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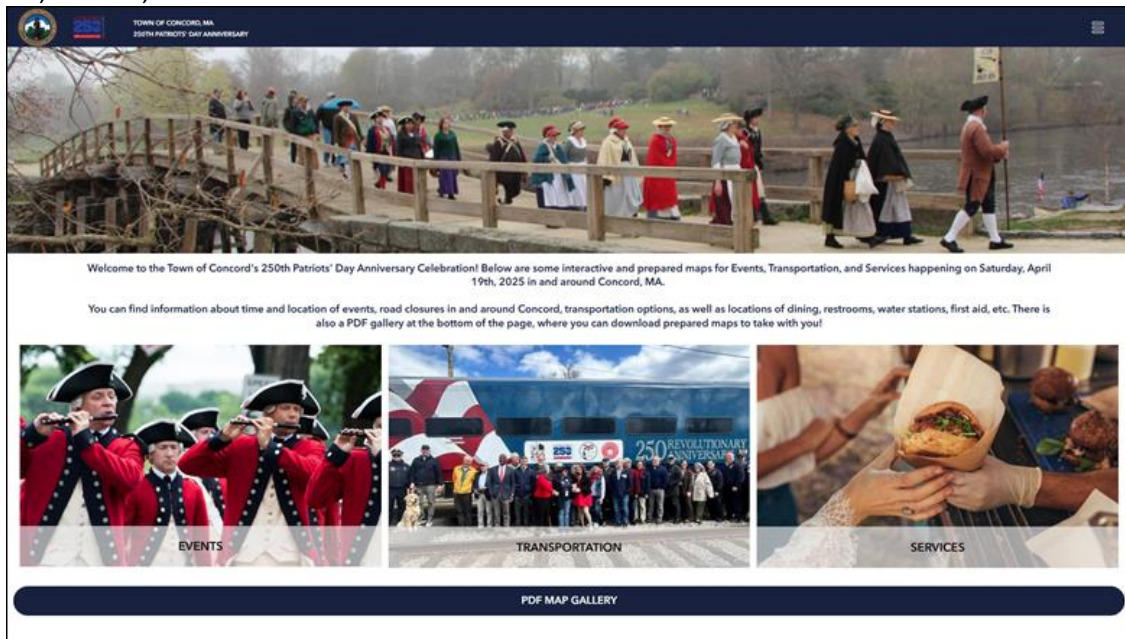
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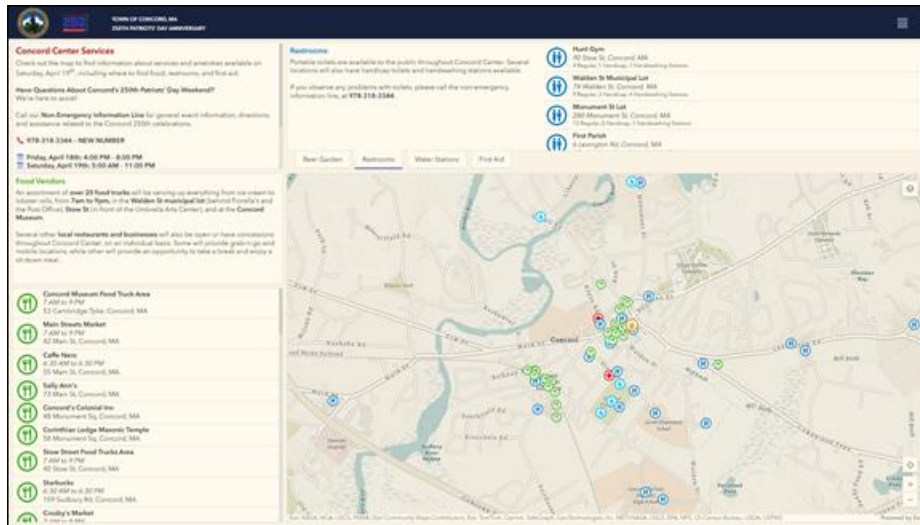
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## 1. Concord 250<sup>th</sup> Mobile Application

The Town of Concord GIS Team created a public-facing, mobile-friendly website for the events happening on Saturday, April 19<sup>th</sup>, 2025 in and around Concord, MA. There was no need to download a separate app, users could find the [link](#) through the Town's 250<sup>th</sup> website or through VisitConcord.org, and were able to get information about time and location of events, road closures in and around Concord, transportation options, as well as locations of services, such as dining, restrooms, water stations, first aid, etc.



The website was created using a combination of ESRI platforms, such as Dashboards and Experience Builder, which have the ability to detect the viewing device's screen size and accordingly adjust the layout, so users could seamlessly find information whether viewing from a desktop at home, a tablet, or a cell phone on the streets, during the events. Several pages contained interactive maps and lists, with the ability to zoom to an event location on the map and gain additional details. Dynamic text also changed throughout the day, such as announcements of upcoming events.



Desktop view



Mobile view

The website was made live in the weeks leading up to April 19<sup>th</sup> so that attendees could obtain the latest information, plan their day, and print out prepared maps ahead of time from the PDF Map Gallery. This application proved to be a valuable means of public communication, allowing staff to push out real-time updates, such as public safety information, event changes, and shuttle service updates, and was viewed around 35,000 times in the week of (and including) the April 19<sup>th</sup> events.

- Heather Bhowmick\_

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## 2. Calculating Impervious Surface Areas in Concord

Later this year, the Town will begin billing for the [stormwater utility fee](#), a new utility service that will bill property owners based on how much impervious surface (areas where rainwater cannot soak into the ground), such as paved driveways and buildings, there is on their parcel. While the GIS Team maintains a 'buildings' and 'driveways' data layer, we have not typically maintained layers for other impervious areas like tennis courts, walkways, and paved patios. In order to ensure that these areas are accurate and up to date, we developed a comprehensive data review process that uses both industry-leading technologies and existing Town-maintained data sources.

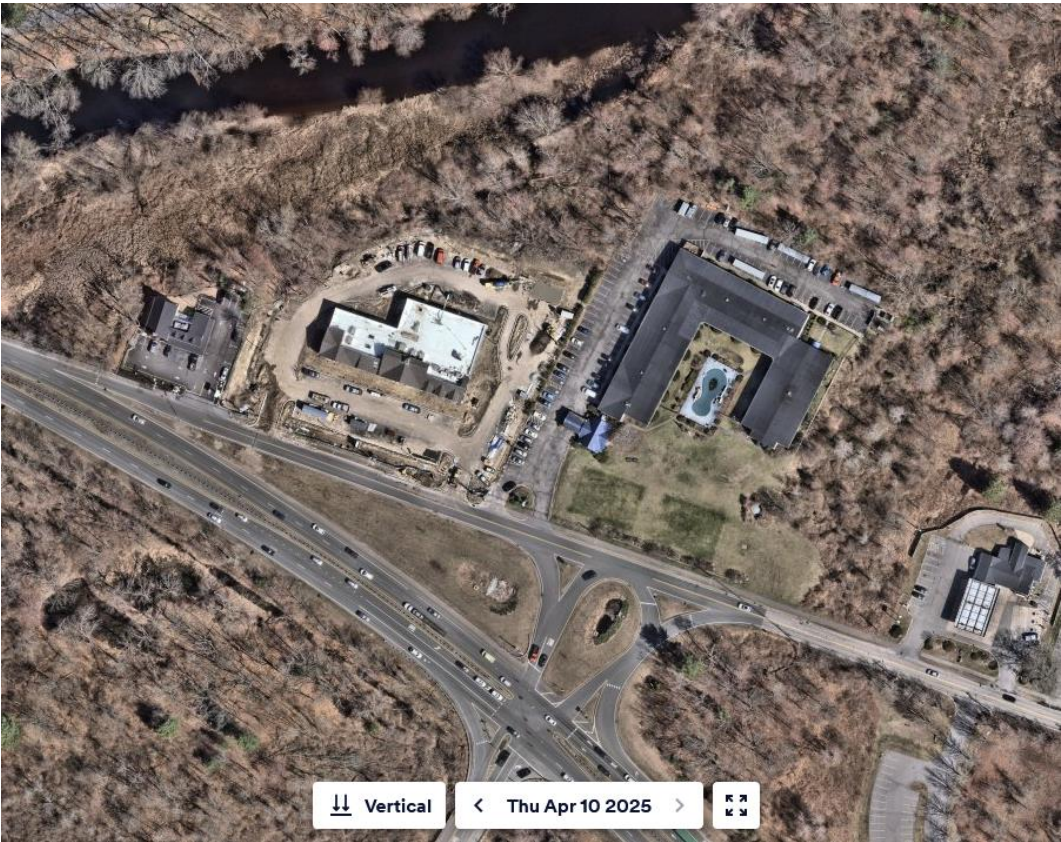
Our approach is three-fold:

- 1- Begin with the impervious surface data from the project consultant, Weston & Sampson, which due to the project's development timeline is missing some of the most recent construction activity in Concord, and compare it to our existing buildings and driveways layers.
- 2- Use our satellite imagery provider [Nearmap](#)'s Impervious Surface AI data layer to identify other impervious surfaces that are not buildings or driveways. We receive updated aerial imagery of Concord in the Spring, Summer, and Fall each year, so we have the most recent data possible.

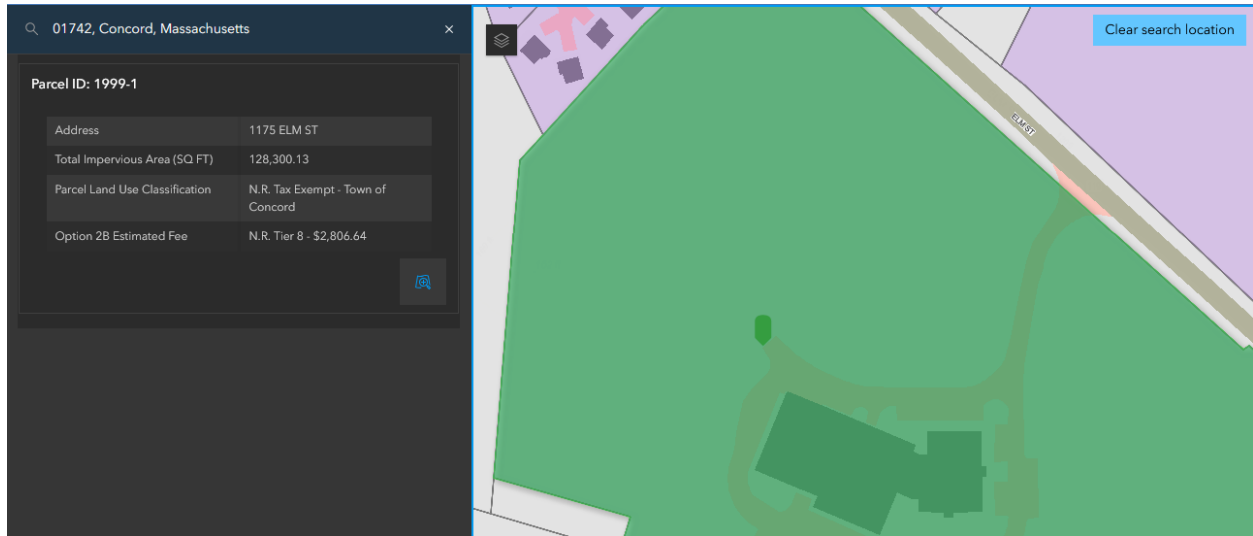
- 3- Search through our permit database to corroborate any missing or unclear impervious areas of town, including identifying materials of surfaces, locating temporary structures, and getting accurate building dimensions from construction as-builts.

By combining these three sources, we're able to cross-check our work and ensure that the square footages we calculate are as accurate as possible. Accuracy is important for both smaller lots where we see more driveway and patio changes (first picture), to large institutional projects like the new Concord Middle School campus (second picture), to commercial developments, as well (third picture).





Once we have our impervious surfaces updated, we will place parcels into their corresponding fee tiers. There are three sets of tiers: one for small residential properties with less than four units, one for residential properties with four or more units, and one for non-residential properties, including commercial, industrial, and government-owned properties. Currently, we have preliminary fee estimates available through our [Stormwater Utility Fee Explorer application](#).



After we update our impervious surface layers, property owners and residents will be able to search for their parcels and see the exact areas that are being counted as an “impervious surface.” We welcome any questions you may have about the data you see in the Stormwater Utility Fee Explorer application, including about your specific property, our methods, or any other details!

- *Tristan Boyd*

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### 3. Map/App Gallery

*CTRL-Click on a thumbnail to view a full-size map*

<p><b>Historic Districts and National Park Service Land</b></p>		<p>Map of Historic Districts and NPS lands for Ann Clifford</p>
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Solar Coaches



Map of Solar Coach locations for Pamela Cady

Town Generators



Webmap of Town Generator locations for Jon Straggas, to assist service contractors

Concord Museum



Concord Museum Spring Garden Tour map

Agriculture Day



Protected and Unprotected Agricultural Lands map for Delia Kaye

Concord Land Conservation Trust



Updated the CLCT Overview map for Jane Gruba-Chevalier, Executive Director.

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