

**TOWN OF PETERBOROUGH
CAPITAL IMPROVEMENT PROGRAM
PROJECT PROPOSAL**

FY 2023 – 2028

DEPARTMENT: IT/GIS

I. Year Proposed for Construction or Purchase: FY 23- 28

II. Project Cost: \$15,000 annually for capital reserve/\$75,000 expenditure

III. Title of Project: Geographic Information System (GIS) Update

IV. Description of Project: To allocate funds into the Capital Reserve Fund for the purpose of maintaining Peterborough's digital land base.

V. Location of Project: Town-wide

VI. Justification/Need/Vision: (Use a separate sheet if necessary)

The Town of Peterborough has made a significant investment in Geographic Information System (GIS) data development, software and hardware. A Capital Reserve Fund was established in 2008 to enable us to begin saving for the cost of these updates. The maps and accompanying data bases serve virtually every Town Department, all boards and committees that deal with land use issues, and the general public. The IT/GIS Dept and DPW have developed a coordinated GIS based Asset Management which provides a common operational through several desktop and mobile GIS apps. Including several inspection apps. The system has also enhanced the Town's Hazard and Emergency Planning efforts, which enables Peterborough to receive credits for the Community Rating System, resulting in reduced flood insurance rates for property owners.

The two components of the GIS update project are: (1) new aerial photography (orthoimages) on a regular basis; 2) Land base data, primarily for tax mapping, for example, building footprints, pavement layers, topographic lines, stone walls, surface water, etc. Ideally, update flights would occur at a schedule of every five to seven years; using the services of a consultant to develop the images and updated land features, who then deliver the data to the town in electronic format, which is then used to do update the various GIS data sets. Upon delivery, all data is owned by town. Background: GIS land base created in 1997. The first update of the aerial imagery and base data was in 2005. We were able to skip 2010 as we took advantage of a state-wide buy-in flyover that gave us high resolution orthophotos, but no land base data updates. 2017 was our last flyover year that delivered 6" orthophotos; LiDAR based topographic contours (2' interval & 5 index), building footprints update, and stone wall mapping. We plan to contract the next flyover in FY24.

VII. Cost Summary (Ensuing Years):

<i>Project/Activity</i>	<i>Appr. to Date</i>	<i>FY23</i>	<i>FY24</i>	<i>FY25</i>	<i>FY26</i>	<i>FY27</i>	<i>FY28</i>
Professional Services			\$75,000				
Capital Reserve Fund	\$35,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
<i>Subtotal</i>		<i>\$15,000</i>	<i>\$75,000</i>	<i>\$15,000</i>	<i>\$15,000</i>	<i>\$15,000</i>	<i>\$15,000</i>
Anticipated Revenues							
<i>Total</i>		<i>\$15,000</i>	<i>\$0</i>	<i>\$15,000</i>	<i>\$15,000</i>	<i>\$15,000</i>	<i>\$15,000</i>

VIII. Needs Criteria (Check as many as apply):

X	1. Improving existing services.	X	8. Coordinating facilities development.
	2. Complying with legal mandates of state or federal government.	X	9. Meeting demands for service resulting from Town growth.
	3. Improving existing environment.	X	10. Guiding future town growth and development.
	4. Protecting the health and safety of the populace.	X	11. Improving the basis for intergovernmental and regional cooperation.
X	5. Achieving optimum and efficient use of municipal funds through cost savings, or avoidance of costs, or coordination of projects.	X	12. Enhancing opportunities for participation in federal or state grant-in-aid programs.
X	6. Meeting demands for service resulting from population growth.	X	13. Maintaining a sound and stable financial program.
	7. Preserving existing facilities through repair.		

IX. Project Ranking (Check only one):

	URGENT PROJECTS <ul style="list-style-type: none"> ▫ Meet emergencies threatening life, health, and safety ▫ Perform work required by state or federal law
	NECESSARY PROJECTS <ul style="list-style-type: none"> ▫ Eliminate safety hazards ▫ Correct code violations ▫ Meet contractual obligations ▫ Perform required renovations, repair, or replacement
X	DESIRED PROJECTS <ul style="list-style-type: none"> ▫ Improve equipment and efficiency ▫ Enhance service ▫ Match state or federal funds
X	ON-GOING PROJECTS <ul style="list-style-type: none"> ▫ Continue work in progress
	NEW SERVICE <ul style="list-style-type: none"> ▫ Expand a public facility service to a new area ▫ Provide a new public service

X. Possible Alternatives:

Do Nothing.

XI. Impact, If Disapproved:

The system would eventually become obsolete, and all the previous investments in the technology and service would have been for naught.