

Project #	72-20-01	Project Title	Elevation Data Improvement (LiDAR)
Department	Planning and Zoning	Manager	Jeff Schuler, Jeff Hartman
Phase	Implementation		
Budget Action	New	Date	February 27, 2015

CAPITAL BUDGET SUMMARY						
Year	2016	2017	2018	2019	2020	Total
Project Phase					Construction	Project
Expenditure Budget					160,000	160,000
Revenue Budget						0
Net County Cost	0	0	0	0	160,000	160,000
COST DOCUMENTATION				REVENUE		
Architect/Engineering		0			State Grant	0
Land		0			User Fees	0
Land Improvements		0				0
Building		0				0
Building Improvements		0				0
Plans		0				0
Project Manager/Contractor		160,000				0
Site Preparation		0				0
Equipment		0				0
Furniture		0				0
Fixtures		0				0
Advertising/Legal Notices		0				0
Total Project Cost		160,000			Total Revenue	0
Expenditure Budget		160,000			Revenue Budget	160,000

Project Scope & Description:

This project will collect elevation data County-wide. The elevation information will support creation of two (2) foot contours using Light Detection and Ranging (LiDAR).

Location:

County-wide

Analysis of Need:

Portage County lacks accurate elevation information. There are many applications for improved elevation information, including: supporting engineering design projects such as ditching and storm water detention basins for the Highway and Land Conservation departments, improve flood risk mapping, allow modelling the impact of conservation practices, aid sighting and design of agricultural, commercial and industrial building projects.

Alternatives:

There is an opportunity to build partnerships with other public and private agencies to reduce cost. The \$160,000 amount represents a 2015 proposal with no partnership contribution. Five years is ample time to forge partnerships.

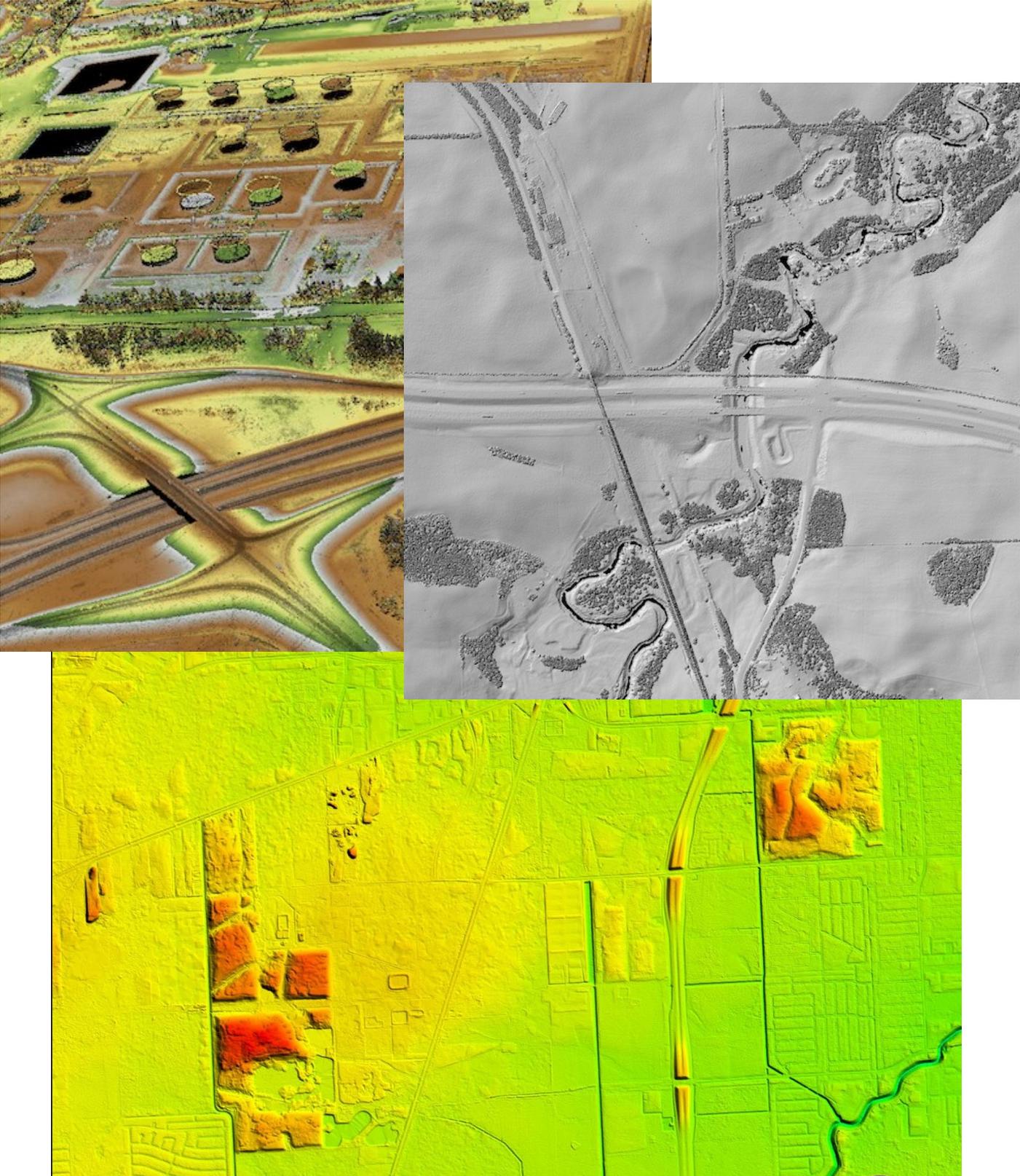
Ongoing Operation Costs:

None

Previous Action:

Below are some images derived from LiDAR elevation data. However, the real power of this data lies in modelling and engineering applications as Mr. Check points out.

“It would be a big help in drainage and basin analysis for our roadside ditches as well as our bridges and large culverts.” Nathan Check, PE --Portage County Highway Commissioner



Project #	72-20-02	Project Title	2020 Aerial Photography
Department	Planning and Zoning	Manager	Jeff Schuler, Jeff Hartman
Phase	Implementation		
Budget Action	New	Date	February 27, 2015

CAPITAL BUDGET SUMMARY						
Year	2016	2017	2018	2019	2020	Total
Project Phase					Construction	Project
Expenditure Budget					80,000	80,000
Revenue Budget					0	0
Net County Cost	0	0	0	0	80,000	80,000
COST DOCUMENTATION				REVENUE		
Architect/Engineering		0			State Grant	0
Land		0			User Fees	0
Land Improvements		0				0
Building		0				0
Building Improvements		0				0
Plans		0				0
Project Manager/Contractor		80,000				0
Site Preparation		0				0
Equipment		0				0
Furniture		0				0
Fixtures		0				0
Advertising/Legal Notices		0				0
Total Project Cost		80,000			Total Revenue	0
Expenditure Budget		80,000			Revenue Budget	80,000

Project Scope & Description:

In this project we will contract for County-wide aerial photography. The photographs are taken in early spring under "leaf off" conditions. The lack of leaf cover allows Planning and Zoning to interpret activity on the ground more accurately.

Location:

County-wide

Analysis of Need:

Portage County does this project every 5 years. This program has been funded by the Land Records program in the past. A sharp decline in document filing fees has reduced program revenue to the point where we are unlikely to be able to raise \$80,000. Portage County residents use aerial photography to manage property and plan development. County staff use aerial photography for many applications including land management, law enforcement, land use analysis, and emergency response.

Alternatives:

Google, Bing, and USDA agricultural photos. These programs are "leaf on" which obscures ground features and do not meet our accuracy requirements.

Ongoing Operation Costs:

None

Previous Action: