

Nate Nickel
City of Bloomington Public Works Department
812-349-3542
nickeln@bloomington.in.gov



X Marks the Spot: Using Interactive Website Maps for Public Works Projects in Bloomington

I came across a funny quip from singer Jimmy Buffett the other day: *“Without geography, you’re nowhere!”* That idea quickly sums up an initiative that we’ve been conducting over the last few years. How do we provide answers for frequently asked questions from the public in a convenient, easy-to-use and transparent format? Can we find something that not only quickly conveys information to the community, but also frees up staff to focus on other important tasks and projects? We don’t have a large budget, so if we do find something that fits this bill, can we make sure that said bill doesn’t cost too much more than a cup of coffee? The quick answer: yes we can, use maps!

Like every municipal and county public works department out there, the City of Bloomington is responsible for a large amount of infrastructure and provides a wide array of important services to the community. One area in particular is street paving and maintenance activities – likely always a hot topic of conversation in all of our communities during each and every summer.

Between April and October the office staff at the Public Works Department’s Street Division often were dealing with a high volume of phone calls and e-mails asking about our annual paving schedule. “Is so-and-so road going to be repaved this summer? When is it going to happen? What other roads are you guys going to do this summer? When are you doing those?” These types of inquiries and more not only came from interested residents, but also from elected officials, neighboring government jurisdictions, school corporations, the press and students from Indiana University’s O’Neil School of Public and Environmental Affairs that were working on class projects (funny, for some reason we always seem to have an influx of those types of calls right before finals week).

We took this issue to the City’s ITS Department back in 2017, and as a team, we came up with a collaborative solution. We could take our annual paving schedule (which listed each paving project, per anticipated month of completion), and turn that into an interactive, searchable map via the City’s website. Anyone can now access this map and see all scheduled paving projects visually listed on a map, with color coded designations to show which month they were scheduled for, plus which projects had already been completed. Street Division staff can edit the map as necessary if any particular paving project’s timelines are delayed or changed due the unanticipated issues that we all face (i.e. weather conditions, material shortages, equipment problems, etc.). Users are able to zoom in and out on the map, as well as move it around to different geographic areas of the city, as needed.

The map also has an additional layer available that will overlay the past approximately 10 years of paving history as a historical reference. The City of Bloomington has been fortunate to have been

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awarded several Community Crossing Grant Projects from the Indiana Department of Transportation over the past few years and these are shown uniquely on the map so that they are differentiated from the City's annual paving projects. This helps to not only showcase those grant funded projects, but is a nice historical reference as well.

Another on-going task that the Public Works Department's Street Division performs every year is residential curbside leaf collection. This activity occurs during the months of November and December, with the goal to remove leaves from curbs and gutters in order to assist with proper drainage in City streets. Each residence receives one pick-up between those months as Street crews work specific geographic zones of the city (there are 23 total). As you can imagine, front office staff field an extremely large amount of calls from the public during this time as people want to make sure that they don't miss their pick-up date.

We again worked closely with our ITS colleagues to develop an on-line, interactive map that could be used to show the upcoming leafing collection schedule. Using the street paving map as a template, our leaf collection map had similar features, but obviously was geared towards leafing. Anyone interested can find out what zone leafing crews are currently servicing, which one is scheduled next, the zones to be completed in the upcoming 3-4 days, the zones still remaining to be completed and which zones are now already complete. The map also has a feature in which the current neighborhood association boundaries can be overlaid on the map, making it even easier for the public to locate the status of their leaf collection activities.

Both of these maps have been great resources for us. At the beginning of paving and leafing seasons, links will be included for these maps in City press releases to better direct traffic to them. Local media will often carry these links in their stories and articles as well, which really helps to distribute them to the public. We've received very positive feedback from the public on both the ease of finding information on these maps, as well as how user-friendly they are. The office staff at the Street Division has also been extremely pleased with the reduction in phone calls and lower e-mail traffic, as people are now able to find this information at their convenience, as opposed to calling to inquire about it.

You don't need to book a flight to Margaritaville, or try deciphering coordinates from a secret treasure map to find out more information. Please feel free to call or e-mail if you have any questions, want more details on how these maps were created, or to learn more about the logistics of keeping them current. Likewise, if your community has recently started using similar maps, please reach out. I'd certainly like to learn from your experiences as well.

If you're interested in taking a look, you can find our maps at the following links:

2021 Street Paving Map:

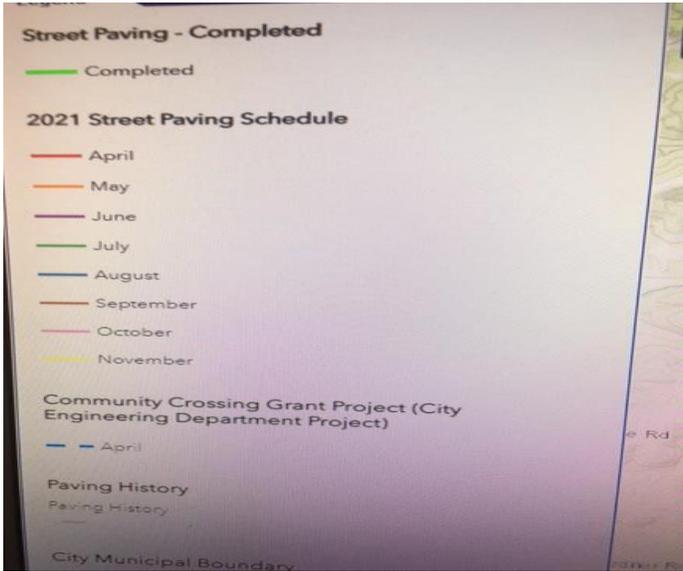
<https://bloomington.in.gov/arcgis/apps/webappviewer/index.html?id=38124cac71e942d999aab03e12e574af>

Curbside Leaf Collection Status Map (Service between November and December 2021):

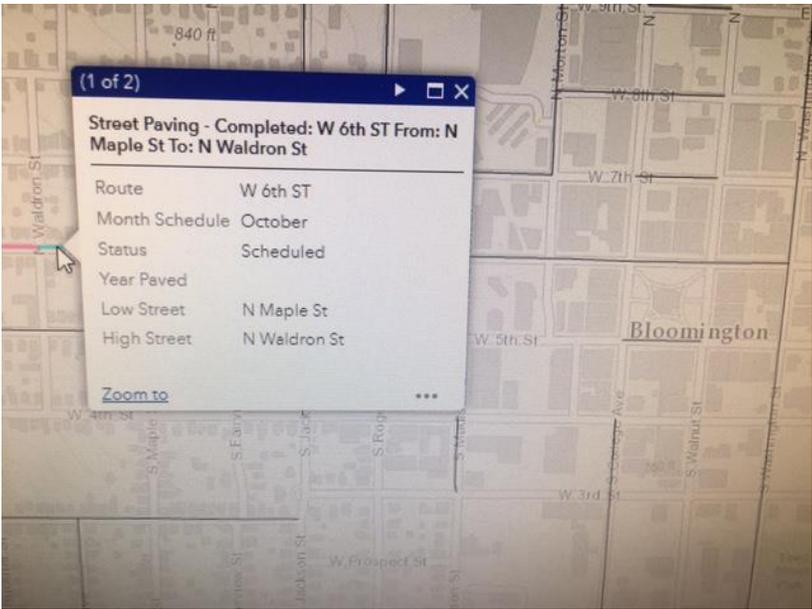
<https://bloomington.in.gov/arcgis/apps/webappviewer/index.html?id=b6f6789aa30644b0819a5d02255663f2>

Several screenshots of the maps are also listed on the next page.

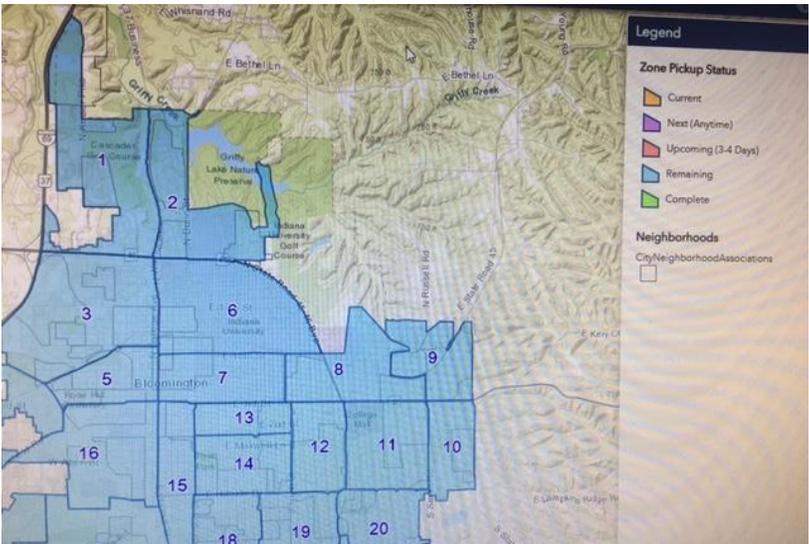
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The Street Paving map displays each month's scheduled paving projects, per month. Staff are able to edit and change expected completion months, as necessary.



Users can select each project to find out more details.



The curbside leaf collection map displays collection information per zone, as well as allows the boundaries of neighborhood associations to be overlaid. The map is active between November and December.