



**TOWN OF MILLIKEN
TOWN BOARD OF TRUSTEES
AGENDA MEMORANDUM**

To: Mayor Woodcock and Town Board of Trustees		Meeting Date:	
From: Martha Perkins, Community Development Director		Wednesday,	
Via: Kent Brown, Town Administrator		July 27, 2016	
Agenda Item #	Action:	Discussion: X	Information:
Agenda Title: Staff Purchase of Sanborn's GIS Services			
Attachments: Sanborn's Proposal			

PURPOSE

The Town of Milliken plans to purchase GIS web based software program called Sanborn Town™ which includes the setting up of a GIS site providing access to the public on the Town's website and allowing Town staff with Sanborn's assistance to load and access the Town's parcels, buildings, utilities, streets, aerial imagery, and other location specific or spatial information.

BACKGROUND

Sanborn is a company known for mapping. The company was originally created to assess fire insurance liability with detailed town and building information in approximately 12,000 United States town and cities from 1867 to 2007. More recently, the company is known as one of the largest geospatial firms in the United States providing high resolution aerial maps and survey data.

In addition, Sanborn has created a low-cost and simple to use GIS web based software program called Sanborn Town Maps™ that utilizes ESRI, Autodesk, and other Open Source software. Sanborn will help staff load data from various sources to create a GIS database for a fee of \$10,000. The company will also continue to update, maintain, and host the data for \$700 a month.

A GIS database is created using location specific data that is linked with other data. Similar data is grouped into layers. For example, typically parcel data is one layer; streets and roads are a layer; utilities are a layer, topography is a layer, aeriels are a layer. These layers can be "laid on top of each other" to create maps or to access multiple types of information attached with a specific coordinate such a parcel of land. A geographic information system or geographical information system (GIS) is a system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.

Sanborn will create the Town's GIS database so it can be accessed through the Town's website. The Weld County Property Portal is a good example of an online GIS database, which is located at: <https://www.co.weld.co.us/maps1/propertyportal/>. The database will include security to allow the public access, while allowing staff to use the database for more detailed specific information.

Sanborn's proposal (attached) outlines the steps involved in setting up the database, including data gathering. Weld County's GIS staff shares with the Town three-dimensional topographic aerial maps and surveys of both surface terrain elements and man-made structures along with other County specific data. Because Sanborn has access to such detailed aerial maps, they believe they can populate much of utility and street database layers without requiring staff to map the GPS points. In addition, a lot of data exists on the public domain. The setup of the GIS database includes training, an initial Sanborn Town GIS database and then, after staff's review and changes, a final GIS database.

After the database is created, then Sanborn will continue to maintain and host the database on their servers for a monthly cost of \$700. These on-demand GIS services include adding new data and updating existing data. The Town specific data will remain the Town's and will be accessible 24 hours a day, 7 days a week all year long.

BUDGET IMPLICATIONS

The creation of the Town's GIS database will be \$10,000. The monthly fee of \$700 (\$8,400/annually) pays for on demand GIS services. This money is already budgeted in Community Development's 2016 budget with \$25,000 in professional services for GIS assistance.

Because the database can be used by the public it can be used for economic development to showcase properties, businesses, and share Town related data. Town staff is currently tracking a lot of location specific data by hand and creating maps showing water certificates by parcel, building certificate of occupancy dates, maintenance dates for road segments, zoning ordinance numbers, etc.

In addition, the Town's water and sewer lines need to be located and mapped since many of the Town's as-built drawings are wrong. Staff uses hard-copy aerials that show general utility locations with different colored lines. Staff has to look at an overall map to find the section map that may have the information they are looking for.

In summary, combining all of the Town's spatially related information into one dynamic database should save staff hundreds of hours of time after the initial setup of the database. The online database access should acknowledge the Town's interest in using technology and innovation to provide exemplary customer service and high quality development.

Town Map Proposal

Sanborn's Interactive Town Map

Sanborn has been creating maps since 1866, longer than any other company in the United States. We've been gathering information and mapping large and small cities for more than 150 years. Sanborn has realized that the emergence of GIS and mapping has largely ignored the needs of small and mid-sized towns, which have the need for GIS and maps but have limited budgets and staffing resources. With our new Sanborn Town Map service, we have removed the heavy cost and sometimes insurmountable staffing issues for using GIS at a local basis, and made it accessible for all.

The Sanborn Map Company, Inc.

Address	1935 Jamboree Dr., Suite 100 Colorado Springs, CO 80920
Telephone/Fax	(719) 593-0093 / (719) 528-5093
Internet Address	www.sanborn.com
Year Established	1866
Office to Provide Services	Colorado Springs, Colorado (Corporate Office)
Other Offices	▪ Pelham, NY ▪ Charlotte, NC
Type of Ownership	The Sanborn Map Company, Inc. is a privately owned company incorporated in the State of Delaware, U.S.A.
Registration	Sanborn is licensed to do business in the State of Colorado, under ID number 20011196564.
Point of Contact	JEFF SPECHT SANBORN ACCOUNT EXECUTIVE (970) 339-5514 office – (970) 391-5511 mobile jspecht@sanborn.com

Sanborn Town Maps Include

- Easy to use (only a web browser) - Training included.
- Works on computers, tablets and phones (although phones are not recommended for every application due to detail of site and phone screen size).
- Centralizes dozens of available digital layers at no extra cost, plus we work with your staff and consultants to bring other city-owned layers into the online viewer.

- A variety of Town Map Sites are included, with **public access, password-protected staff access, and password-protected administrative sites.**
- Online access, 24-7-365.
- You own the data. When you, or a consultant, need to use this data, it is easily forwarded.
- Access to the full line of Sanborn value-added services. City Sets, parcels, buildings, conversion services, streets, centerlines, and aerial imagery (either custom or Google based).
- Ideal for shared systems with ISDs, economic development, chambers, and historic groups. If desired, we will work with you to divide the cost and use of the system.

Sanborn's Town Maps program is a great way to begin enjoying the benefits of GIS.

The Town Map Program Overview

- Step 1: Hold a kickoff meeting and site visit to collect data and explain the process.
- Step 2: Build the draft site, which includes gathering digital data from internal departments, external contractors, and other available sources.
- Step 3: Review and test the draft site. This step allows for changes based on City preferences.
- Step 4: Finalize Town Map sites. Sanborn will fine-tune the levels of access for the desired users.
- Step 5: Provide onsite and/or remote training for staff and other selected users.
- Step 6: Hosting, with a monthly fee for storage of up to 20 gigabytes.

Monthly or Annual Subscription Fees Details

This cost includes 24-7-365 access and daily backups in our secure hosting facility. Each month, or more often if needed, you send us newly updated shapefiles, and Sanborn loads the data and integrates it with the existing site. Updated, integrated data is available within days of receipt, or earlier in an emergency. Our fee includes online assistance to ensure the data is incorporated correctly.

TOWN MAP PRICING:

You select one of the following price plans depending on how Severance would like to budget.

Cost		
Pricing Options	Setup Fee*	Monthly Hosting
Town Map Fees	\$ 10,000	\$ 700
*2/3 upon award and 1/3 on acceptance of Town Map Site		
Note: Google API, which includes Google Streetview, is free for public facing sites (not password protected). Google API may be added at \$10,000 per year for internal sites.		

ON DEMAND GIS SERVICES:

Sanborn regularly enters into GIS maintenance contracts for clients, which do not have, or do not need a full-time GIS staff, to make changes to layers under a separate maintenance contract. This is a fast and less expensive way to keep your GIS layers current and correct. You set a contract amount and then any small or large GIS services can be done quickly and with minimal time and effort, keeping your program on track with minimal delays. You provide the project parameters, with Sanborn's assistance if needed on the most effective way to accomplish each task and we will quickly draw up a proposal.

These prices include simple to complex pricing schedules. Program Managers are utilized mostly for larger, more detailed/complex programs, while more simple GIS services, not requiring a PM, will be priced based on the technician's hours.

Appendix A: Sanborn Town Maps™ Process

Sanborn Town Maps™ Scope of Work

The Sanborn Town Maps™ process involves minimal effort on the part of staff members and officials. Sanborn will provide step-by-step guides to the process, documentation of all decisions, checklists for data layers requested, and input on the look and feel of those data layers.

- Step 1: Hold a kickoff meeting and site visit to collect data and explain the process. Data for the site must be in a CAD, shapefile or digital format useable in GIS systems.
- Step 2: Build the draft site, which includes gathering digital data from internal departments, external contractors, and other available sources.
- Step 3: Review and test the draft site. This step allows for changes based as needed.
- Step 4: Finalize the Sanborn Town Maps™ sites. Sanborn will fine-tune the levels of access for the desired users.
- Step 5: Provide onsite and/or remote training for staff and other selected users.
- Step 6: Hosting, with a monthly fee for storage of up to 20 gigabytes.

Kickoff Meeting

The kickoff meeting is an excellent way to get your project off to a productive start. Sanborn's representatives will meet with the Town's project manager and any staff assigned to your project team to review the functionality and scope of work (SOW). The Sanborn team will collect and discuss:

- The top banner design options, with Town's page background wording, color and logo.
- Show specifications for how data sets are published.
 - Scale dependency: when layers are made visible
 - Display:
 - Initial: What area is displayed when connected to the site.
 - Zoom Out/Zoom In
 - Jump To initial display
 - Raster and vector data
 - Symbols: Which symbols are to be used? There are standard symbols but in some instances, new symbols may be desired.
 - Transparency: How layers are viewed on top on of other layers.
 - Folder and layer names
 - Patterns and colors for various layers like zoning or districts.
 - Area coordinate system: a standard is chosen so that all data is in the same geographic projection.

- This projection should also be used by all consultants.
- Measuring units
- All possible layers to be displayed (see list under Data Gathering below).
- Determine which layers will be set up for search functions, normally addresses and parcels.
- Sanborn Town Maps™ site:
 - Public site and data to be displayed.
 - Staff site (password protected) and what layers are shown.
 - Any additional, and more restricted, password-protected sites for EMS, police, and utilities only.

The initial meeting will discuss the first draft of all aspects of your site and put this into a more detailed SOW for both the Town's and for Sanborn staff. This document is the most time-consuming aspect of the process. Once these decisions have been made, the majority of the look and feel of your site will be determined.

Data Gathering

Sanborn will gather all digital data you select from the following sources.

- **Public domain sites:** These are scattered through dozens of federal, state and local agencies. The data is meant to be shared and used by municipalities.
- **City and local utility data:** These are often found throughout the various departments of your agency. Since your digital data is not combined on one site, you will find that vast amounts of viewable data are contained in various departments. Sanborn will assist in identifying and gathering these internal data layers.
- **Consultant data:** Often consultant-created digital layers for subdivisions, zoning, comprehensive plans, or engineering projects exist. These should be the property of the Utility Districts, and Sanborn will work with you and your consultants to identify and gather these valuable datasets.

Once the various sources of data are gathered, we combine all existing digital layers in one location. The following table illustrates typically available layers for municipalities. A more complete check list of data layers will be provided at the kickoff meeting, customized to data sets available in the STAFF region.

Digital Layers	
Base Data	City Limits, Parcels, Orthos (aerial photography), Addresses, City/Parish Boundaries
Local Data	Buildings, City Facilities, Utility Facilities
Transportation	Federal, State and Local Streets, Railroads, Oil and Gas Pipelines, Evacuation Routes, Bridges
Planning	Census
Utilities	Gas, Water and Wastewater, Water Wells, Septic
Geography	Streams, Rivers, Ponds, Canals, Floodplains, SURRGO Soils, HUC's and Elevation
Districts	Utility, Fire, Voting, Recycling, School Boundaries, and Solid Waste Pickup Schedules

Draft Sanborn Interactive Town Maps™

Sanborn programmers and GIS technicians will take all of the specifications and data layers that have been gathered and develop a draft interactive site for the Town. This involves taking all digital layers, placing them in your chosen projection, and ensuring the data overlays as closely as possible to the base layer.

The base layer is normally public domain orthophotos (aerials), streets and parcels, but the Sanborn Town Maps™ also allows public users to view the data using Google maps.

This portion of the Sanborn Town Maps™ development will include interaction between your staff and Sanborn staff to clarify any data questions that may arise.

Review of Initial Sanborn Town Maps™ Site

Once Sanborn has created the initial Sanborn Interactive Town Maps™ site, we will review the site with your team to create a list of changes to the items listed in Step 1 above. The review is limited to the functionality of the Sanborn Town Maps™ software. There is no guarantee that functionality not presently available on the current Sanborn Town Maps™ viewer will or can be added.

Your enhancement ideas are important to us and this aspect of the process may identify additional functionality that Sanborn will deploy in future versions of the Sanborn Town Maps™ viewer. This decision is a balance between the need of such enhancements, and the impact on the overall ease of use, which is critical to widespread use of the Sanborn Town Maps™ viewer.

Final Town Maps™

Sanborn staff will take and enact all agreed upon modifications to the site, and then publish all selected Sanborn Town Maps™ sites. At this point, District staff will have a final chance to review the Sanborn Town Maps™ sites, and issue an acceptance of the site as designed.

Staff and Stakeholder Training

Town Maps training is for all staff, commission or board members, and elected officials. Agencies are encouraged to include stakeholders important to the community. These may be press representatives, elected officials or commissioners, Chamber, ISD staff, and community volunteers. Once the site is finalized, Sanborn will provide training in one of three methods. These are listed in order of client preferences. Our Town Map Program is a simple and straight forward application, thus the Town Map video is normally the preferred method since a staff member can become trained in minutes at their convenience and anywhere. Web training is the second best option, since all attendees can use their own computer at home or office for previously scheduled training. Onsite training is rare due to the client requirement to provide a room large enough for 15-20 people with internet access and computers. Most Town Map Users find that the online and web training are easiest and most effective.

1. Online Help/Training Video: Sanborn will provide a link to a comprehensive Town Maps User Guide Video, which shows all functionality and tools available to STAFF, and how to use these tools. This video may be placed on your website as a link for access anytime.

Should any specific training questions remain, your POC, will be happy to host a web meeting to answer your questions or show you the answer.

2. **Web Training:** Web training is the second most popular option and can be set up for staff or others during normal business hours. Web training can also be scheduled periodically when new employees or new stakeholders join your community, or if the online video does not fully answer a question.
3. **Onsite Training:** This option can be provided, but is rarely used. In order to provide onsite training, the Town will need to provide a location where 5 to 20 people can gather with their laptops or desktop machines to train. The training itself lasts about 1 hour, and 1½ hours are allocated for each training session. Sessions are typically limited to two morning sessions and two afternoon sessions. If applicable, a training session may take place at a council meeting or something similar. All training should be scheduled over 1 to 2 days.