

Providing GIS Products in the Public Sector

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Abstract

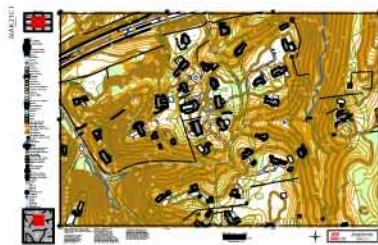
LOJIC made data available for purchase to the public and private sector in 1991. LOJIC's products include a street atlas, digital data, paper, and Mylar maps. How does a traditionally technical GIS department define who its private sector customers are and meet their customers' needs? LOJIC GIS customer's use data in diverse ways. Taking the time to find out what a customer's project goal is and finding the best GIS product to help that customer's reach his/her goal can save time and improve the value of GIS departments to the public and private sector. This presentation will look at how LOJIC has defined who purchases data in the private sector and how they are being served. Also the presentation will show how to assess a customer's true need and get through the "I need a map because the last department said I needed it" phase and make a product that gets the job done.

What are LOJIC's products?

The list of products has grown with the technology that produces them. All of LOJIC's products fall into three categories; hardcopy maps, digital data and internet maps. Hardcopy maps consist of custom plan/topo maps, property and imagery created in ArcMap 8.x to the customers specifications and a county wide set of one inch equals 100 feet and 200 feet scale 36"x24" standard mylars that are used to create paper copies. LOJIC produces a street atlas of Jefferson and western Oldham and Bullitt Counties. Digital data is available in six formats; DXF, GEOTIFS, JPG, AI files, Shapefiles, and Geodatabases. The data is given to the client on a CD or floppy disc. An import translation is provided with the DXF data that includes symbology. The LOJIC internet site provides five interactive map applications and an online product catalog of thematic atlas maps in pdf format for download or printing.



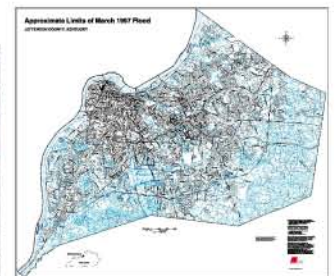
Custom Plan/Topo Map
Showing FEMA Floodplain



Standard 100 scale Map Sheet



Custom Imagery



Thematic Atlas Map

Complete LOJIC Products List

Online Products

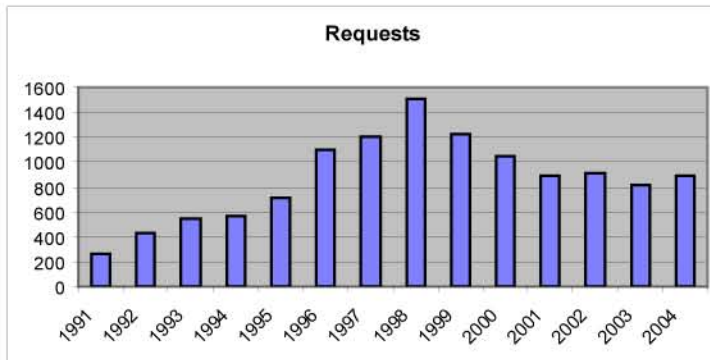
Street Atlas
Thematic Maps - 8.5 in. by 11 in.
Thematic Maps - 4 ft. by 3 ft.
Federal Datasets

Specialty Products

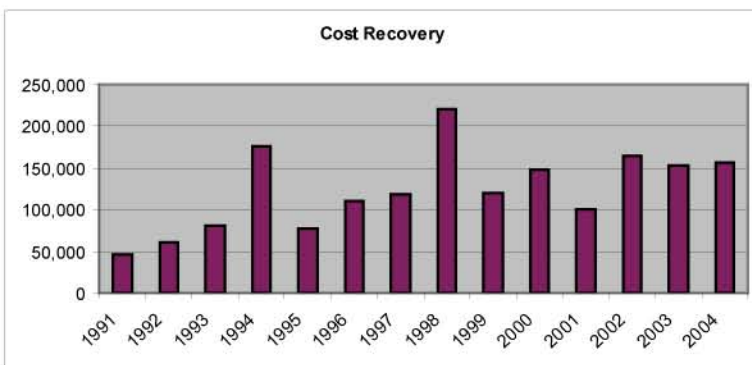
Standard Maps
Custom Maps
Digital Data
Aerial Photography
Red Book Atlas
Street Centerline Data Package

How much cost recovery do we generate?

LOJIC data fees cover time, materials and some data cost recovery. Since the beginning of data sales, LOJIC has recovered 2.2 million dollars. Fees for LOJIC data range from two dollars for a Standard Map Sheet at a non-commercial rate to a several thousand for commercial digital data. The bar chart showing requests and cost recovery indicates that request are dropping off while cost recovery is not. This change coincides with LOJIC data becoming available on the internet. Data available to the private sector is priced as commercial and non-commercial. Commercial pricing is in accordance with Open Records KRS 61.870 - 61.884 section 4 (a) (see reference at the end of this paper for more on Open Records Statutes and LOJIC data prices). Customers who use LOJIC data for commercial purposes pay the recovery cost of the data while non-commercial prices cover time and materials only.



There have been 12,076 request recorded from customers. This total only tracks the amount of products created. LOJIC also creates estimates for customers that can be ordered at a later time. Creating an estimate requires the same assessments as creating a product and often as much staff time.



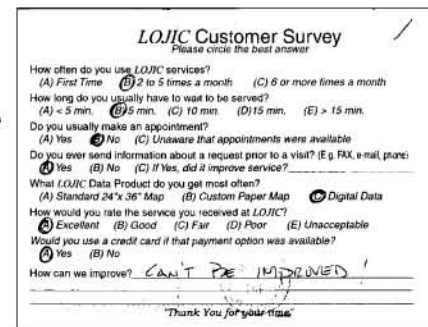
The cost recovery chart tracks the amount of data fees LOJIC has collected over the past fourteen years. The total collect to date is \$2,204,049. The total is for fees collected on products provided to the public.

Who are LOJIC customers?

Customers of LOJIC are anyone who needs maps, data or technical services. Customers include engineering firms, architectural firms, home owners and law firms. LOJIC customers were surveyed to determine who they were and how service could be improved. From our customer survey we found the average customer purchases data two to five times a month. Customers usually wait about five minutes in the lobby before meeting with staff. Frequently customers send information in advance about the data needed. Service is considered excellent and payment is in the form of check or cash. Credit cards were not accepted when the survey was taken but the service will be available in the near future. These are the average customers. Actual GIS customers are more varied and complex than the average. There are three types of customer contact; customers with appointments, customers who order data via email or fax and walk in customers. Customers with appointments have most likely used LOJIC services before. This group includes law firms, engineering firms, surveyors and architects and they know what LOJIC product they need. The most complex customer is the walkin customer. Often this customer has been referred by another government department and often is unsure as to what GIS product is needed.

Customer Survey

The survey was written and distributed by LOJIC staff. The questionnaire was put in the product without the customer's knowledge. To avoid bias the survey was printed on a self addressed stamped postcard. A 33% return rate was achieved. At the same time the written survey was being conducted several meetings were held with technical staff of local engineering firms and the LOJIC staff. The goals of these meetings were to find out how AutoCAD handled the data and if there were ways to make the translation easier. The outcome of the meetings was to reformat the DXF data from an exchange file for each GIS layer into a combined DXF file with drag and drop AutoCAD import capability. The new DXF translation and instructions can be downloaded at www.lojic.org/techhelp/downloads.htm.



LOJIC Customer Survey

What do GIS customers want?

All customers want their project completed or problem solved as fast and inexpensively as possible. If GIS data will help do this they want GIS data. Otherwise GIS data has no value to them. Very few customers come to LOJIC to get a map because it is cool. Taking the time to find out what the customers project goal is and finding the least expensive product to accomplish that goal is what customers want from a GIS department.

How to assess or GRAB a customer.

Customers that have been to LOJIC before usually know what they want and it is a matter of taking an order for a product. Customers that have never used LOJIC data need to be assessed to determine their needs. The acronym for the assessment is GRAB; Goals, Responsibility, Attitude, and Behavior. This is an interactive assessment that gives you a chance to find out what the new or one time customer really needs rather than what they may be asking for. The following is a breakdown of the GRAB method.

Goals. What is the goal of the customer? Do they want a map to decorate their room or office? It could happen but most likely not. The customer usually has a problem they need solved and GIS data will help do it. Your goal is to find out what they are trying to accomplish and find the best and lowest cost product to reach their goal.

Responsibility. What is the level of responsibility for the person requesting the data to the project? Are they a runner for someone else? Is this the property owner? Finding out how much the person with the request cares about the project is of great value. If they are a warm body sent down to get a map, they often come back wanting what their boss really wanted. This can be avoided by calling the responsible party.

Attitude. What is the attitude of the customer? Are they angry, impatient, or in a good mood and who isn't all three of these when needing GIS data? Often a new customer will be evasive in answering questions. The customer often is incorrectly informed about what LOJIC can do and will insist that the incorrect information is correct. Often the incorrect information has been given to the customer by another department that has a limited GIS understanding.

Behavior. How is a customer acting? This is closely tied to attitude but a good indicator of how much time I will spend with a customer in the lobby versus in my workspace. A person may have a poor attitude but their behavior indicates they are not acting on it. The reverse is also true. There have been some very odd requests made by some very difficult people at the LOJIC products department. It is important to look out for ones own safety as well as the safety of co-workers.

When a customer has been assessed it is very easy to guide them to the correct product. A good example is a new engineering firm needs data for a subdivision. After assessing their goals I would direct them to digital dxf data. This would be the most versatile and cost effective data for the job. The commercial fee for dxf data on a sixteen acre vacant property would total \$261.00. The fee breaks down to \$75.00 for labor, media and system resource costs and \$186.00 for data cost recovery fees. The product will include all plan/topo data, current property lines and aerial photography. The fee includes reproducible rights which gives permission to make as many copies as needed to complete the subdivision. The flip side of this example would be when the neighborhood association next door to the new development wants to stop the same subdivision project. I would guide them to the 100/200 standard map sheets. The standard map sheet is on a 36" by 24" piece of paper. The quality of analysis for this customer is much lower and the capability to make multiple copies is usually limited. I may suggest getting several copies at \$2.00 each. The standard map sheet has the plan/topo layers and is a non-reproducible product. The neighborhood group usually has a low tech approach to the project and hardcopy maps do a good job of showing the current land use of the area. These customers have very different attitudes toward the goal of the new subdivision and their behavior, attitude and responsibility to the project are polar opposites but GIS data can help both reach their respective goals.

For information about KRS61.870 Open Record:

www.lojic.org/products/pdfs/krs61.pdf

For more about LOJIC reproducible rights:

www.lojic.org/products/pdfs/recreq.pdf

For information on how LOJIC prices data:

www.lojic.org/products/pdfs/feesched.pdf

For information on the GRAB method:

"Golden Nuggets Readings for Experiential Education" edited by

Jim Schoel and Mike Stratton, 1990 ISBN 0-934387-09-5

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