

TOWN OF REHOBOTH

148 Peck Street
Rehoboth, MA 02769

TOWN MAPS REVIEW COMMITTEE

Minutes of the November 30, 2016 meeting

Attended: William Costa, Chairman
Robert Materne, Vice Chairman
Karl Drown, Clerk
Ted Ballard

Absent: Jim Muri
Charles Procopio
Steve Silva

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The meeting was opened at 7:00 p.m. by William Costa.

The minutes of the November 2, 2016 meeting were reviewed and Mr. Drown accepted the position as Clerk.

Mr. Ballard and Mr. Costa (Mr. Ed Bertozzi was present at the meeting) met with Professor Mark Brickley of Roger Williams University and his students to review their progress in developing a GIS map. They showed a digital map of Rehoboth that was overlaid with the Assessors current Lot lines, locations of approximately 1,200 wells at their associated lot locations, and colored coded of each wells as to their depth. The students were also able to generate a bedrock overlay when zoomed, showed contour elevation lines but not their value. The students explained how they developed the map by down loading digital information from existing data sources and the Town of Rehoboth's Assessors current lots, and then generating digital well data from well information supplied by the Town.

Mr. Costa asked the Board members if they could review their department's data storage to estimate the volume of information that would have to be converted into digital storage. Requested that they look at the amount of file cabinets containing past history and the number of file cabinets required conduct daily business would be a start to determine the volume of data.

Mr. Costa shared a suggested procedure for the Board to review entitled "Planning a GIS" document which will be emailed to the absent members for their review and comments for the next meeting.

The next meeting was not determined.

The meeting closed at 8:00 p.m.

Submitted


William Costa, Chairman

TOWN OF REHOBOTH
TOWN MAPS REVIEW COMMITTEE

148 Peck Street
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November 30, 2016

PLANNING A GIS

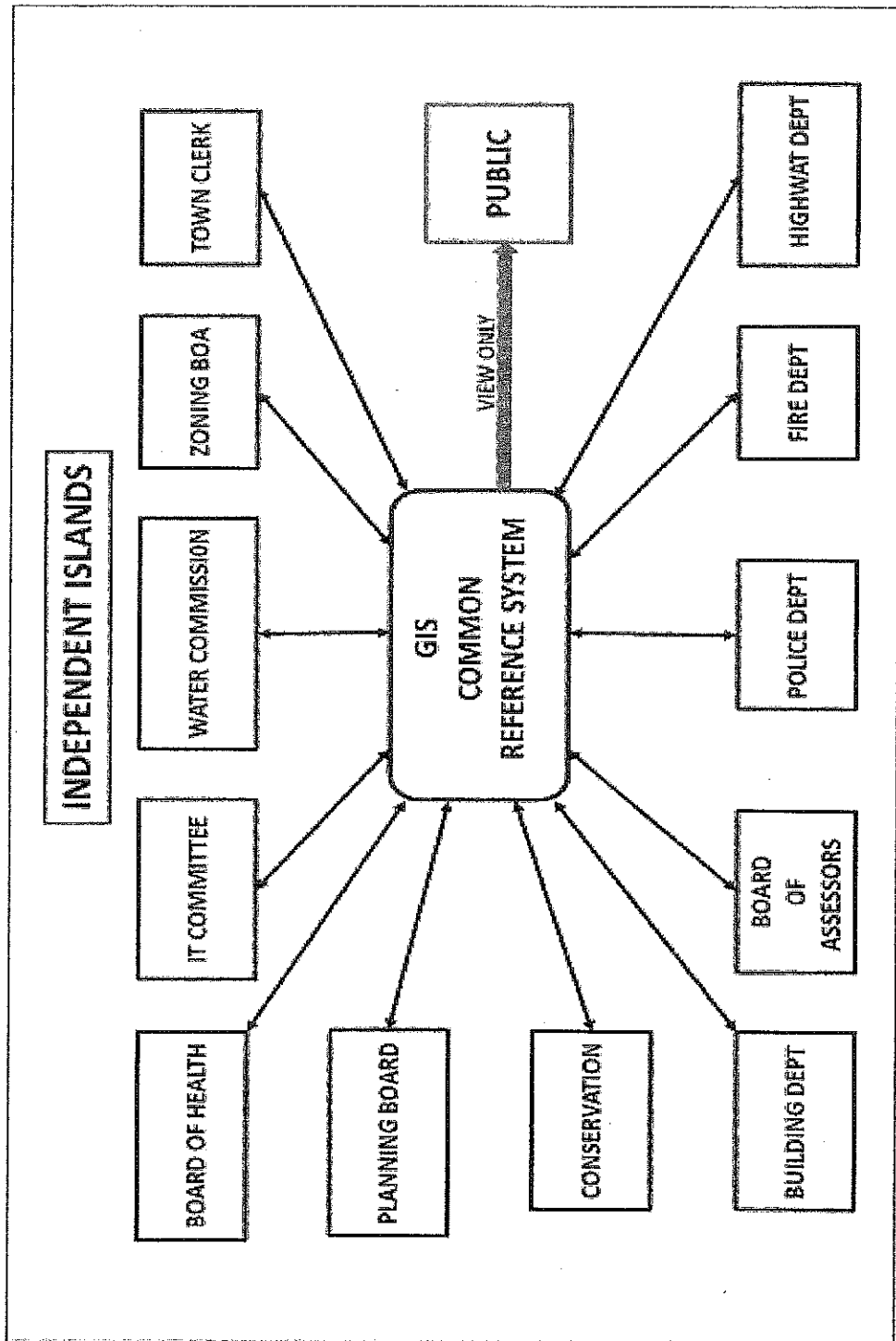
(How Good Planning Can Promote Successful GIS Implementation)

I have copied procedures recommended to generate a proposed GIS plan from "The GIS Book" by George B. Korte P.E., whose book is for "people who want to know about the selection, implementation, uses, benefit, and management of geographic information systems (GIS), but do not need to know all the technical details of how a GIS actually 'works'."

In Mr. Korte's Fifth Chapter, he explains the "Advantages of GIS over Traditional methods of Land Data Management" and reviews six of the major benefits of a GIS.

1. Map data is more secure and better organized.
2. Redundancy and other problems of multiple map sets are eliminated.
3. Map revisions are easier and faster.
4. Map data is easier to search, analyze, and present.
5. Employees are more productive
6. Map data is integrated through the organization.

Each of Rehoboth's various Departments, Boards and Committees may have different data reference systems which exist as "independent islands" of information. A GIS provides the opportunity to key all map and map-related data to a common reference system. The data used for reference purposes before is still available to the users but the data now is linked to a common



geographic reference system and become fully integrated into a common mapping database.

In Chapter 11, Mr. Korte discusses seven aspects of a GIS plan that needs to be part of any successful plan by sorting out the issues, strategies selected will have a tremendous impact on the design of the entire project. It will affect the time, energy, and cost required to implement it and if the GIS is to be use to its fullest potential, in will be integrated through the Rehoboth municipal government. The following are recommended components of a successful plan.

1. EXAMINE GOALS AND STRATEGIES: GIS is a significant venture and demands careful planning and requires any organization to examine its basic goals and strategies.
2. GUIDE THE IMPLEMENTATION: A GIS plan provides the guidelines for an organized, systematic, and efficient implementation of this new technology. It should document the steps to be taken, their schedule, and the persons responsible for accomplishing them. Such a plan can effectively coordinate the various components of a complex program.
3. FORECAST REQUIREMENTS: A GIS plan serves as the basis for developing budget request and staff requirements. It is the best means of ensuring that the present and future needs of all users will be met by the GIS being investigated or proposed.
4. JUSTIFY THE PROGRAM: An effective GIS plan can also help obtain prompt and full funding of the GIS program. GIS projects are characterized by large up-front cost, a significant time period before break-even, high risk, and often profound cultural effect of job changes

for the users. These factors combine to cause great concern among top-level managers and decision makers who must approve GIS funding. A good GIS plan can provide the level of understanding and confidence they need to approve the program.

5. SET GOALS: A GIS plan can define goals and thus lend a sense of direction and purpose to the GIS program. Goals help maintain the morale of GIS personnel as they encounter the problems and setbacks that can occur. Clearly defined goals also provide a means of measuring success. Demonstrated achievement can help justify further funding and continuation of the program, and give employees a sense of satisfaction and accomplishment.
6. INVOLVE USERS: Users need to play a responsible role in the planning, selection, and implementation of a GIS. If they do not take part in this process, the organization loses the opportunity to benefit from their experience. Employees who have no say in the way they do their work may resent radical changes, such as those associated with GIS. Thus, failure to involve the users can also create a sense of indifference, or even hostility, toward the new system. A formal GIS planning process will interview potential users for their needs, problems, and suggestions. This gives them a sense of "ownership" of the program.
7. THE COMPONENTS OF A GIS PLAN: A GIS plan should typically address all or most of the following topics:
 - Introduction and background to GIS
 - Summary of existing operations
 - Summary of existing needs and problems
 - General description of a GIS

- GIS hardware and software
- GIS database
- GIS data maintenance
- Data communication
- Staffing and organization
- Training
- Implementation phase and schedule
- Financial analysis

Such a plan describes the proposed GIS program, presents the justification for a GIS, and guides its implementation. It also describes the current operations and potential GIS uses, and contains a schematic description of the content of the GIS database and describes the source of the data. It presents a schematic configuration for the GIS hardware, and a general description of the GIS software and communication function required.

New staff positions needed to support the GIS should also be included, as well as proposed user training and support programs. The plan also presents the procedure, schedule, and budget for implementing GIS hardware and software, and for converting existing data to the format of the GIS. It relates the benefits that can be expected from the GIS, both quantitative and qualitative, and provides a cost/benefit analysis.

Where do we go from here? Develop "A Step-by-Step Guide to Selecting and Installing a GIS" (Attached).

William A. Costa Sr.
Chairman

