

## Borough of Madison – Community Asset Mapping

### A Report Submitted to Sustainable Jersey

7 September 2019

#### Summary

Recently voted best place to live in New Jersey,<sup>1</sup> the town of Madison has much to share with residents and visitors. The community asset mapping project enables those familiar with Madison to contribute their vision of what Madison means to them and to share that vision with newcomers. The map also offers a visual platform for engaging community members on place-based planning and a mechanism to see where gaps are present and where opportunities exist to better meet the needs of all people who live, work and play in Madison. We created our current Community Asset Map by starting with the three key components of our last map: local businesses, open space and parks, and local non-profit and community organizations important to residents and visitors. We updated and extended our work to include schools, public transportation, historical districts and properties and property uses, using the ArcGIS StoryMap platform. We also have plans to extend our current map to include additional natural and cultural resources, including school gardens and legacy trees.

#### Community Asset Project

This project evolved from two previous community maps: the earlier Borough of Madison community asset map (submitted to Sustainable Jersey in 2015) and a map displaying Environmental and Cultural Resources along the proposed Pilgrim Pipeline corridor, developed for the Coalition against the Pilgrim Pipeline and Chatham Environmental Commission. We also identified important information from residents who participated in previous town centered events, such as YMCA Healthy Kids Day, the Madison Green Fair and the Madison Green Vision Forum (Figure 1).



Figure 1. Photos from the Madison Green Fair – Spring 2016 – Drew University Students Invite Madison Residents to Draw Their Vision for a Greener Madison on the Town Map

**Building on Previous Community Asset Mapping.** For the previous round of actions for Sustainable Jersey, the Borough of Madison described community assets through: 1) an online map of Madison businesses, 2) an engineering drawing, posted online, of Borough open spaces, and 3) a list of non-profit and community organizations. This material was

<sup>1</sup> La Gorce, “Madison Tops Our 2019 List of Best Places to Live.”

collected and inventoried by the Madison Green Team, with contributions from the Borough of Madison and volunteers, which were then compiled by Kathi Caccavale. The Green Team and Kathi remained key contributors for this iteration as well. Kathi also recruited Lisa Jordan, Director of the Spatial Data Center at Drew University, to join the Green Team and to facilitate several projects related to GIS and mapping for Sustainable Jersey actions. As part of Lisa's interactions with the Drew University campus civic engagement program, she recruited student volunteers to facilitate work on mapping community assets in Madison over the past two years.

Our updated community asset map extends on each of the core elements of the previous version. First, our map of Madison businesses became outdated, and was retired from the Borough of Madison website; additionally, several commercial mapping sources include Madison businesses and seemed to better update content than the older version. To serve as a replacement, our community asset map contains a tab for Open Street Maps (OSM), shown in Figure 2. OSM is the worldwide equivalent of Wikipedia for maps. The Open Street Maps visualization explains how interested users can edit the map to include place-based information that is important to them, related to the town of Madison. The narrative posted on the asset map links users with information on how to participate and learn more about the work of the Madison Downtown Development Commission. Last, the OSM tab includes a search tool enabling users to type in and zoom to a specific location in our area.

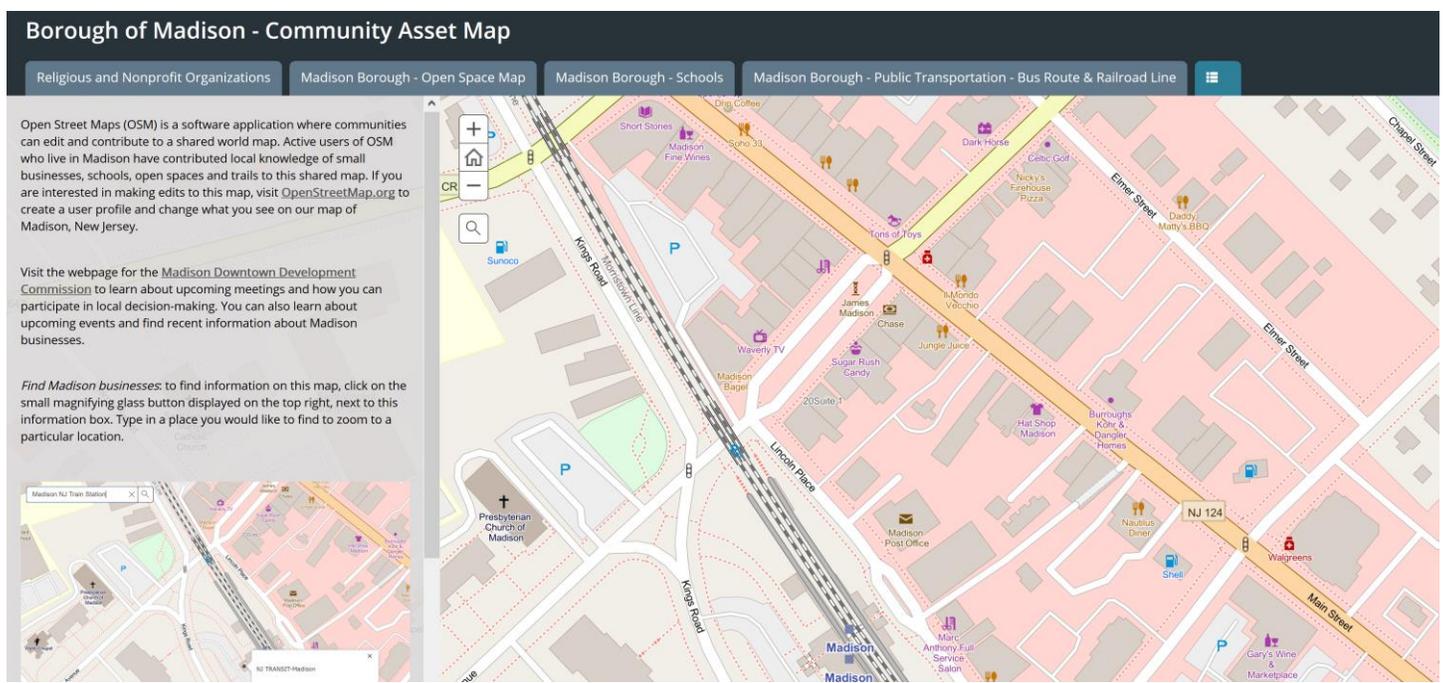


Figure 2. Open Street Maps Tab for Community Asset Map

Business and residential features on Open Street Maps have been developed over many years by a wide variety of volunteers. Many of those volunteers are Drew University students. Another important contributor is Bryan Housel from New Providence, New Jersey, who worked on updates to bicycle and trail maps. Madison High School student Jacob Jordan edited many of the downtown businesses, and bicycle parking features.

The second way that we extended our previous community asset map was to create an interactive version of the Borough of Madison Open Space Map. Our last submission included a static, engineering design that listed the parks in Madison. Our updated community asset map includes the parks on a webmap, which allows users to click and zoom in on different parks, and learn more about their features. A screenshot of this map is shown in Figure 3. Our webmap was built from GIS data shared by the New Jersey Department of Environment Protection containing the state open

space inventory.<sup>2</sup> An updated, and beautiful version of the static engineering map is available through the Borough of Madison, on the Open Space Committee page, and included as an upload this year for one of our Community Asset Map documents.

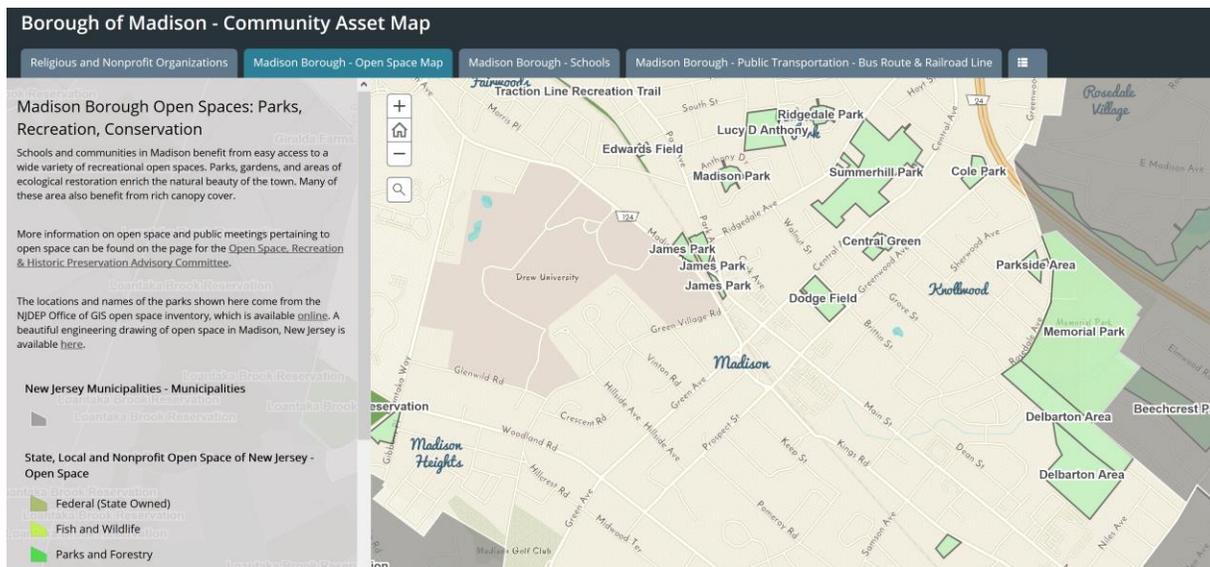


Figure 3. Open Space Map

Third, our previous community asset map included a table posted on the Green team website, with a list of non-profit and community organizations, as well as their websites and phone numbers. With the help of a Madison high school student contributing community service hours to this project, we were able to update the list in which many phone numbers and websites had changed. We were also able to create an interactive map from this list, which is the first map featured on the Community Asset Map. By clicking the points on the maps, users can learn more about the locations. We also retained the table format, which users can also access as a spreadsheet.

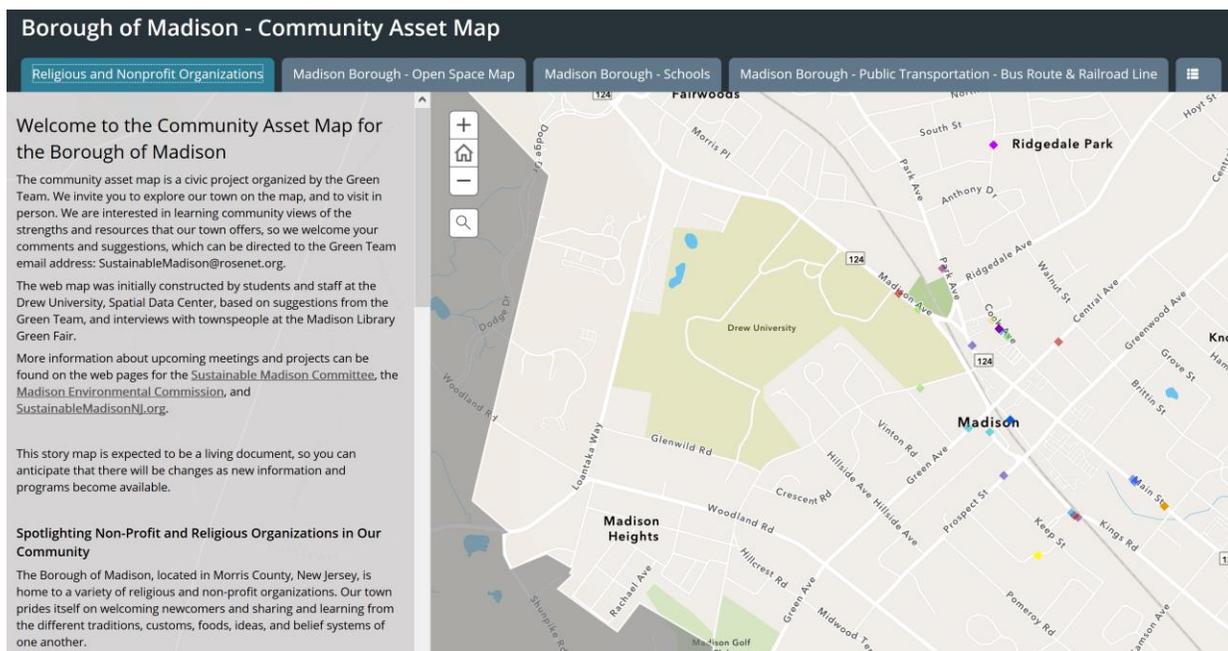


Figure 4. Non-profit and Community Organizations in Madison, front page of the Community Asset Map, available [online](#)

<sup>2</sup> NJDEP Bureau of GIS, "State, Local and Nonprofit Open Space of New Jersey."

Because the previous community asset maps were either not web-based maps or were no longer updated and accessible, we had the opportunity to start a community asset map with a new template. Building from experience in creating the [Natural and Cultural Resource Map](#) for the Coalition against the Pilgrim Pipeline, Lisa Jordan borrowed from the ESRI Story Map template to generate a Community Asset Map for the Borough of Madison. Building this map proved to be helpful background, because it drew from student and resident volunteers, feedback from environmental commission volunteers, and feedback from environmental activists. Similar to the idea for the community asset map, the pipeline map intended to demonstrate all the important community resources, natural and cultural, that were jeopardized by the potential construction of an oil pipeline. The Chatham Environmental Commission continues to list this map as a resource on their webpage, and the map won 2<sup>nd</sup> place at the [New Jersey Department of Environmental Protection GIS Story Map Contest](#) in 2017.

The additional layers developed from the pipeline map that we chose to include in the community asset map were: information about properties (Figure 4), public transit (NJ Transit, bus lines), shown in Figure 5, historic properties and districts (Figure 6), and schools (Figure 7).

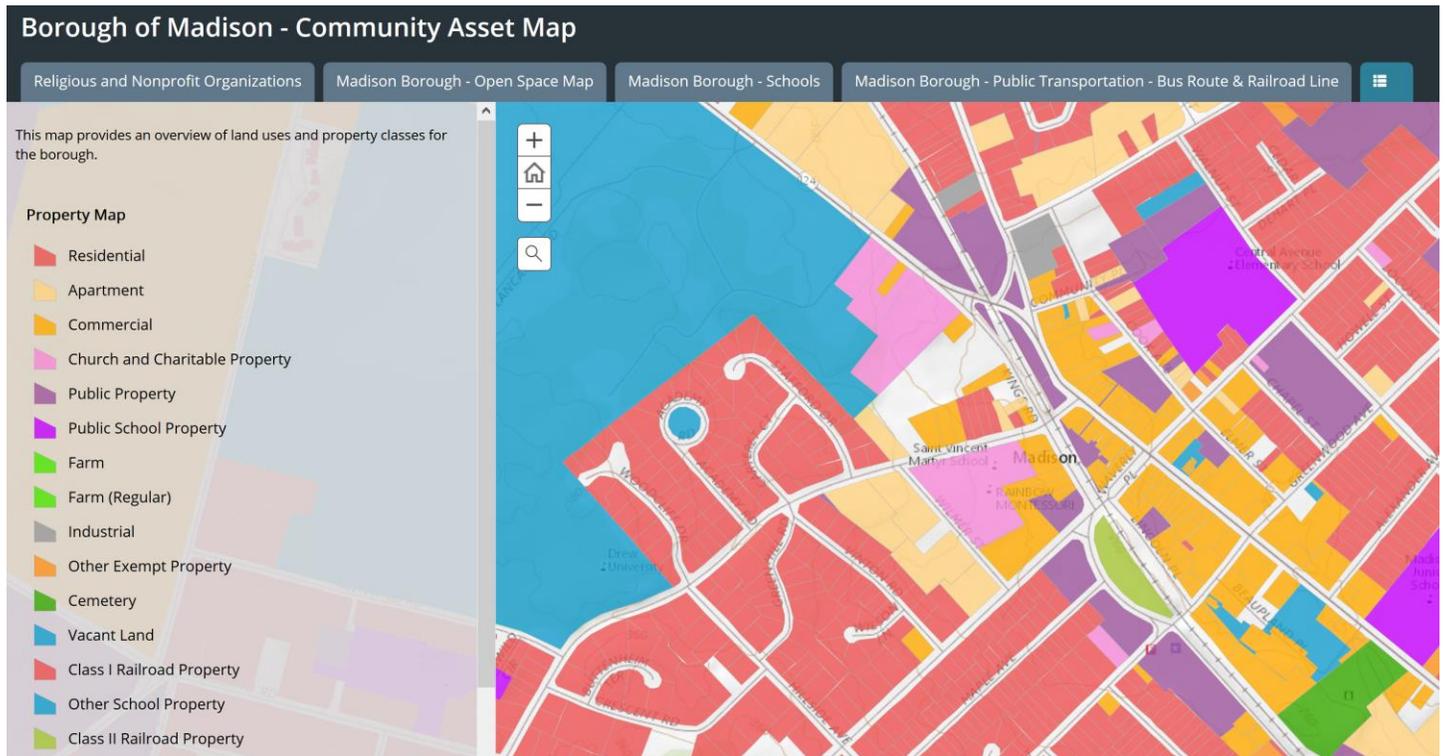


Figure 4. Property Map for Borough of Madison

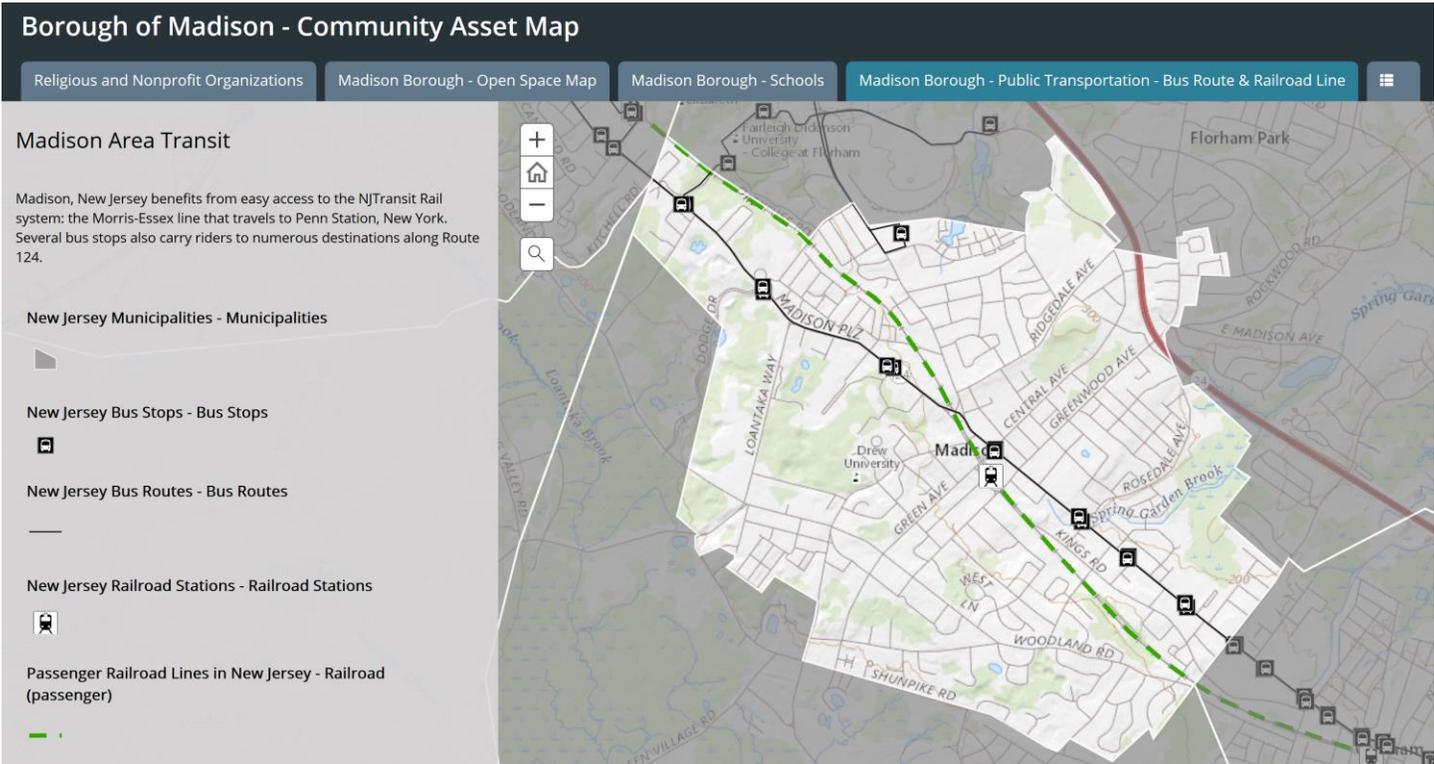


Figure 5. Public Transportation Map for Borough of Madison

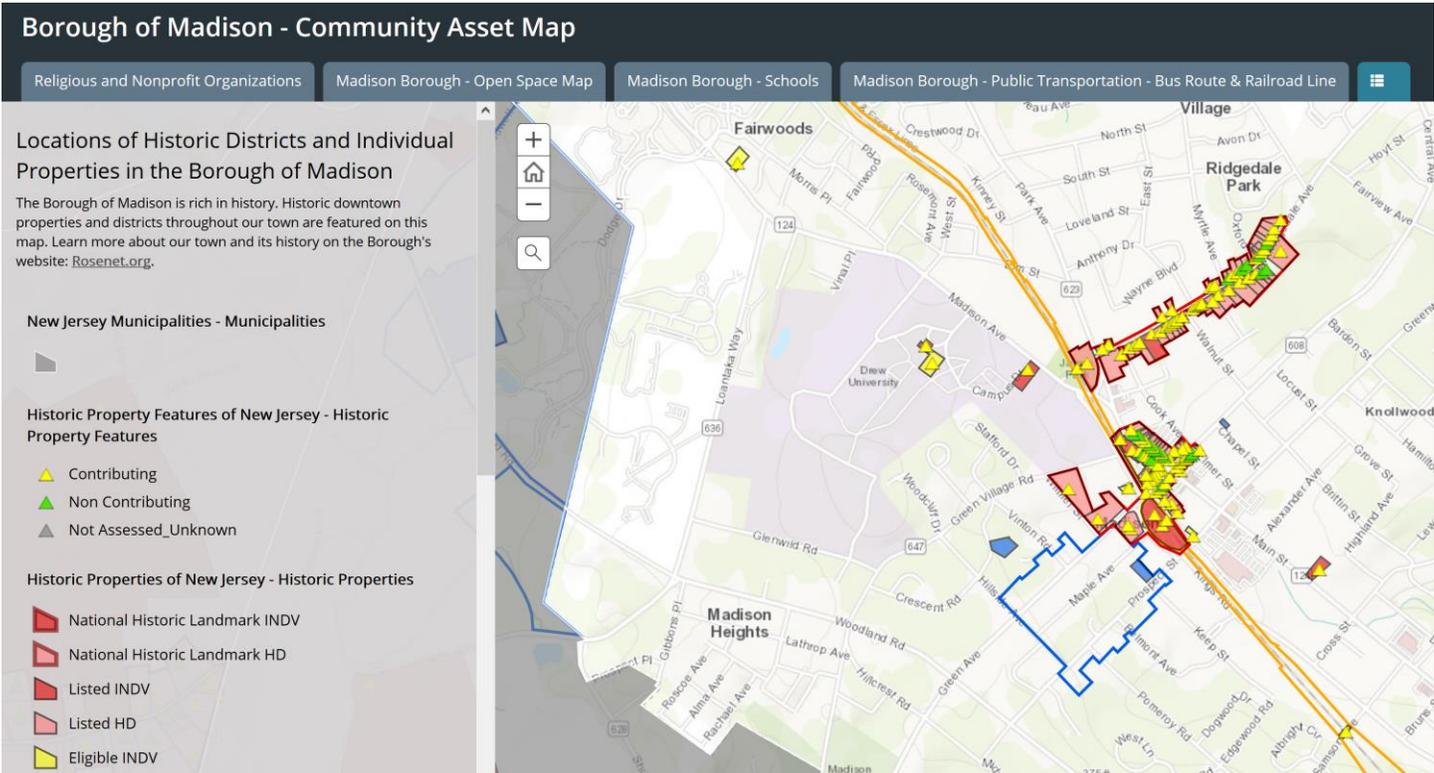


Figure 6. Historic Districts and Properties for the Borough of Madison

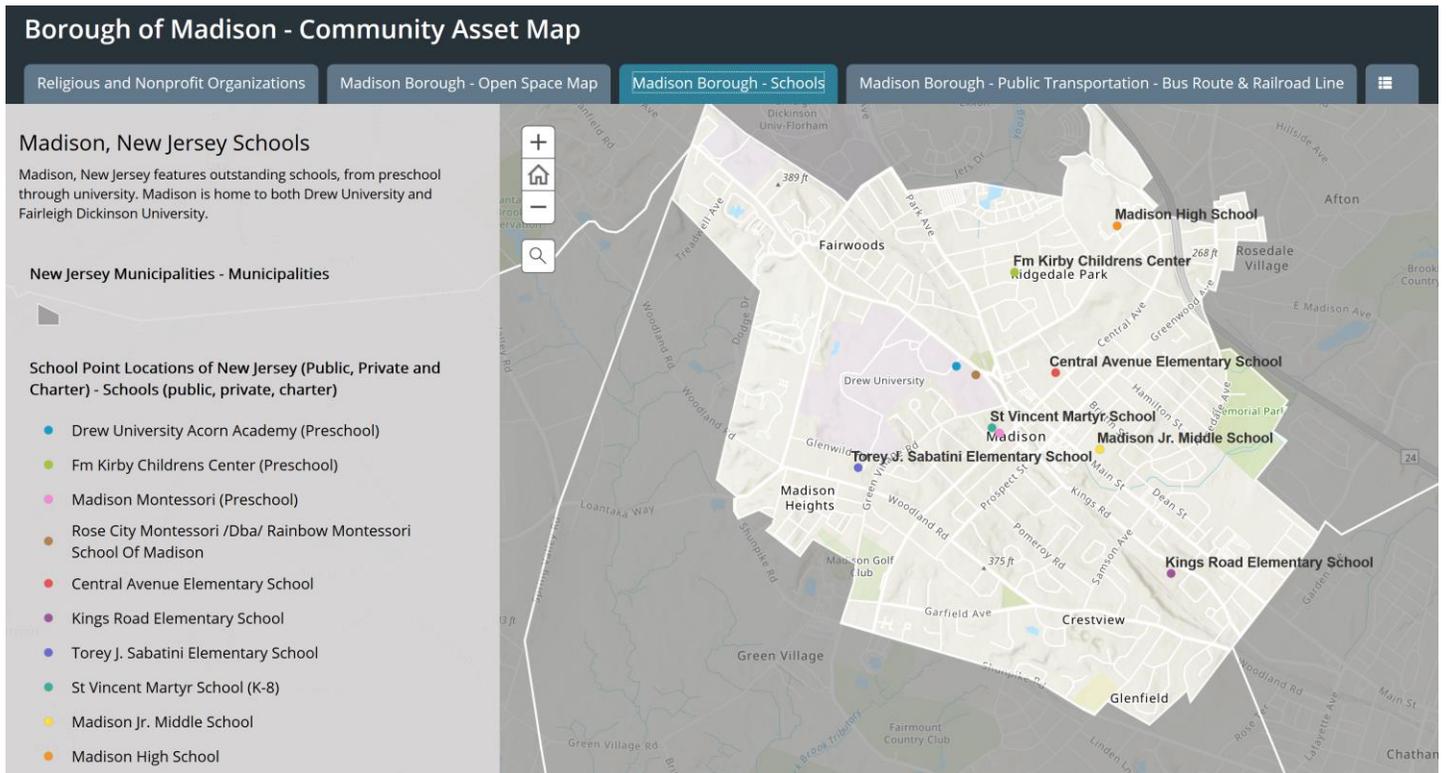


Figure 7. Public and Private Schools in the Borough of Madison

### Challenges and Opportunities

As a webmap, the current Community Asset Map for the Borough of Madison is a living document. Changes in Open Street Maps and changes by the New Jersey Department of Environmental Protection and the New Jersey Office of Information will automatically update and change the map. There are several valuable recommendations that have been made for expanding the existing the map. These revisions are currently under development. For example, several committees in the Borough of Madison have place-based information that is useful to share through the Community Asset Map. For example, the Shade Tree Commission map of legacy trees could be included. These ancient and important trees are currently featured in a lovely color flyer, and would make an attractive and important educational contribution to the Community Asset Map. In addition to legacy trees, several other important natural features, beyond open space locations and parks should be added. A few examples of vital natural resources include: the Buried Valley Aquifer and locations of wells, local hydrography – names and locations of rivers and water bodies, zones of vegetation and land-use, and areas identified in the recent urban heat map document developed by the green team.

The community gardens across all Madison area elementary schools, and the town’s food gardens and ecological restoration areas deserve special attention and information devoted to them. Recycling drop-off and locations of trash and recycling collection, as well as locations that specialize in materials re-use, of which there are several in Madison, can be highlighted. All of this is to say that while we have made significant improvements from our previous Community Asset Map in reach, accessibility and features, we see that we have much work that we hope to include moving forward. The partnership with Drew University has been a fruitful one, and also one that could extend more closely with the Borough of Madison engineering department, which produces impressive, high quality engineering plans for the borough. These documents can be easily converted into other formats to display online, but will require more time, though partnerships to the benefit of both Drew and the borough.

The opening page for the map includes the green team email address, so that community members can share their feedback and suggestions to enable the community asset map to better represent community vision of both human and natural characteristics of our town, which makes it so important to us.

### **Sharing the Community Asset Map**

Currently the Community Asset Map has been shared in borough committee meetings and online as a resource from [SustainableMadisonNJ.org](https://SustainableMadisonNJ.org): a website managed by the green team and Madison Environmental Commission. We have only recently, over the summer 2019, published our map online and through SustainableMadisonNJ. We have plans to embed (instead of linking) the map on the SustainableMadisonNJ site and on the Borough of Madison Green Team site. Already we can begin tracking views and usage of the site. After three months, we have over 200 views. The Story Map can be found here: <https://arcg.is/0DWHan>.

The community is presently using the map as a resource to view Open Street Maps of the Borough of Madison, identify important locations and the distribution of non-profit and community organizations. It has also been used to quickly identify open space areas, including their names, sizes and distribution. The properties map was used to locate borough properties for site suitability of solar power, by a local solar installation company. As we learn of new uses for the community asset map, it would be advisable for the green team to keep track of how the map is useful and how it may be improved.