

# **Location in Telecommunications: Mapping Better Decisions**

*Baseline Business Geographics Inc. Whitepaper*

## **Introduction**

Telecommunications companies handle large amounts of customer information that relate to geographic locations. Contact centers need their Customer Service Representatives (CSRs) to be able to have an accurate and efficient way of referencing customer location to the provider's service coverage, so that callers to these centers are provided with the right information that they are looking for.

The ability to provide potential or current customers with accurate information may mean the difference between obtaining and retaining customers for the future or not.

Every part of an organization reflects the image of the company as a whole, and telecommunication companies are a prime example. Contact centers are the central meeting point between customers and the organization, and this is where most customers form their first impression of the company. The contact centers must operate efficiently and effectively to allow the rest of the organization run smoothly and profitably.

## **Telco Problem**

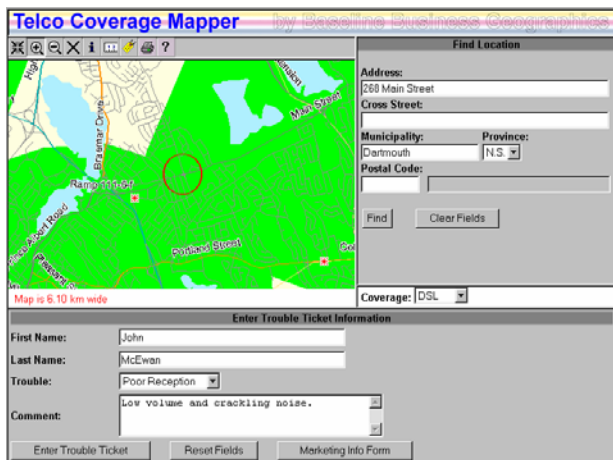
Often times, telecommunications contact centers use separate hard copies of roadmaps and coverage maps. Many times, the maps are in different scales, and it is difficult for a CSR to be accurate when conveying location information to customers. This can be a slow and cumbersome process, and the CSR's confidence level of providing callers with accurate information is questionable. Even if the information given to a caller is accurate according to the maps, there is a great possibility that the information on the maps is outdated. Other departments, such as marketing and engineering, have no control over who is using what version of what map, and the efficiencies of the whole organization is left vulnerable.

Coverage information changes monthly, weekly, even daily due to build out power failures, disasters, network trouble, and new interconnection or reseller agreements. Using Coverage Mapper, information is kept current and shared frequently to ensure questions are properly answered and issues adequately handled. Coverage Mapper eliminates paper maps, guess work or sending someone to the location to perform a test.

## Solution

With Coverage Mapper, telecommunications companies can now employ a mapping solution that brings together roadmaps and coverage maps - a unique advantage. Together with company data and imported street data, CSRs can perform searches by municipal name, street address, street intersection, zip code and any other method appropriate for the telco.

Coverage Mapper enables telecommunications companies to provide the best, most comprehensive customer service available today. Coverage Mapper enables companies to leverage their network coverage information to integrate engineering with marketing and customer service departments by providing everyone in the organization with a method of communicating accurate network coverage information to its most important audience – the customers. It gives Customer Service Reps instant access to live coverage data and a super-fast address finder. For example, if a customer calls to inquire about DSL service, the CSR using Coverage Mapper can quickly pinpoint the caller's location and immediately relate that information to the coverage footprint and provide an answer. Therefore, a caller's service question is answered within seconds of placing his or her call. Coverage Mapper captures and records this valuable information for later analysis by other departments. The engineering department will use it to share planned network expansion and determine which services are in demand in specific geographic areas, and the marketing department will use the information to plan promotional activities. Location details from callers may also be used to identify where demand for service is coming from and can be used in your organization's marketing and sales efforts.



Coverage Mapper is designed so that designated staff and dealers are able to use the application, as well as any other department that recognizes the benefits of integrating location into their processes. For example, Coverage Mapper has the capability of providing coordinates to trouble tickets and recording other inquiries for products and services with a location coordinate. Therefore, maintenance crews can take action with the information provided from the trouble ticket – the same information recorded by the CSRs. This kind of one-to-one service represents a significant competitive advantage, letting companies maintain a personal relationship with each customer.

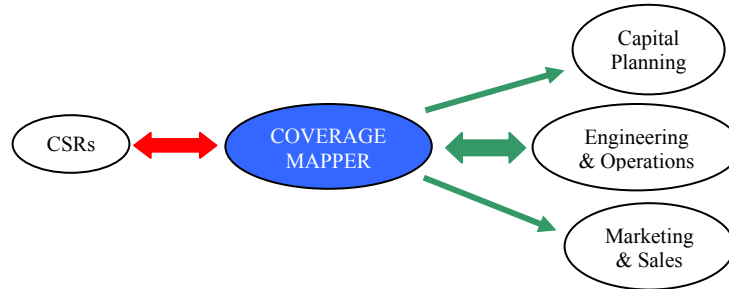
## Benefits

- Quickly locate customer;
- Share real time information pertaining to service coverage;
- Visually verify coverage information;
- Determine if a customer location is within a current or planned coverage area;
- Reduce average call time;
- Increase customer satisfaction;
- Ease of communication through the organization by entering trouble tickets with location information and sharing maps containing database information;
- Provide accurate answers about the status of the network during service-affecting outages;
- Pass trouble and marketing information to existing databases;
- Pre-sales qualification;
- Assist customers by finding the nearest retail location or service center;
- Target marketing and sales efforts;
- Enhance e-commerce applications.

## Functionality Across Departments

The implementation of Coverage Mapper can help increase the efficiency and productivity of all departments in your organization. It can facilitate decision making for:

- Customer Service
- Engineering/Operations /Maintenance
- Marketing/Sales



### Customer service

- Correlate customer information to networks;
- Provide answers to the customer on service availability;
- Provide accurate answers on the status of the network during service outages;
- Find the cause of customer problems;
- Discover where customer churn is occurring the most;
- Produce trouble tickets to forward on to operations so that the customer problem can be fixed and network performance can be fixed;
- Only create trouble tickets to bona fide problems, leading to operational savings;
- Reduce average call time, dramatically reduce hold time and elimination of call backs → Increase customer satisfaction;
- Reduce CSR strain;
- Allow for proactive customer care – resolve concerns before they become problems.

### Engineering/Network Operations/Maintenance

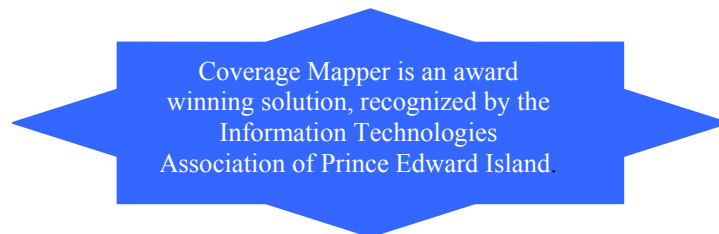
- By making the recorded trouble tickets mappable, staff respond more efficiently and effectively to problems;
- Prioritize network maintenance and improvements according to clusters of problems within a given area;
- Create operational efficiencies, save money and improve customer retention due to network improvements;
- Maximize network reliability and performance;
- Pass network quality and operational data to the call center so that customers can be provided with the most up-to-date network performance and coverage data;
- Expand networks according to the greatest customer demand;
- Set up new towers according to the origin of the most frequently reported trouble tickets;

## Marketing/Sales

- Qualify market leads by determining if service can be provided at a certain location;
- Target trends, identify market opportunities and shorten the sales cycle;
- Track requests from interested prospects for planning future rollouts;
- Use information within the database and relate it to geographic coverage to make better decisions about marketing expenditures.

## **Advantages**

- Reduce costs with process & workforce efficiencies;
- Reduce costs associated with manual paperwork;
- Improve accuracy of communication throughout all levels of an organization;
- Extend vital information to your dealer network or about your dealer network;
- Answer coverage-related questions quickly;
- Consistently meet customer objectives;
- Simultaneously improve service levels while reducing costs;
- Build stronger relationships with customers and increase customer loyalty;
- Increase efficiency from real time status reports;
- Improve responsiveness and decrease response times;
- With each customer, the telecommunications provider gets meaningful subscriber data, which can be useful in updating customer profiles and determining target markets;
- Increase richness and scope of content;
- Satisfy customers' needs and make it harder for the competition to attract them in the future;
- Realize a substantial return on investment.



## **Features of Coverage Mapper**

*Easy Customization* - New interface uses HTML frames that can be placed on various HTML pages or in a single interface page. These pages can be easily customized to the look and feel of your preference. The application is customized to include more or less functionality, depending on your preferences.

*Scalability and Flexibility* - Efficient back-end request handling and resource sharing allow multiple requests to be handled by multiple users. This new architecture provides more flexibility in implementation and provides scalability from tens to thousands of users. This application is easily interfaced with other applications.

*Administrator Tool* - Server-based administrator tool makes altering parameters and diagnostic checking a smooth and logical process.

*Comprehensive And Easy-To-Use E-Commerce Applications* - Coverage Mapper provides you with the option of running the application online, so that it can provide 24-hour service information to your customers. This will enable your customers to obtain information about coverage areas, investigate problems with their service, or find the nearest store or service center. Such e-commerce initiatives also allow companies to obtain customer feedback to improve service quality and determine new coverage requirements.

*Limitless Data Inputs* - For instance, a telco may want to include EAS boundaries and cellular site locations.

*Dealer Locator* – Show the locations of your dealers or retail outlets

*Coverage Layers For Multiple Technologies* - E.g. 1x, digital cellular, trunk radio, cable - can be shown by selecting them from a simple drop-down list.

*Search Tools* - The tools available to the CSR include a ruler for measuring distance, an Info tool for pulling data from the map and a Print button to print a copy of the map. The address search can be done by street address, street name, street intersection, community or zip code. Coverage Mapper can be customized to include additional or less functionality if required.

*Conversion Tools* – Tools for measuring distance and area can convert the values between imperial and metric values.

*On-Line Help* - Reduces training costs to a minimum and simple point-and-click operation makes the system a joy to use.

*Data Collection Frame* - A marketing data collection frame will collect data on where customers and prospects are requesting service, enabling telecommunications providers to efficiently expand networks.

*Data Updates* - Yearly maintenance will keep Coverage Mapper data current.

*ASP* – We can host the server for you, or you may purchase the license yourself.

**Running on a standard web browser with no plug-ins or downloads, the cost of rolling out the system is negligible and the benefits of increased customer satisfaction will be felt immediately!**