm, Water, and Streets/Pavement Management. She has also provided Staff Training for data automation and parcel maintenance. In addition to the Engineering department, she also worked with the Assessors and Planning offices to manage Plymouth's GIS parcels and website.

- Town of North Attleboro, MA - Ms. Healy worked with the DPW, MIS, Assessors and Planning department to maintain and improve the town's current GIS. In addition to ongoing Implementation Assistance, she also completed Sewer System Geodatabase design and automation, Water System updates, MassGIS Parcel conformance and parcel updates, as well as staff training and systems support.

- City of Pittsfield, MA - Ms. Healy managed the development of Pittsfield's GIS program, which included complete Parcel, Sewer, Storm and Water system data automation, custom field application development, staff training and tech support. Other projects with the city included Flyover project management and QA/QC, as well as integrating the DPW's Sewer/Water billing system into the GIS.

- Wannacomet Water Co., Nantucket, MA - Ms. Healy managed the Implementation, data updating, map production and staff training for the GIS program at the Wannacomet Water Co.

LAURA DOTY, PROJECT MANAGER/GIS ANALYST

Laura Doty is a GIS Analyst with four years of experience in GIS analysis, map design and data production, including working for the City of Cambridge, MA as a GIS technician. She holds Masters degrees in Geographic Information Technology and in Environmental Studies. She has experience in ESRI ArcGIS, Geoserver, Open Layers, PostGIS and SafeSoftware FME.

Education:

- Masters of Professional Studies, Geographic Information Technology, 2010, Northeastern University
- MS Environmental Studies, 1997, Antioch New England Graduate School
- BA English, 1988, Kalamazoo College

Work History:

- 2010, Applied Geographics, Inc., GIS Analyst
- 2008-2010, City of Cambridge, GIS Technician
- 2009, CDM, Masters Intern
- 1999-2008, EarthWorks, Outdoor Classroom Program Director
- 1997-1998, New Canaan Nature Center, Assistant Director of Summer Nature Programs & Teacher/Naturalist
- 1992-1994, The Environmental Schools, USA, Teacher
- 1993, Puffin Project, National Audubon Society, Research Assistant & Tour Boat Naturalist
- 1992, Whitefish Point Bird Observatory, Raptor Banding Intern
- 1991-1992, Sutton Avian Research Center, Avian Technician

Selected Project Experience:

Massachusetts Broadband Institute (MBI), Massachusetts Technology Collaborative (MTC) –

Broadband Availability Mapping Web Application, 2010-Ongoing

AppGeo is currently under contract with the Massachusetts Broadband Institute (MBI) to design and develop a Broadband Mapping Application for the Commonwealth of Massachusetts. The project, funded by the National Telecommunications and Information Administration (NTIA), involves the development of several web components including a broadband information portal, public survey, broadband speed test, and interactive map. The

project also includes an on-site evaluation of MBI's hosting infrastructure and recommendations for short and long term hosting of the application. MBI prioritized ease of use and simplicity in their design requirements, allowing the user to focus on a limited set of map and query tools. The site performs complex overlay analysis and geocoding while presenting the user with a very simple and intuitively understood interface. The site also takes advantage of map caches (both Google basemap tiles and custom caches built using Massachusetts data), and open source technology, allowing for a flexible, cloud-based hosting option.

Ms. Doty researched data sources, uploaded data, processed data, created cartographic styles, provided quality control on data, and managed data tiling and loading onto the cloud hosting environment.

State of Connecticut, Department of Public Utility Control –

Broadband Planning, Broadband Availability Mapping, Data Collection, Data Conversion and Standardization, Web Application Design and Development, 2009 - Ongoing

Applied Geographics is working directly with the State of Connecticut, Department of Public Utility Control on their Broadband Mapping project as well as supporting some of the Broadband Planning programs. These projects and programs are a part of the larger nationwide effort funded though the National Telecommunications and Information Administration (NTIA), State Broadband Data and Development (SBDD) grants. Requirements for the Broadband Mapping project include gathering broadband availability, speed and technology information from all providers that operate within Connecticut. AppGeo is also gathering information from the public as well as designated community anchor institutions to try to understand what broadband services they actually have and use today. This information is then compiled and processed into a standard data model that supports delivery both to the NTIA, as well as to the DPUC and CT's Office of Consumer Council for monitoring and planning activities. As part of this initiative, Applied Geographics has worked with the Departments of Public Utility Control and Information Technology, respectively, to develop a suite of web based applications. for (1) secure reporting and data review by providers and Community Anchor Institutions (CAI), (2) secure access for state staff to monitor data delivery, and (3) for general public access to information about broadband availability, speed tests, and broadband programs, including an interactive mapping capability.

Ms. Doty provided data conversion and loading for the application including scripting, ETL routines, data modeling, data processing, and documentation.

Commonwealth of Massachusetts, Office of Geographic Information (MassGIS) -

MA Digital Parcel File Level III Compliance for Massachusetts Municipalities, 2011 - Ongoing

AppGeo is assisting the Commonwealth of Massachusetts, MassGIS (the Commonwealth's Office of GIS) to bring municipal parcel data up to the State Digital Parcel File Level III Standard. Since the beginning of 2011, AppGeo has managed the creation or updating of digital parcel data for 34 Massachusetts' municipalities including more than 260,000 parcels, with more municipalities in the queue. For each municipality, AppGeo first assessed the status of digital parcel data (digital, mylar, etc.) and assessor's property data records with respect to the Level III standard. AppGeo then managed and guided a process of data development or updating for the geographic feature data, followed by the linking of the CAMA and geographic data, and resulting in submittal of conforming data for review and acceptance by MassGIS.

Ms. Doty reviews and provides quality control for deliverables, including spatial data quality and parcel polygon matching to assessor data records.

Other Areas of Experience:

- Data processing, tile creation, cartographic styling for map themes, data loading, testing and quality control for multiple municipalities using AppGeo's MapGeo™ web mapping subscription service.
- Statewide Broadband Mapping Projects - Spatial data integration quality control, process automation, and mapping for Vermont, Connecticut, Georgia, Oklahoma, Washington and Massachusetts.
- Municipal GIS consulting, data automation, quality control, georeferencing, digitizing, and processing for municipal GIS data layers, including parcels, storm, sewer and water systems, groundwater recharge zones, pavement management, voting districts, and utilities
- USGS GAP Analysis - Assisted in development of ETL conversion process for translating state data to standardized schema.
- State of NY, CSCIC - Data quality control for statewide street centerline database.

GUIDO STEIN, GIS ANALYST

Guido Stein is a GIS Analyst with eight years of experience in GIS analysis, data production and automation, GPS and aerial photography. Mr. Stein has previous experience working with municipal districts transferring data. In addition, he has developed work flows to incorporate the power of GIS and AutoCAD with the presentation power of Illustrator and Google Earth. Mr. Stein's experience includes AutoCAD, ESRI ArcGIS, Google SketchUp, SafeSoftware FME, various relational databases, and programming in Java, Delphi and C.

Education:

- BA Geography, 2002, Clark University
- GIS and Web Mapping courses, Harvard Extension School

Work History:

- 2007- present, Applied Geographics, Inc.
- 2005-07, Sasaki Associates, *GIS Planning Specialist*
- 2004–05, Industrial Economics Inc., *Research Analyst/GIS Specialist*
- 2003-04, USDA Farm Service Agency, *GIS Program Technician*
- 2002-03, Westborough, MA, *Web Consultant*

Selected Project Experience:

Commonwealth of Massachusetts, Office of Geographic Information (MassGIS) - *MA Digital Parcel File Level III Compliance for Massachusetts Municipalities, 2011 - Ongoing*

AppGeo is assisting the Commonwealth of Massachusetts, MassGIS (the Commonwealth's Office of GIS) to bring municipal parcel data up to the State Digital Parcel File Level III Standard. Since the beginning of 2011, AppGeo has managed the creation or updating of digital parcel data for 34 Massachusetts' municipalities including more than 260,000 parcels, with more municipalities in the queue. For each municipality, AppGeo first assessed the status of digital parcel data (digital, mylar, etc.) and assessor's property data records with respect to the Level III standard. AppGeo then managed and guided a process of data development or updating for the geographic feature data, followed by the linking of the CAMA and geographic data, and resulting in submittal of conforming data for review and acceptance by MassGIS.

Mr. Stein develops scripts for automating and streamlining data extract, transform, and loading (ETL) procedures and oversees data processing and loading, and provides quality control on processes and data outputs.

State of Connecticut, Department of Public Utility Control – ***Broadband Planning, Broadband Availability Mapping, Data Collection, Data Conversion and Standardization, Web Application Design and Development, 2009 - Ongoing***

Applied Geographics is working directly with the State of Connecticut, Department of Public Utility Control on their Broadband Mapping project as well as supporting some of the Broadband Planning programs. These projects and programs are a part of the larger nationwide effort funded though the National Telecommunications and Information Administration (NTIA), State Broadband Data and Development (SBDD) grants. Requirements for the Broadband Mapping project include gathering broadband availability, speed and technology information from all providers that operate within Connecticut. AppGeo is also gathering information from the public as well as designated community anchor institutions to try to understand what broadband services they actually have and use today. This information is then compiled and processed into a standard data model that supports delivery both to the NTIA, as well as to the DPUC and CT's Office of Consumer Council for monitoring and planning activities. As part of this initiative, Applied Geographics has worked with the Departments of Public Utility Control and Information Technology, respectively, to develop a suite of web based applications. for (1) secure reporting and data review by providers and Community Anchor Institutions (CAI), (2) secure access for state staff to monitor data delivery, and (3) for general public access to information about broadband availability, speed tests, and broadband programs, including an interactive mapping capability.

Mr. Stein writes data processing scripts and routines for automating data conversion, standardization and conformance, loading, and quality control.

State of Oklahoma Office of State Finance - ***Broadband Mapping, 2009-ongoing***

Under subcontract to the Sanborn Map Company, AppGeo is working for the Oklahoma Office of State Finance (OSF) on the National Telecommunications and Information Administration (NTIA) funded State Broadband Initiative (SBI) program. The project involves collecting data from all known broadband service providers, processing of data into a standardized format, validating the data received, and delivery to the NTIA. Data includes collecting and/or defining broadband service areas for wired (cable, DSL, fiber), fixed and mobile wireless, and satellite providers. In addition, data is being collected about service availability and service

subscription at Community Anchor Institutions (CAIs) throughout the State of Oklahoma. As part of the program AppGeo has developed and deployed a series of web applications, all of which were built using Open Source technology, and utilize cloud-based hosting, managed by AppGeo.

Mr. Stein wrote data processing scripts and routines for automating data conversion, standardization and conformance, loading, and quality control covering census data sets, base map data sets, and various point data sets incorporated into the application.

Other Areas of Experience:

- Performed parcel data creation or updating for the following municipal clients: Acton, MA; Canton, MA; Coventry, RI; Coventry, CT; Duxbury, MA; Ellington, MA; Gardner, MA; Grafton, MA; Greenfield, MA; Hatfield, MA; Holyoke, MA; Hopkinton, MA; Lexington, MA; Lincoln, MA; Manchester-by-the-Sea, MA; Milton, MA; Norfolk, MA; Northborough, MA; North Bristol County Registry of Deeds, MA; Old Lyme, CT; Paso Robles, CA; Southbridge, CT; Smithfield, RI; Taunton, MA; Thompson, CT; Wallingford. CT; Westport, MA; Woodstock, CT
- Base Map QA/QC: Town of Amherst, MA
- Pitney Bowes Group 1 - Data collector and integrator for municipal parcel data collection process covering the states of Connecticut, Massachusetts, and Rhode Island
- Statewide broadband availability spatial data integration, quality control, process automation, and mapping for various states – Connecticut, Florida, Georgia, Oklahoma, and Washington
- Wannacomet Water Company – water utility data automation and quality control for county-wide water utility
- PB Power – Digital Elevation Model updates and data quality control
- Connecticut Housing and Finance Authority (CHFA) - Data development and integration support for web-based system that serves data, reports, mapping, and other spatial analysis capabilities from a centralized ArcSDE database that is tied to the CHFA core RDBMS system
- State of Maine Department of Inland Fisheries and Wildlife – Data quality control and integration for statewide habitat mapping application
- Southeastern Connecticut Council of Governments (SCCOG) – Property data development and integration for regional GIS implementation and application development
- Westchester County, NY - Georeferenced and prepared digital historic aerial photography for Web archive application created by AppGeo
- City of Boston, MA – GIS support for GIS web application
- Town of Millbury, MA - Data development support for storm and drain system mapping and regulatory compliance

- City of Taunton, MA - Data development and online database configuration for web-mapping application for cemetery management
- North Bristol County, MA, Registry of Deeds - Reviewed deliverables for parcel updates for regional parcel data layer covering 11 towns and 691 square miles, and approaching 100,000 parcels
- City of Pittsfield, Massachusetts - Developed automation process for citywide sanitary sewer and storm drain systems. Inventoried over 1,000 town as-built plans through creation of index layer, designed and implemented geodatabase to City specifications and automated and attributed system components to develop a comprehensive sanitary sewer and storm drain layers
- Milton Hershey School, Pennsylvania - Developing an initial Web-based campus visualization application, that will provide for the design of a Web-based campus facility visualization and management system via converting AutoCAD data into a geodatabase format

MICHAEL THOMPSON, GIS ANALYST

Mr. Thompson is a GIS Analyst with 2 years of experience with data development, analysis, and map production. His technical skills and areas of expertise include: Arc GIS 10.x, mapping, and GPS data collection.

Education:

- BA in Regional Planning from Westfield State University.
- BA in Business Management from Westfield State University.

Work History:

- 2010-Present, Applied Geographics, Inc., GIS Analyst
- 2009-2010, Pioneer Valley Planning Commission, GIS Intern

Selected and Relevant Project Experience 2010 - present:

Spatial data development (tax maps, street maps, parcel updates) and GIS consulting for the following municipalities:

- Columbia, CT
- Cromwell, CT
- Cumberland, RI
- East Hampton, CT
- Ellington, CT
- Essex, CT
- Glastonbury, CT
- Gloucester, MA (sewer)
- Hebron, CT
- Lincoln, RI
- Lyme, CT
- Norwalk, CT
- Old Lyme, CT
- Pioneer Valley Transit Authority
- Smithfield, RI
- Springfield, MA
- South Hadley, MA
- Westbrook, CT
- West Hartford, CT

Town of Cromwell, CT (2010-11)**-** Mr. Thompson has digitized the storm water system in Cromwell, complete with catch basins, drain lines, headwalls, and other storm water features, through the use of utility and subdivision plans as well as GPS field data collection and verification. This data shows the direction of the flow of storm water through the system and the location of outfalls where it enters a body of water such as a stream, lake, or river.

State of Connecticut, Office of Legislative Management, Connecticut General Assembly (2011) – geocoding and data development.

Norwalk First Taxing District (2010-2011) – Water utility system geospatial data automation including data collection with Trimble GPS technology.

Town of Northborough, MA (2011) – GPS field work and data editing for stormwater system

Statewide **Broadband** availability data intake, data quality checking, data integration and standardization for:

- State of Connecticut
- Commonwealth of Massachusetts
- State of Oklahoma
- State of Washington

MICHAEL G. TERNER, EXECUTIVE VICE PRESIDENT, GISP

Michael G. Terner has been applying Geographic Information Systems (GIS) to environmental, municipal, utility, transportation and business sector since 1985. Mr. Terner's comprehensive GIS experience includes GIS strategic planning, needs assessments and data evaluations, designing databases, programming user-interface applications, designing web-based architectures and implementing and managing systems. Mr. Terner has been instrumental in the design and development GIS systems and applications at all levels of government, including major cities, county and regional government, state agency and federal agency, and the private sector. He co-authored GIS Strategic and Business Planning Templates for the National States Geographic Information Council on behalf of the FGDC. Prior to founding AppGeo in 1991, Mr. Terner served in state government where he managed the project that developed MassGIS (the Commonwealth of Massachusetts state GIS office) in the late 1980's, and subsequently he managed MassGIS for three years within the Executive Office of Environmental Affairs.

Education:

- MCP, City Planning with Environmental Policy & Planning and GIS focus, 1993, Massachusetts Institute of Technology, Cambridge, MA
- BA in Environmental Studies and Biology, 1985, Tufts University, Medford, MA

Work History:

- 1991-present, Founder and Executive Vice President, Applied Geographics, Inc.
- 1988-1991, Systems Manager, Massachusetts Executive Office of Environmental Affairs, MassGIS
- 1985-1988, GIS Project Manager, Hazardous Waste Facility Site Safety Council, Commonwealth of Massachusetts

Selected Project Experience:

State of New Jersey, Office of Information Technology – *GIS Strategic and Business Planning, Spatial Data Infrastructure, 2011-12*

AppGeo is developing a strategic and business plan for the State of New Jersey concentrating on four key framework data layers: street centerlines, parcels, , orthoimagery, and addresses. The process started with a series of 8 stakeholder meetings and facilitated workshops in Trenton involving state, county, federal, and municipal levels of government and the private sector. The goal of the planning process is to identify and document the common data requirements, to evaluate the status of data layers, to develop plans for efficient data aggregation and

maintenance, and to make recommendations for improvements in data interoperability, organizational coordination, and data distribution.

Mr. Terner is the leader for the project. Since the start of the project in August 2011, he has facilitated workshops, conducted interviews, and he will co-author the final strategic and business plan reports.

USGS, GAP Program – ***design and development of landcover, protected areas and species viewers for GAP programs' portfolio of nationwide data sets, 2009-2012***

AppGeo and its partner, GreenInfo Network, worked with the US Geological Survey Gap Analysis Program Team to design and develop the user interface and mapping functionality for a series of viewers for important national environmental data sets. The Land Cover viewer presents vegetation and land use patterns for the continental United States. The Protected Areas Database (PAD-US) viewer presents current information about publicly held (state and federal) conservation lands for the United States. The Species Viewer displays vertebrate species ranges and distributions across the United States for 2,000 species. The Species Viewer won a Web-based GIS Application Award at the 2011 Esri User Conference Software Applications Fair. The applications were built using Esri's ArcGIS Server to serve the map images combined with JavaScript customization developed by AppGeo for dynamically accessing files and data. USGS is hosting the viewers.

Mr. Terner led the AppGeo Team that designed and developed these applications, including close collaboration with the client to define the application scope, review data and functional requirements, and to define the system specification and delivery.

Utah Department of Transportation - ***Enterprise GIS Planning and GIS Consulting Support***

Mr. Terner is providing a variety of GIS planning, strategic, and consulting support to the Utah Department of Transportation (UDOT), for the establishment of their Enterprise GIS (EGIS) Program. Tasks have included technical review of platform technologies, scoping system design, preparing a strategic approach for EGIS, and assisting with the development job descriptions and interviewing for two new positions that resulted from planning work.

Scope of Other Areas of Experience:

Mr. Terner has been a national leader in GIS Strategic Planning, Business Analysis, Implementation Planning, and System Architecture. His extensive experience involves facilitation of workshops and stakeholder meetings, departmental interviews, case studies, system architecture, cost analysis, benefit analysis, governance and organizational change assessment, applications and data assessment, functional requirements analysis, workflow

analysis, recommendations and report preparation. GIS Planning projects on which Mr. Terner has had a major and leadership role include:

- Utah DOT – enterprise GIS planning, integration strategies, software migration strategies, 2011-12
- US DOT - Transportation for the Nation (TFTN) strategic planning initiative, 2010
- Calgary Regional Planning Agency, GIS Strategic Plan, Calgary, Canada, 2011
- 2005-2012, managed and/or participated in statewide strategic planning projects for the following states: Arkansas, Colorado, Connecticut, Delaware, Kansas, Maine, Massachusetts, Minnesota, New Hampshire, Nebraska, New York, New Jersey, Pennsylvania, Rhode Island, , Utah, US Virgin Islands, plus Washington DC
- 2008 Southern California Council of Governments (SCAG)
- 2008 USGS – support for revision of original strategic and business planning templates
- 2006 National States Geographic Information Council (NSGIC) - co-author for development of strategic and business planning templates for Statewide GIS Coordination Councils
- 2003 Massachusetts Department of Public Health
- 2002 Massachusetts Port Authority (MassPort)

Since co-founding AppGeo in 1991, Mr. Terner has led or overseen as Principal in Charge *dozens of application development and GIS data development projects*, including parcel and public works data automation, custom Web and desktop application design and development, including all levels of government, as represented by the following projects:

- New York Natural Heritage Program – implementation support for iMap Invasive Species Project
- City of Baltimore, MD – city web mapping capability for various departments to promote city services, planning and tourism, 2010
- USGS, GAP Program – design and development of landcover viewer for nationwide landcover data sets, 2009
- National Recreation and Parks Association (NRPA) – development of standardized data model for park, trail, and facilities data, 2009, oversees development of web-based data uploading and mapping application, 2011
- Minnesota Department of Transportation (Mn/DOT) 2011 – Principal in charge of major initiative to design and deploy an enterprise IT infrastructure for mobile applications for the Department
- Minnesota Department of Transportation (Mn/DOT) 2009 – Geoenabling workflows associated with the Department's Right of Way Electronic Acquisition and Land Management System (REALMS) using AppGeo's configurable web mapping technology, GPV.
- GreenInfo Network – Protected Areas Database for the US (PADUS) project to define data model for national protected areas spatial data, 2008

- City of Boston, MA – implementation support, custom GIS Web application 2008, enterprise GIS needs assessment 2007
- Boston Preparedness Pilot Project for the U. S. Dept. of Commerce, National Oceanic & Atmospheric Administration (NOAA), National Ocean Service – 2002 study and compilation of geospatial data layers for critical infrastructure for an area encompassing 103 municipalities in the Greater Boston region and including interviews with first responders.
- State of Colorado Department of Local Affairs (DOLA) 2006 – Contributor to project to provide emergency management application needs assessment and architecture design for state agencies
- City of Cambridge, MA - implementation support for AppGeo's GPV® configurable GIS Web mapping software
- County of Albemarle, VA – needs assessment, technical support, custom web mapping application, ongoing support through 2008-09
- Mid-America Regional Council (MARC), MO – 2008 HealthNet clinics mapping application using innovative ArcGIS and Google Maps mashup
- Massachusetts Department of Environmental Protection – 2007 statewide web application for watershed protection and status mapping and data retrieval
- Vermont Department of Economic Development, 2005 – Principal in Charge and contributor to design and deployment of site suitability web mapping application for Vermont.