

Key Objectives:

- improve bidirectional communications with the public
- provide data for decision making
- improve transparency of city decisions and work
- return public access to historical public documents
- improve consistency and accuracy of city work
- provide institutional memory and public access to city records
- reduce long term operational costs

A primary objective that encapsulates the project design thinking is a desire to minimize city long term costs by embedding business logic in the information tools that are part of the Yachats Database system. Business logic can be defined as the rules and assumptions that define what needs to be done; when; what information is needed, who is involved; how communications are to occur; and the timing for each step in the process. The logic can include calculations that are required, rates/amounts that are appropriate, and penalties that might apply. Business logic can include triggers that respond to events. For example, when someone submits a form, the system can be told what to do; who to notify; send a message in reply; create a record that is visible to the public; enable tracking of work and actions.

A good example of business logic is a complaint system. When a complaint is submitted using an on-line form, it will include a property address. This makes it possible to track where and when the complaint occurred and the type of complaint. A note could be added to a web page with information about the complaint. (Where, when, type of complaint and status). Anyone can monitor the status of open complaints. When the status changes, a message can be sent to the person filing the complaint and the complaint page would be update automatically. A record of all complaints would be maintained. Dynamic reports could be generated that summarize complaints by address, street, zoning, type of complaint, business type, subdivision, neighborhood, date or status (open or closed). Report data can be exported to Excel for further analysis. The only staff involvement would be the time required in responding to the initial problem. All the record keeping and notification would be handled by the database and the business logic. That logic could include specific instructions included in the complaint ordinance. There would be tools that allow staff to update business logic when ordinance changes are approved without having to write new code. No off the shelf software will ever offer this level of flexibility and customization. The current web site vendor has been unable to replicate Yachats business logic applications.

A core concept around the data system was to reduce or eliminate staff time to manage data while providing the council, commissions, the public, and staff access to information for decision making or operational management. One full-time position was eliminated when the city implemented the business license and tax reporting system which both use business logic customized to fit Yachats. This saved around \$50,000 a year in salary and benefits when one position was eliminated. Yachats can't afford to "staff up" like traditional cities. We need to think outside the box using technology so that citizen members on governing bodies (council, commissions, & committees) have access to data that helps them understand what is happening

and can do research and analysis without staff assistance. It is unlikely you would find a system like this elsewhere because Yachats' small size makes it possible to implement a fully integrated data system.

Not many people know about the property inventory that has been developed for Yachats. It contains data on all the lots in town. It makes possible the ability to ask property related questions. Here are a few examples.

How many undeveloped lots are there? What is the zoning of these lots?
What is the zoning of all the vacation rentals? Where are all the vacation rentals located?
What is the water consumption for all the houses on a given street?
Where are all the lots with septic tanks?
How many houses are in the local or distant tsunami zone?
Which streets are gravel, paved, private? What is each street width and right-of-way?
What houses are served by each city water tank?
Where is the location of all business licenses?

This is just a small sample of the kind of questions that can be asked. Much of the data is static [tax lot number, lot size, address, water service, water meter information, street data, subdivision, neighborhood, tsunami zone, wetland, # of bedrooms, parking spaces, etc.] and requires virtually no staff time to manage.

Some information is dynamic [water use, assessed value, license info, business info] and was updated in batch operations requiring minimal staff time to upload a spreadsheet once a month or year. Business information is entered and maintained by each business.

The database can contain telephone numbers and e-mail addresses for every piece of property and business in Yachats. It is fairly easy to be able send messages to everyone on a given street, subdivision, commercial zone or a number of other field options in the database.

The items so far only describe a small range of the capabilities that are possible. The key is to maintain one set of data that many applications can use. To be successful there needs to be a clear policy statement that the Yachats Database is the master property and user record for the city of Yachats. Currently, the utility billing system is the master property record but it does not include lots that do not have water service and is not accessible by other city applications and it does not include any non-water related data like zoning, property size, neighborhoods, wetlands, streets or tsunami zone to name just some of the community elements.

All of the data still exists and the database is still in use to provide the business license application, tax reporting and collection services. A general restart process will require some work to bring older code current, upgrade the databases and update property records. The business license code upgrade is 80% complete and could be implemented quickly.

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