



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

To: Mayor Tokunaga and Town Board of Trustees	Meeting Date:
From: Martha Perkins, Community Development Director	Wednesday, March 25, 2015
Via: Kent Brown, Town Administrator	

Agenda Item #	Action: X	Discussion:	Information:
Agenda Title: Consideration of Approval of Geographic Information System (GIS) hardware and software			
Attachments: Quote for Desktop Computer			
Quote for Cables and Computer Monitor			
Quote for Online Subscription of Office 365			
Quote for ERSI ArcGIS Desktop Single Use License Software			

PURPOSE

To review and consider approval of the purchase of a new desktop computer and a new ERSI ArcGIS software license for maintaining and expanding the Town's geographic information system. Currently, the Town is running obsolete and unsupported Version of ArcGIS. Staff would like to upgrade from Version 9.3 to the ERSI supported Version 10.3 with ERSI's software support and access to an ArcGIS online account.

BACKGROUND

The Town has a geographic information system (GIS) designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data. ArcGIS is the software used to access points, lines and polygons with an attribute to describe it spatially by x, y, and z coordinates representing longitude, latitude, and elevation. This data is relatable to one other with a real physical location. Points, lines and polygons can represent water wells, rivers, lakes, roads, land parcels, utility lines, etc., which can be used to create layers within ArcGIS. One layer could be the topography; one layer could be lot lines, one layer could be the streets, one layer could be water lines, one layer could be sewer lines, one layer could be addresses, one layer could be the aerial photography etc. By overlaying these layers on top of each other, a user can find out if a lot has water lines, sewer lines, a house, and what parcel unique identification number is (created using the lots latitude and longitude). A map can also be created showing all of the layers or those of specific interest.

The physical location becomes a key index for relating all kinds of different types of data. For example, the unique parcel identification number is used by the

County Assessors to track how many buildings exist on the parcel, the age of the buildings, property owners over time, improvements, etc. Most of Colorado's Counties use ArcGIS for their parcel property information portals. They use ArcGIS software to access this data.

The ArcGIS software can be used to analyze the data. Data can be queried and analyzed. For example, a user can request how many structures are located in the local floodplain versus FEMA's. ArcGIS allows a user to create interactive queries, analyze spatial information, edit data in maps, and store all kinds of data by location online.

Currently, the Town uses a five year old personal computer with an unsupported ArcGIS license running Version 9.3 for maintaining and accessing its geographic information. The hardware and software are obsolete. The Town contracts with a GIS professional by the hour. She sits waiting for the computer to process a simple change to a map; the Town pays for the wait time. The old computer cannot run the newer version of the software.

With new GIS hardware and software, the contractor will be more effective. She can access the software vendor's support and share data and files with other municipalities. She can maintain and add additional data that the Town struggles to maintain through paper, especially with changeover in key staff. For example, as-builts can be entered into the database and stored for future reference so that Public Works is no longer pot-holing to find water and sewer lines. Easements can be mapped and tracked. Maintenance and purchase dates can be tracked to better plan for equipment replacement. The possibilities are endless.

Finally, ArcGIS Version 10.3 provides access to an ArcGIS online account and the cloud to create, store and manage maps, applications, and data online. The Town will be able to link the GIS and maps to its new website for internal and public use.

Staff believes that this small investment in a computer and updated software will reap huge benefits. The Town needs to become more efficient in doing business and providing service. This is one giant step in getting there.

BUDGET IMPLICATIONS

The Town's appropriated \$16,000 in the impact fee administrative infrastructure revenue line item. The total amount to purchase an updated computer and software was quoted at approximately \$3,000, leaving an appropriation of \$13,000 in the Town's 2015 Budget.

GIS Budget Quote	
Personal Computer	\$965.00
Cables & Monitor	\$184.98
Office 365 ProPlus Subscription	\$108.00
ERSI ArcGIS Single Use License	\$1,500.00
Total	\$2,757.98

The annual maintenance will be \$400/year for ArcGIS and another \$108 for the online subscription to Microsoft Office 365 or a total of \$508/year. This amount will have to be budgeted as part of the Milliken's 2016 Town Budget.

RECOMMENDATION

Staff recommends the Town Board of Trustees fund the procurement of new GIS software and hardware for an amount not to exceed \$3,000 out of the administrative infrastructure revenue appropriation in the 2015 Town of Milliken Budget with the understanding that annual maintenance and GIS contractor funds will need to be budgeted for separately next year.

SUGGESTED MOTION

"I move to approve the procurement of new GIS software and hardware for an amount not to exceed \$3,000 out of the administrative infrastructure revenue appropriation in the 2015 Town of Milliken Budget."

