

Proximity

Decision Making Information and Effective Information Infrastructures

Warren G. Glimpse
founder, Proximity

This document describes resources and capabilities of Proximity to work with clients in developing and augmenting decision making information infrastructure and operations. These resources can be applied to address wide-ranging business requirements.

This document is summary in nature and addresses these topics:

- Decision Making Information Solution Tools
- Information Infrastructure and Architecture
- Geodemographics in Action
- Mapping and Geographic Analysis
- ProximityOne – Enabling Data Integration and Analysis
- Proximity Statement of Capabilities – effective information infrastructures

Proximity works with businesses, government agencies, academia, and other organizations to design and develop the effective information resources and systems. A statement of mission and capabilities is located in a later section.

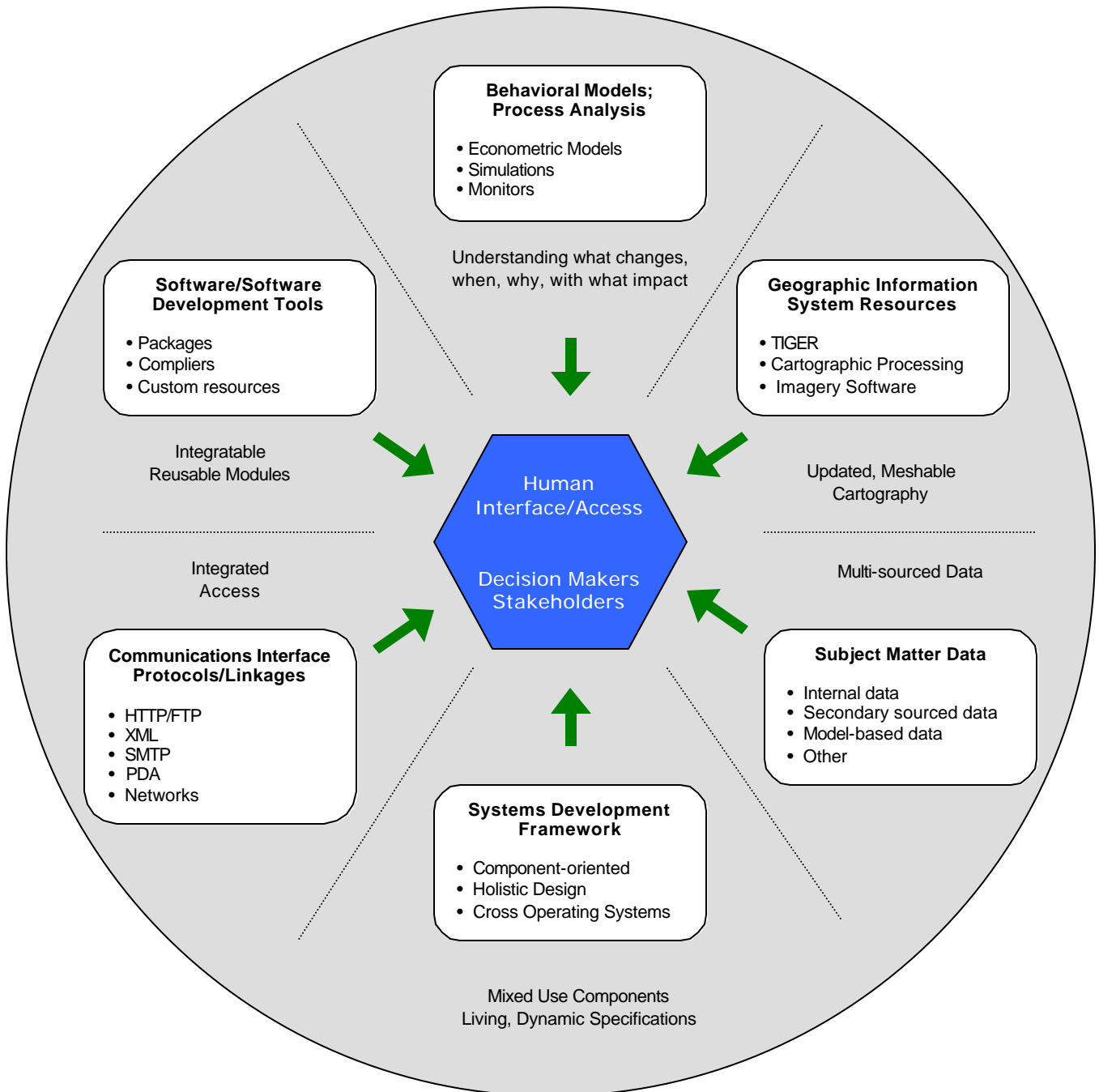
Copyright © 2001-2002. Warren G. Glimpse, Proximity. All Rights Reserved. Permission to reproduce this document is hereby given without further authorization provided that the document is distributed in its entirety, no fee is charged for its use, and neither income nor profit is made directly or indirectly from its use.

Proximity ♦ 6121 Lincolnia Road, Suite 300A ♦ Alexandria, VA 22312 ♦ Tel (703) 256-9850 ♦ Fax (703) 256-9425
<http://www.proximityone.com>

1. Decision Making Information Solution Tools

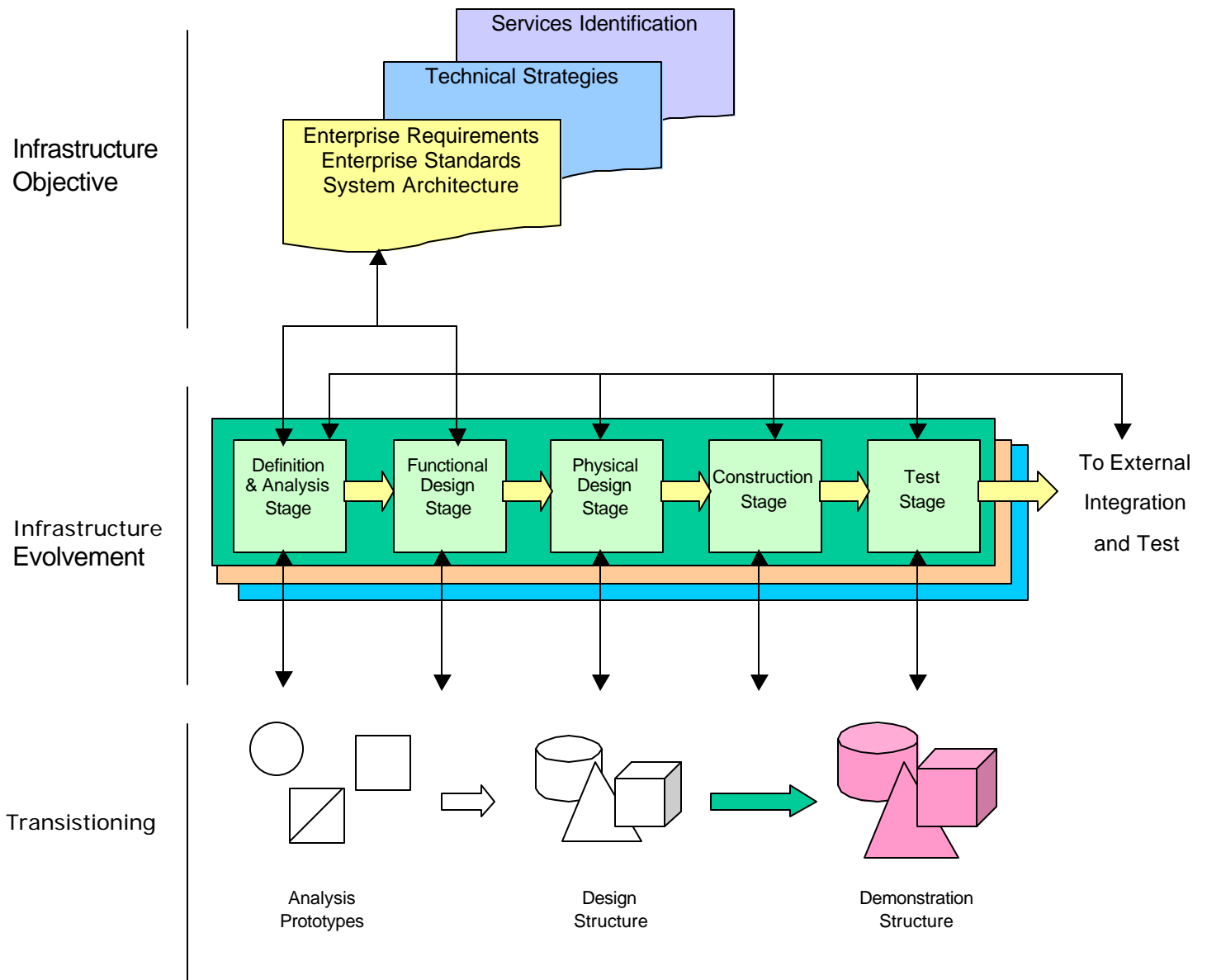
The development and operation of the information infrastructure needs to be data driven. That is, a set of integratable, mable tools need to be in-place so that any given time, the right set of decisionmakers, operations staff, relevant stakeholders, and others have the required access. These tools/components are depicted in the graphic shown below. Alone, the components are insufficient to provide effective results-oriented solutions. Holistic solutions also requires an overarching infrastructure outlined in the next page.

The integratable tools must have the continuing capacity to answer key questions:
 When ... How Long ... Where ... How Much ... Impact/Incidence Assessment ... Identifying Options



2. Information Infrastructure and Architecture

The DMI solution tools summarized in the previous topic should exist in architecture suited to the organization(s) and overall application goals. This page shows an abstract description of how the infrastructure architecture can be envisioned and change and requirements change.



3. Geodemographics in Action

Geodemographic resources are the collection of demographic and geographic data that are used in combination to analyze and understand the composition, dynamics, and changing nature of the population. Small area demographics and related geographic data resources play an important role in data driven decisionmaking in virtually all organizations.

Using Census 2000 Data. The Census 2000 data are the benchmarking, baseline, and most detailed/accurate set of general purpose demographics. Warren Glimpse, leading expert on decennial census and related geodemographics maintains the frequently updated Census 2000 Data Access and Use website (<http://proximityone.com/cen2000.htm>) – the most authoritative source of information facilitating effective access to and use of Census 2000 data.

Proximity Census 2000 Data Resources. Proximity reorganizes Census 2000 and related data to make them more accessible, easier to use, and linkable with other data. See the Houston, Texas area database set of Proximity data resources (<http://proximityone.com/48201.htm>). These are production datasets that you can download and use. These types of data are available for the entire U.S.

Demographic Updates and Models. Proximity demographic updates and models offer the best way to obtain updates to the decennial census data. See the description of the ZIPDemographics data resources (<http://proximityone.com/eii/zd.pdf>) for a description of how annually updates small area demographics, providing current year estimates and projections.

ProximityModel. The ProximityModel is a set of linked simultaneous equation models used to model and simulate demographic-economic-business-market conditions. The ProximityModel is applied to develop current estimates and projections of jointly dependent variables within the models. More information is available on ProximityModel in the description of small area demographic estimates and projections at <http://proximityone.com/eii/zd.pdf>. Proximity provides a unique solution to meet requirements for integrated demographic/economic data ranging from a census block in the U.S. to a country on the other side of the globe.

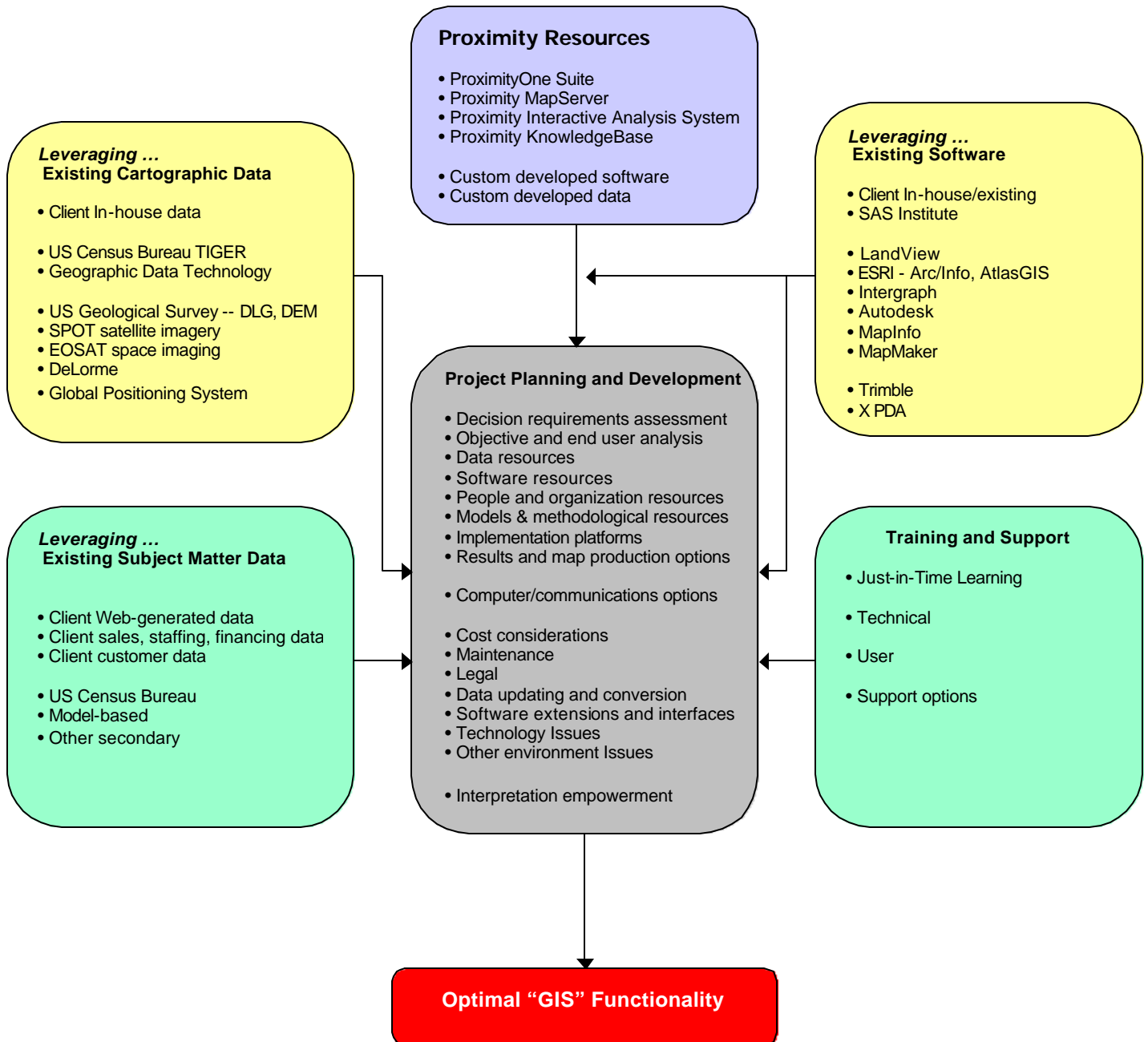
Children's Demographics, Schools, School Districts and Education. We are all affected by the location and operation of public schools and ways that school districts interrelate to the community and our businesses. Warren Glimpse is developer of the largest decennial census special tabulation – the 1990 Census school district special tabulation. The resulting School District Databook (44 volume CD-ROM database) provides the only source of comprehensive data on children's demographics and their living environment. In connection with this, Glimpse developed the first set of national scale school district map boundary files and brought school district analyses to the world of GIS and geospatial analysis. Proximity has continued this sphere of work – see <http://proximityone.com/plsd.htm> for related development information.

Cartographic Data Files. The Census Bureau TIGER/Line files provide a vector, digital, database containing characteristics of individual street segments, covering the U.S., down to the intersection-to-intersection detail. Warren Glimpse developed the GBF/DIM file used as prototype for development of the Census Bureau TIGER System. Proximity has continued this sphere of work, developing tools for address-matching, geocoding, mapping, and linking geospatially related data. See <http://proximityone.com/grf.htm> for more information.

Putting the Data into Action. Just having the right data may not be sufficient to actionize the data. Proximity operates courses such as the innovative WebCourse "Mapping and GIS Applications Using Census 2000 Data" (<http://proximityone.com/vc2.htm>) to help data user put data into action. Proximity also conducts face-to-face custom and general data user training sessions (see <http://proximityone.com/c2kdc.htm>).

4. Mapping and Geographic Analysis

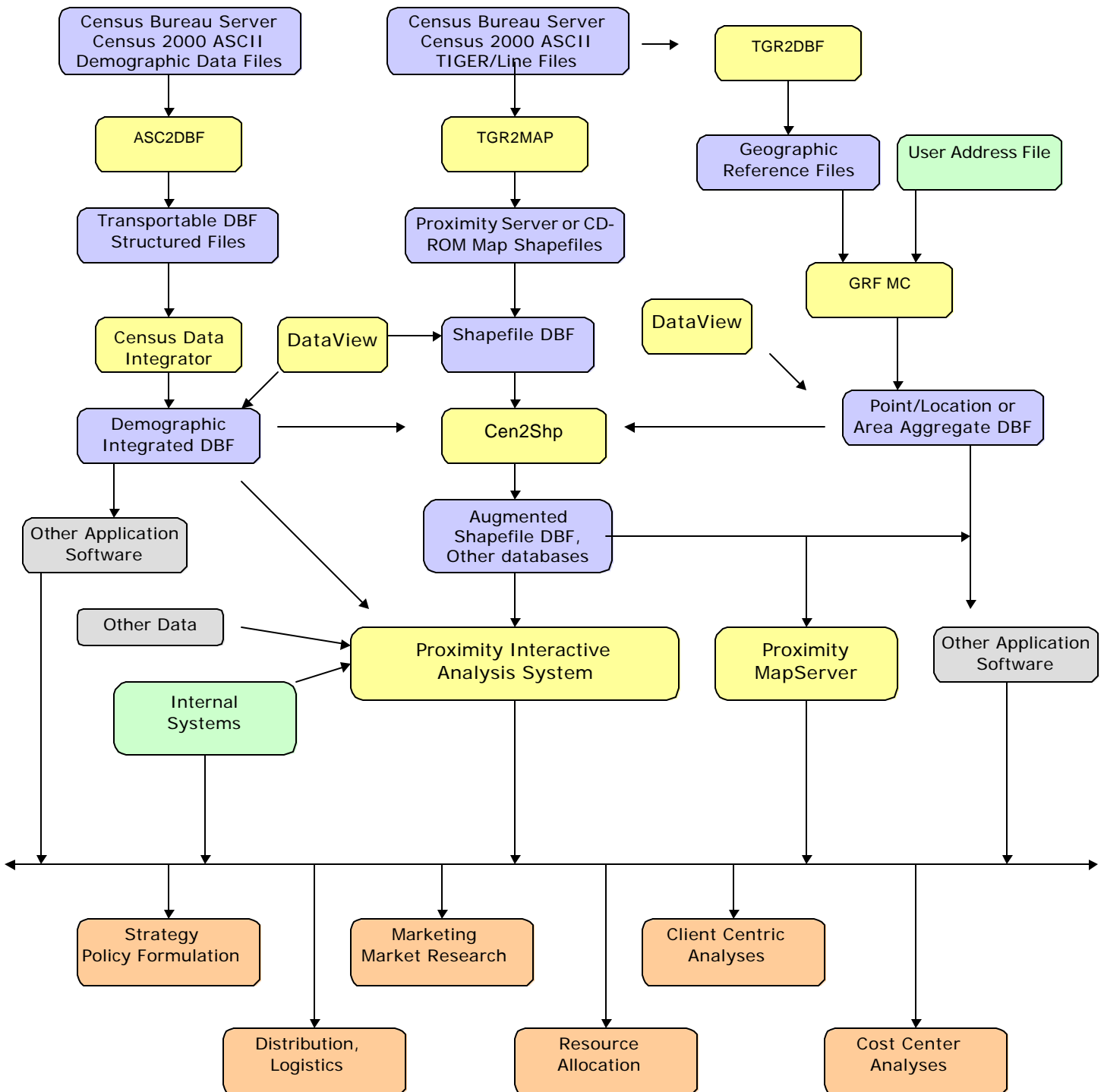
Mapping and geographic analysis are essential ingredients in the DMI architecture. Geographic information system (GIS) and cartographic analyses should be based on standards and integratable/transportable files but not necessarily the software resources of one provider. The best architecture features the ability in integrate a wide range of resources



5. ProximityOne – Enabling DecisionMaking Data Access and Use

The ProximityOne suite is a set of powerful, scalable, open-architecture software resources that helps organizations meet their needs for cost-effective, rapid, relevant access to decision making information. The ProximityOne suite overcomes the limitations of traditional hierarchical, function-oriented, and fixed-purpose structures characteristic of many data processing and decision support resources. ProximityOne enables processing Census 2000 geographic and demographic data and effective integration of these data with non-Census data for analysis.

ProximityOne Suite Graphical Overview



ProximityOne Software – Enabling GeoDemographic Data Access and Use

Open architecture. ProximityOne – P1 -- components are developed in an open, component-oriented, architecture enables you to leverage other resources - data, software, models, interfaces, and more. P1 is an integrated suite that is the composite set of standalone, web-enabled, and/or local network component based software, data, models, and linkage. Mix and match these elements to meet you needs. Add or remove components as requirements change over time.

For any organization. The architecture of ProximityOne enables it to adjust to the size and operational requirements of any organization. The modular structure of the ProximityOne components enable you to choose those parts required for your applications.

ProximityOne Components

ASC2DBF -- converts ASCII data [free Census web server download] to database structure for use with other Proximity Census 2000 software and other standard dBASE file processing software.

Cen2Shp -- automatically interfaces (creates and integrates) demographic data from ASC2DBF generated database files into ArcView shapefile dbfs – uses freely downloadable map shape files from Proximity web server.

Census Data Integrator -- data mining software enabling the user to selectively extract specific subject matter for specific geographic areas.

DataView -- generalized dbase file viewer and processing utility designed for use with Proximity Census 2000 dbase files. DataView works with any standard/generic dBASE files.

Interactive Analysis System -- used with Proximity and other databases to generate tabular reports and comparative analysis profiles; perform queries; manage/process generalized dBASE files, and perform related analyses.

TGR2GRF – general database structured files based on TIGER/Line files enabling address-matching, geocoding and related cartographic applications.

GRF MC – address-matching and geocoding software assigning latitude longitude coordinates to user supplied address data, assigns geocodes for matching with other data, and aggregates address data to geographic areas.

Licensing. Prices are for single user (one CPU) licenses. Inquire for site license prices.

6. Proximity Mission and Capabilities

The mission of Proximity is to design, develop, implement, facilitate access to, and deploy component-based information resources to help clients integrate and use geodemographic and decision making information.

Core Capabilities

- Enterprise-wide, scalable, interoperable decision making information system development
- Management consulting services to deploy information resources
- Mapping and geographic information system applications
- Census 2000 and related geodemographic data access, management, and use applications
- Modeling, simulation, and forecasting applications
- Research and analysis supporting projects and program management
- Collaborative and information access and sharing solutions
- Distributed object, advanced middleware, and intelligent software solutions
- Multimedia and visualization solutions

Products

- Proximity component-based, scalable DMI resources-custom systems
- ProximityOne software suite
- ProximityModel
- Specialized demographic and geographic data resources

Services

- Decision making information seminar and workshop programs
- WebCourses: Mapping and GIS Applications Using Census 2000 Data
- Systems development including complete Web hosting services
- Research and analysis supplementing and supporting DMI requirements
- Operation of Census 2000 Data Access and Use Website (<http://proximityone.com/cen2000.htm>)

Clientele

- Domestic and international private and public organizations

Application Areas

- Business Decision Making Information Process Engineering and Capacity Development
- Neighborhood and School System Analyses
- Housing Market, Health Infrastructure Analyses
- Decennial Census and Geodemographics
- Mapping and Geographic Information Systems

7. About the Author

This document has been prepared by Warren G. Glimpse, founder and president of Proximity. Proximity is a business based in Alexandria, Virginia. Proximity develops, deploys, and uses decisionmaking information resources to help clients better formulate, manage, and assess strategy and operations. Proximity works with a wide range of clientele including businesses; Federal, state and local government agencies; universities; and associations. Proximity operates specialized programs focused on developing, accessing, and using geodemographics.

Warren Glimpse is a Ph.D. econometrician and former Census Bureau official. While with the Census Bureau he was responsible for Census Bureau data access and user services programs. Glimpse established the Census Bureau State Data Center Program based in part on his own experiences in Missouri.

Glimpse is an expert in issues concerning Census 2000 data access and use. See the Web site <http://proximityone.com/cen2000.htm> which provides general information, access to key data, and frequent updates on issues of general interest to the Census 2000 data user community.

Other experience includes:

- Developed official demographic estimates and projections for the state of Missouri and participated in the Census Federal State Cooperative Program for Population Estimates
- Developed the Columbia, MO GBF/DIME which became the prototype for the U.S. Bureau of the Census TIGER system – the most comprehensive digital map database for the U.S.
- Served as assistant chief for Census Bureau Data User Services; implemented many innovative programs to enhance data access and use; conceptualized and implemented Census Bureau State Data Center program.
- Served as associate director of the U.S. Office of Federal Statistical Policy and Standards where he developed a framework data access and user services for Federal statistical agencies and programs.
- Founding member of the Association of Public Data Users promoting systemic ways to expand effective access and improved usability of public data.
- Developed the School District Data Book for the National Center for Education Statistics (NCES), of the U.S. Department of Education
- Developed the 1990 Census School District Special Tabulation for NCES in coordination with the U.S. Bureau of the Census.
- Serves as advisor/developer to NCES for Census 2000 school district data development.
- Developed of the first set of national scope school district boundary files under sponsorship of NCES for use in mapping and GIS applications.
- Developed of ProximityOne software suite.

Contact information:

Warren Glimpse
Proximity
P.O. Box 3565
Alexandria, VA 22302-3565
(703) 256-9850
<http://proximityone.com>