
# Albany Crash Analysis for Bicyclists and Pedestrians

Statistical Summary of Vulnerable User Crash Data for Albany County, NY

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Walkable Albany

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## EXECUTIVE SUMMARY

This report analyses crash data for pedestrians and cyclists in Albany County with a larger focus on the City of Albany to determine trends and geographic areas of concern to assist advocacy efforts for safer streets.

Numerical crash summaries were created for crash data from 2012-2022 to provide a broad overview of bike/ped crashes and total crashes, and fatalities were charted by year to visualize trends.

Geospatial data for the years 2016-2022 was obtained from New York State Department of Transportation (NYSDOT) via Freedom of Information Law (FOIL) requests. This data was used to create maps of fatalities and serious injuries at the city and county level and determine streets and intersections with most overall crashes.

There was a great degree of difficulty obtaining this data and we echo a call for more open access crash data for New York made by NYC based advocacy group Transportation Alternatives in their recent Policy Platform directed at Governor Hochul and the New York State Legislature[1].

> Open Access: Create a statewide open data portal and mapping application with up-to-date information on when and where traffic crashes are happening across New York State, modeled on New York City's Vision Zero View.

Providing public access to geospatial crash data, either by allowing public access to NYSDOT's safety management system CLEAR (Crash Location and Engineering Analysis Repository)[2], or via a GIS Web application provided to local MPOs, in Albany's instance CDTC, would be a tremendous asset for New York residents fighting for safer streets.

We also hope to see more local planning efforts to identify crash trends and areas of concern, as well as more proposed countermeasures and street redesigns for problem areas highlighted in this crash analysis and other safety studies by CDTC and NYSDOT, including the City of Albany Bicycle and Pedestrian Master Plan[3] and NY ROUTE 5 Comprehensive Pedestrian Safety Study[4].

[1] https://www.transalt.org/7steps-state
[2] https://www.dot.ny.gov/divisions/operating/osss/highway/crash-analysis-toolbox
[3] https://www.cdtcmpo.org/images/linkage_program/AlbCoFinal/albbikepedmp2021.pdf
[4] https://www.dot.ny.gov/regional-offices/region1/repository/113182_Final_Report_20150701.pdf

## TOTAL CRASH SUMMARY

Crash data from 2012 to 2022 is available on the NYS Traffic Safety Statistical Repository (TSSR)[5]. Total crash data was retrieved and formatted in **Table 1,** separated by City of Albany and rest of the county.

Notably, while almost twice as many pedestrian/motor vehicle crashes were reported within the city of Albany, almost 60% of pedestrian deaths that occurred were outside city limits. Bike fatalities were equal between Albany and outside city limits, although there were approximately 10% more overall bike crashes reported within Albany.

| *Albany County Bike/Ped Crashes (2012-2022)* | | | |
|---|---|---|---|
| **Crash Severity** | **Albany** | **Rest of County** | **Total** |
| Bike Injuries | 411 | 332 | 743 |
| Pedestrian Injuries | 1208 | 625 | 1833 |
| **Total Injuries** | **1619** | **957** | **2576** |
| Bike Fatalities | 3 | 3 | **6** |
| Pedestrian Fatalities | 22 | 34 | **56** |
| **Total Fatalities** | **25** | **37** | **62** |

**Table 1: Albany County Total Bike/Ped Crashes (2012-2022)**

[5] https://www.itsmr.org/TSSR/

## Pedestrian Actions

A more in-depth look at pedestrian crash data for Albany County is included in **Table 2,** showing the recorded pedestrian action prior to the crash. Crashes could have several actions recorded so this table does not align completely with overall crashes recorded.

| Pedestrian Action before Crash | Total Crashes | Percentage of Total |
|---|---|---|
| Crossing, No Signal or Crosswalk | 504 | 26.2% |
| Crossing, With Signal | 321 | 16.7% |
| Crossing, No Signal, Marked Crosswalk | 276 | 14.4% |
| Other Actions in Roadway | 206 | 10.7% |
| Crossing, Against Signal | 193 | 10.0% |
| Not in Roadway | 132 | 6.9% |
| Riding/Walking/Skating Along Highway With Traffic | 75 | 3.9% |
| Emerging From in Front of/Behind Parked Vehicle | 70 | 3.6% |
| Riding/Walking/Skating Along Highway Against Traffic | 41 | 2.1% |
| Working in Roadway | 39 | 2.0% |
| Getting On/Off Vehicle Other than School Bus | 29 | 1.5% |
| Playing in Roadway | 22 | 1.1% |
| Unknown | 11 | 0.6% |
| Going To/From Stopped School Bus | 3 | 0.2% |
| **Grand Total** | **1922** | **100.0%** |

**Table 2: Pedestrian Actions Prior to Crash**

The largest percentage of motor vehicle/pedestrian crashes occurred when crossing with no signal or crosswalks. While it is easy to blame pedestrians for crossing at unsafe locations, the lack of adequate amount of crosswalks and signalized intersections is also a factor in unsafe mid-block crossings.

Additionally, crossing the street legally is no guarantee of safety, with over 30% of pedestrian crashes occurring while crossing either with a signal or marked crosswalk. Many walkers feel more safe crossing the street mid-block with no traffic rather than face the whims of driving who rarely yield to pedestrians as legally required, with Albany ranked as one of the worst cities for drivers yielding to pedestrians.[6]

[6] https://wnyt.com/archive/study-albany-schenectady-among-most-dangerous-cities-for-pedestrians/

However, the dangers of crossing midblock are illustrated in a breakdown of pedestrian actions prior to fatal crashes in **Table 3**. Crossing with no signal or crosswalk occurred prior to over 1/3 of overall deaths. This illustrates the need to provide enough safe crossing opportunities and for pedestrians to only cross the street at intersections and designated crosswalks with the signal.

Getting hit while crossing at legal intersections is less likely to result in death, but even crossing at designated crosswalks or signalized intersections is no guarantee of safety with 11 deaths occurring in these situations, amplifying the need for safer street design and better traffic enforcement.

| Actions Prior to Fatal Crash | Total Crashes | Percentage |
|---|---|---|
| Crossing, No Signal or Crosswalk | 21 | 35.0% |
| Other Actions in Roadway | 10 | 16.7% |
| Crossing, Against Signal | 7 | 11.7% |
| Crossing, No Signal, Marked Crosswalk | 7 | 11.7% |
| Crossing, With Signal | 6 | 10.0% |
| Not in Roadway | 2 | 3.3% |
| Riding/Walking/Skating Along Highway Against Traffic | 2 | 3.3% |
| Riding/Walking/Skating Along Highway With Traffic | 2 | 3.3% |
| Emerging From in Front of/Behind Parked | 2 | 3.3% |
| Unknown | 1 | 1.7% |
| **Grand Total** | **60** | **100.0%** |

**Table 3:Pedestrian Actions Prior to Fatal Crashes**

## BIKE/PED CRASHES BY YEAR

Total pedestrian crashes in Albany County resulting in injury declined between 2012 and 2022, per TSSR data compiled from police reports and shown in **Figure 1**.

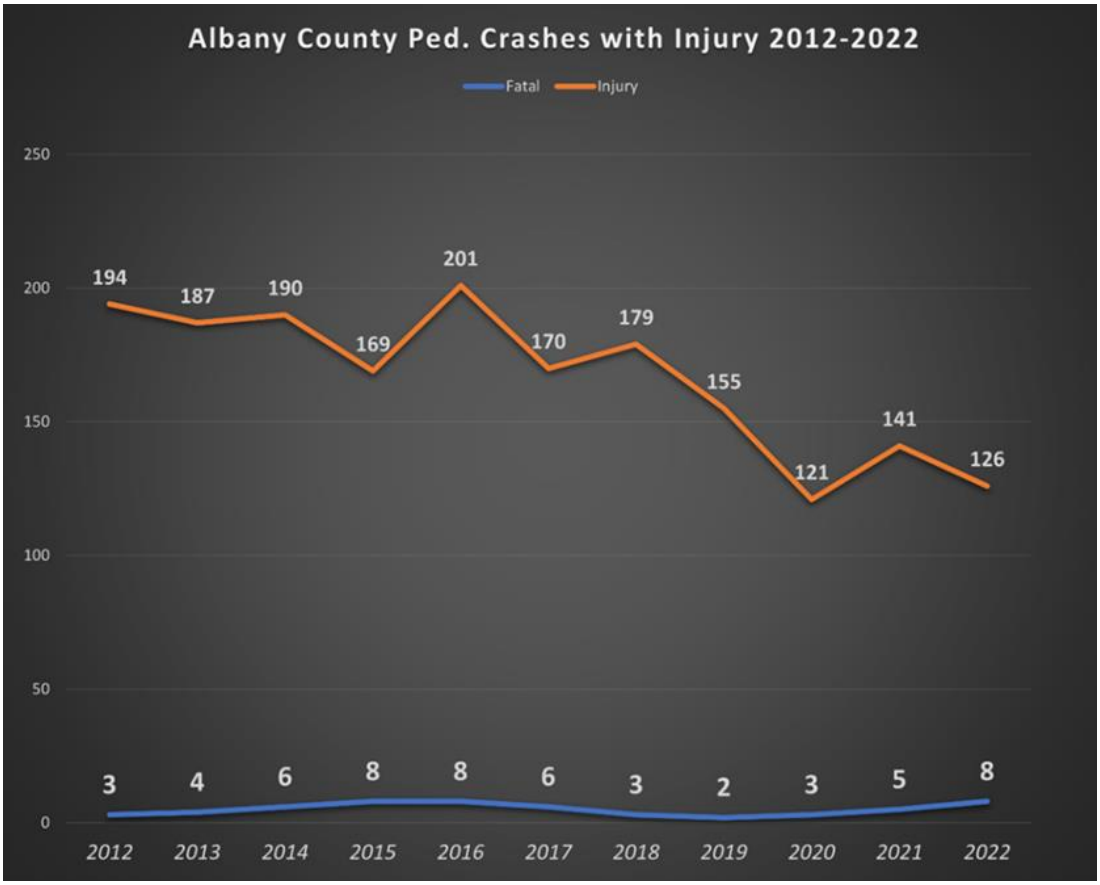


**Figure 1: Total County Pedestrian Crashes with Injury**

However, one caveat is that in Albany and national wide police have been shown to be writing less traffic tickets overall, as reported by Chris Churchill in The Times Union[7].

> *In Albany, for example, city police wrote 11,543 tickets in 2012. By 2021, they wrote just 4,601. While Albany is at the extreme end of the trend, the city is not alone. The number of tickets written declined across the region, with police in Albany, Rensselaer, Saratoga and Schenectady counties together writing 44 percent fewer tickets in 2021 than in 2012.*

The decline in traffic tickets could be leading to a decline in reported pedestrian and bike crashes for less serious injuries, although this is merely speculation with no hard evidence.

[7] https://www.timesunion.com/churchill/article/Churchill-Free-reign-for-reckless-drivers-17704960.php

Traffic volumes declining following the pandemic could also be a factor in the declines in crashes. However less traffic could be leading to more speeding, possibly a factor in the increasing fatalities.

While reported crashes are down, Albany County pedestrian fatalities have matched 1-year highs from 2015 and 2016 after several years of declines, a worrying trend.

The city of Albany also reported lower crashes since 2019, charted in **Figure 2**, possibly related to factors previously mentioned. However, pedestrian fatalities have reached an 11-year high within the city, mirroring a nationwide trend of increasing pedestrian fatalities[8].

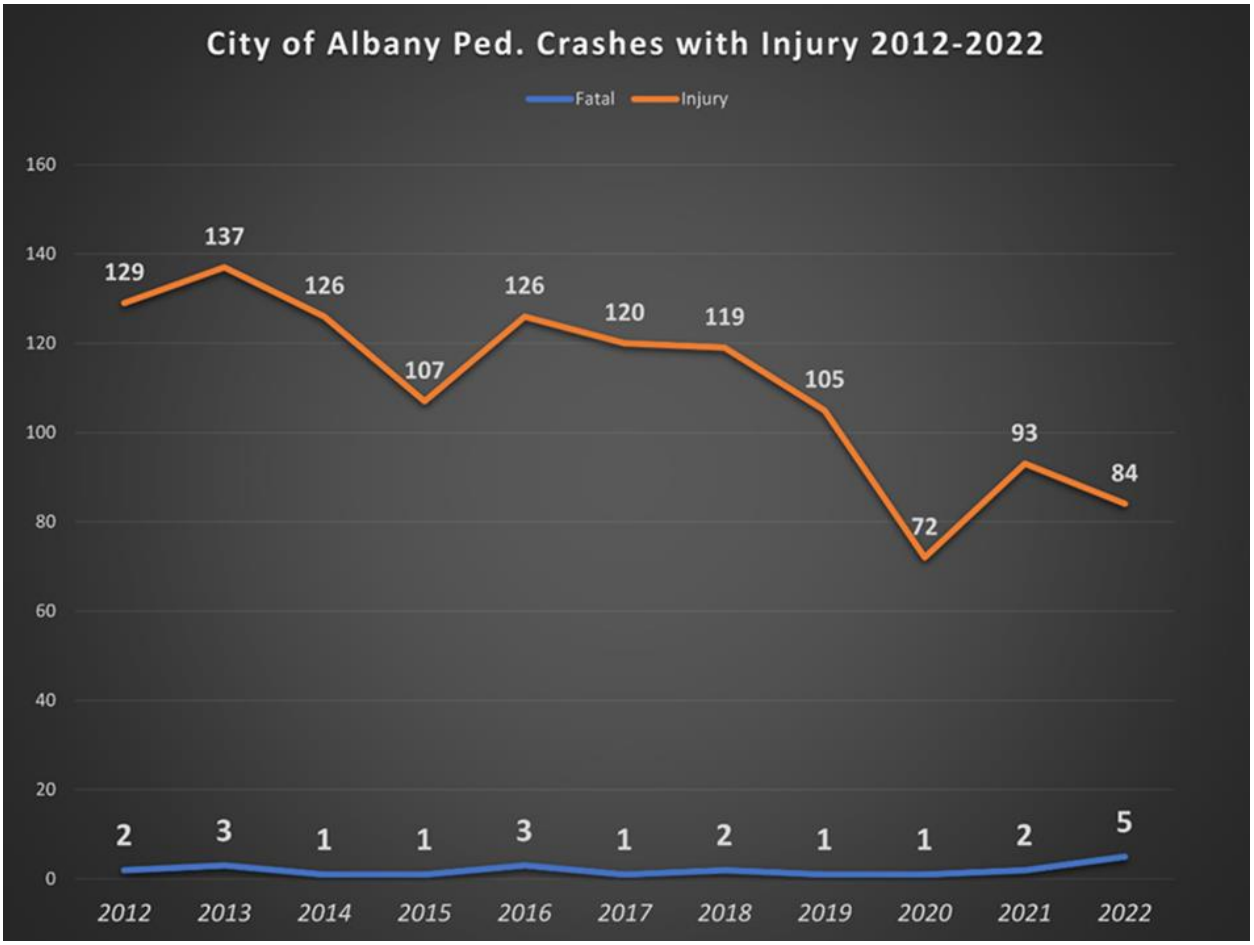


**Figure 2: City Pedestrian Crashes with Injury**

The previous trend of more pedestrian deaths occurring in the sprawling car dependent suburbs flipped last year with more deaths occurring inside the walkable urban core for the first time in the available data. This trend of increasingly dangerous streets threatens Albany's quality of life and our treasured walkable historic neighborhoods.

[8] https://www.route-fifty.com/infrastructure/2023/02/troubling-trend-pedestrian-deaths-continue-rise/383380/

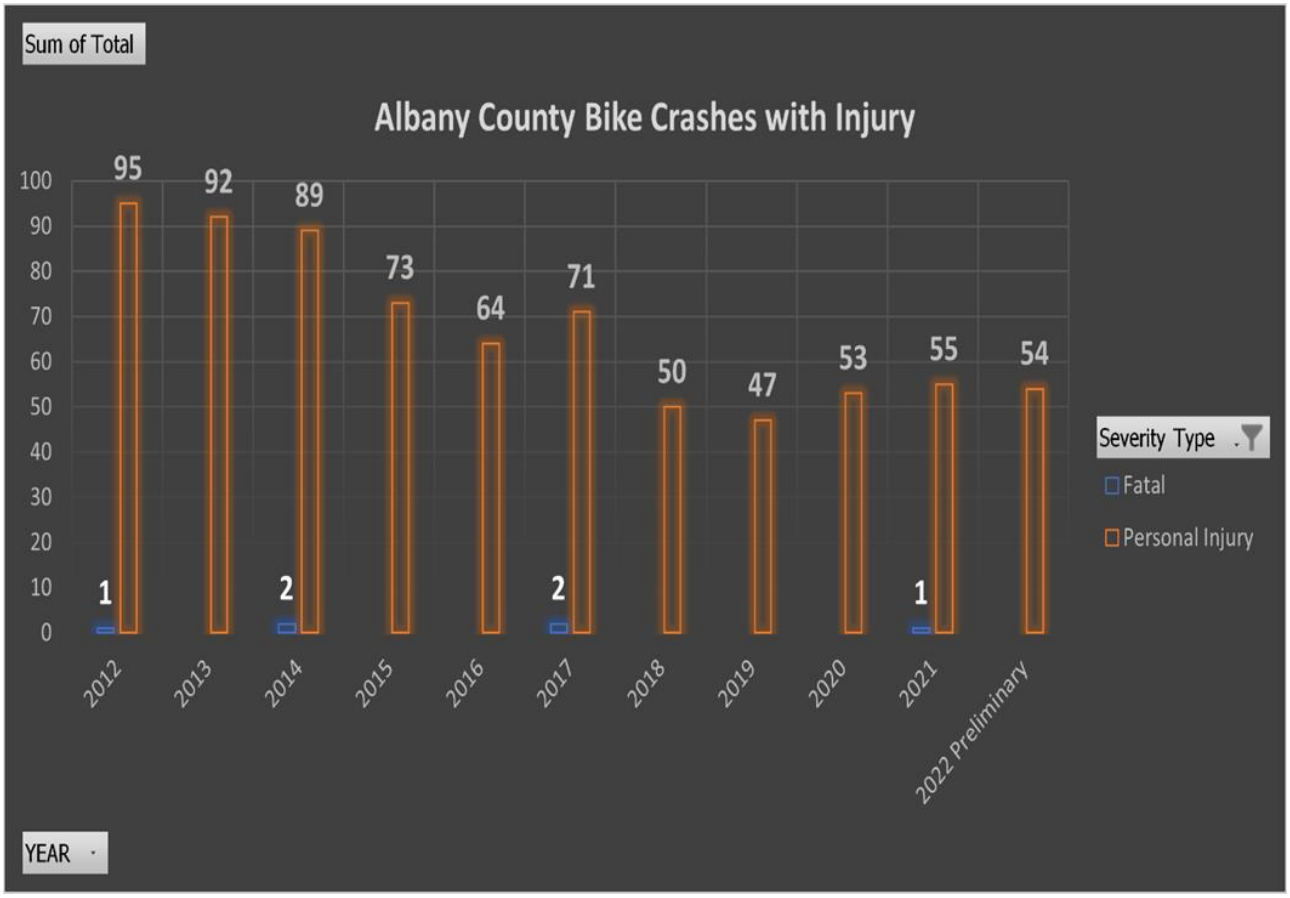


**Figure 3: Total County Bike Crashes**

Reported bicycle crashes in **Figure 3** also follow the decline seen in pedestrian crashes. While having significantly less fatalities than pedestrians, even non-fatal bike/motor vehicle crashes can be traumatic and harmful, resulting in lifelong disabilities and expensive medical bills. We must aim to decrease overall crashes for both pedestrians and cyclists to make our streets safer, encourage active travel, and make Vision Zero a reality in the Capital Region.

## GEOGRAPHICAL ANALYSIS

Geospatial analysis was performed on shapefile data using open source QGIS software. A heatmap of all Bike/Ped crashes in **Figure 4** within the city of Albany provides a visual illustration of the streets and intersections with highest crash rates. In many instances these crash hotspots correlate with areas with highest population density, walking and transit use, and traffic volumes.

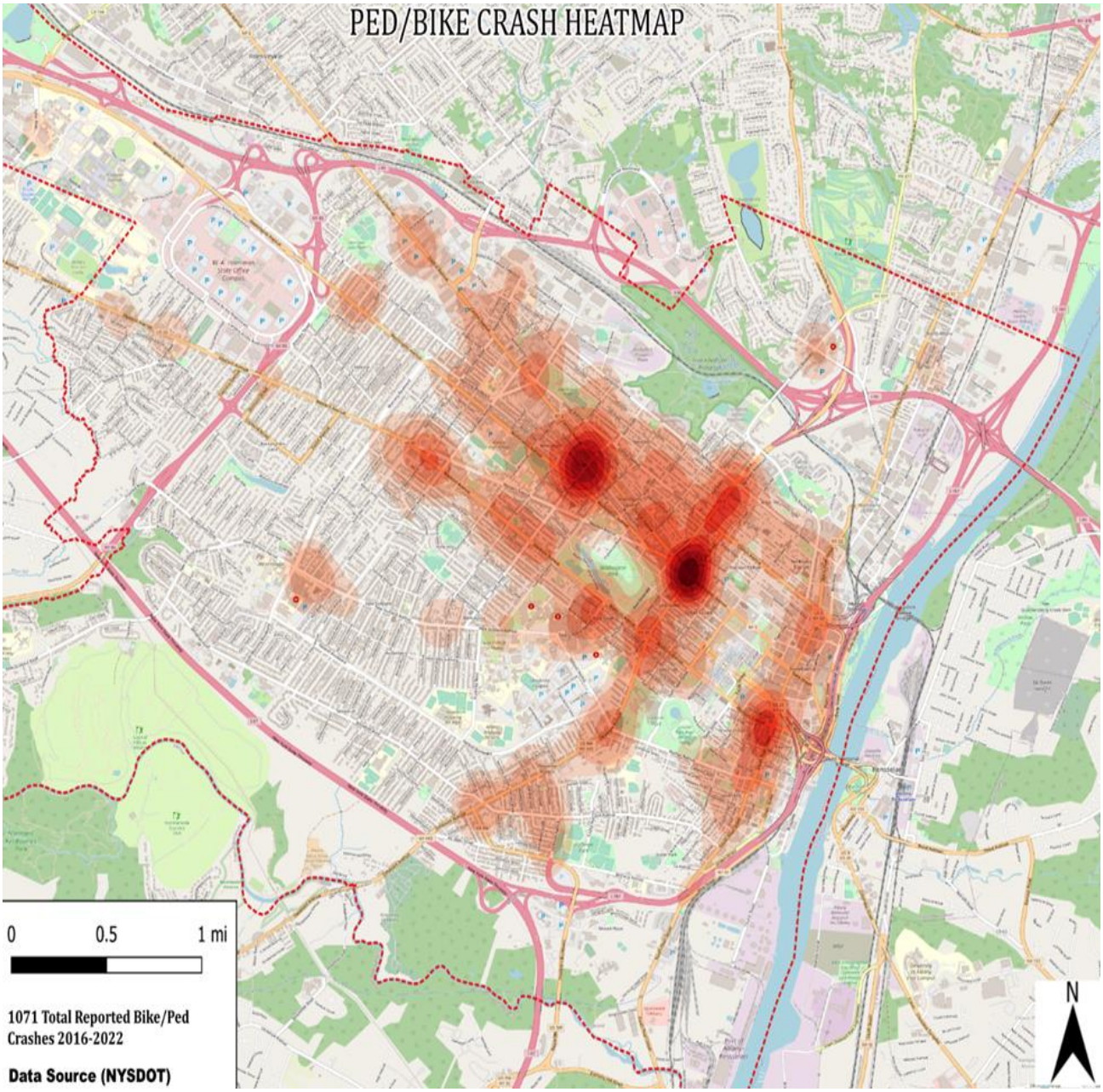


**Figure 4: City of Albany Heat Map**

## Most Dangerous Streets & Intersections

- Streets with Highest Volume of Bike & Pedestrian Crashes
    - Central Avenue – 130 crashes
    - Washington Avenue – 116 crashes
    - Madison Avenue – 105 crashes
    - North/South Pearl Street–70 crashes
    - Delaware Avenue– 57 crashes
- Intersections with Highest Volume of Bike & Pedestrian Crashes
    - Washington Avenue/Lark Street– 32 crashes
    - Central Avenue/Quail Street – 15 crashes
    - Washington Avenue/Quail Street – 13 crashes
    - Madison Ave/ Pearl Street – 13 Crashes
    - Madison Avenue/Lark Street – 10 crashes

Central Ave unsurprisingly on the top of the list for most crashes, with the high-speed arterial regularly cited for pedestrian safety issues [9]. Other streets with high crash rates also have similar characteristics with high traffic volumes and high speeds.

Madison Avenue's continued safety issues is concern considering it recently went through a road diet to drop it from 4 lanes to 2 lanes with a turning lane and bike lanes.[10] 14 bike/ped crashes occurred on this busy road in 2022. One issue may be related to lack of traffic enforcement with double parking, driving in bike lanes, failing to yield, and speeding very common from personal observations. Madison Ave's proximity to Washington Park, Albany's premier park, and Center Square and Pine Hills, Albany's two most walkable neighborhoods, means making the street safe for pedestrians and cyclists should be a top priority for local leaders.

[9] https://www.timesunion.com/tuplus-local/article/Road-still-takes-grim-toll-6844677.php
[10] https://www.bizjournals.com/albany/news/2019/05/08/madison-ave-redesign-bike-lanes-road-diet.html

## Fatalities

The map of fatalities within the city in **Figure 5** correlates with areas of overall high crashes, although not every fatal crash was included in the geospatial data so not all crashes from the TSSR data are displayed.

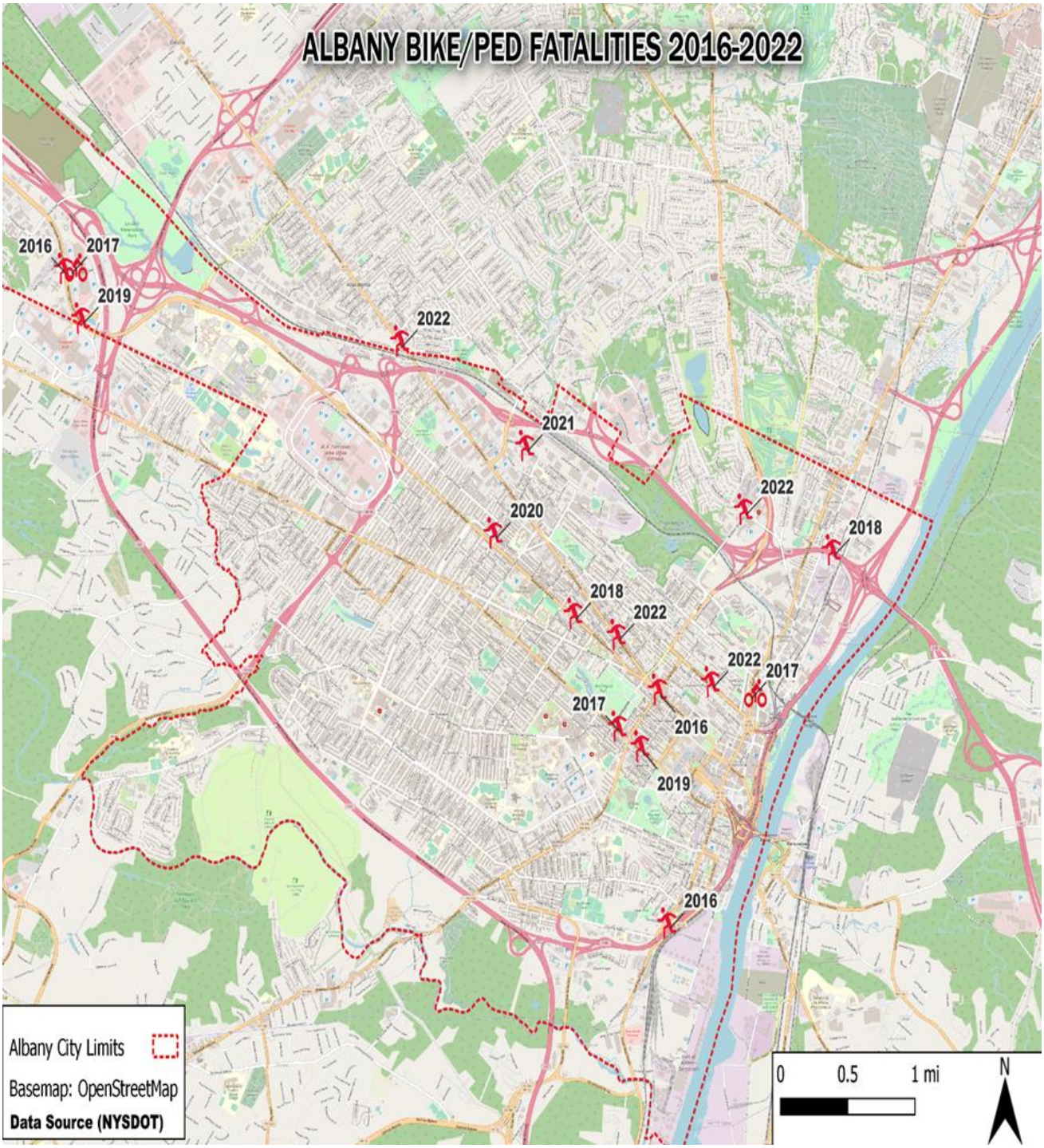


**Figure 5: City Bike/Ped Fatalities**

The 2022 fatalities show the tragic death of Tanisha Braithwaite on Clinton Ave[11] and the continued dangers of high-speed arterial Central Ave, which had two deaths inside city limits.

The high-speed streets surrounding Crossgates Commons also resulted in 2 pedestrian and 1 bicyclist death over the past 7 years. While car dominated, Crossgate Commons has significant transit ridership and will have a new BRT stop when CDTA's Purple Line launches, so pedestrian safety is paramount for bus riders here[12].

Pedestrian and bicyclist fatalities outside Albany city limits in **Figure 6** shows more carnage along Central Ave and Wolf Road near Colonie Mall. These automobile-oriented shopping areas also have significant transit ridership, leading to walking and biking along high-speed arterials which lack sufficient crosswalks and other pedestrian and bicycle safety features.

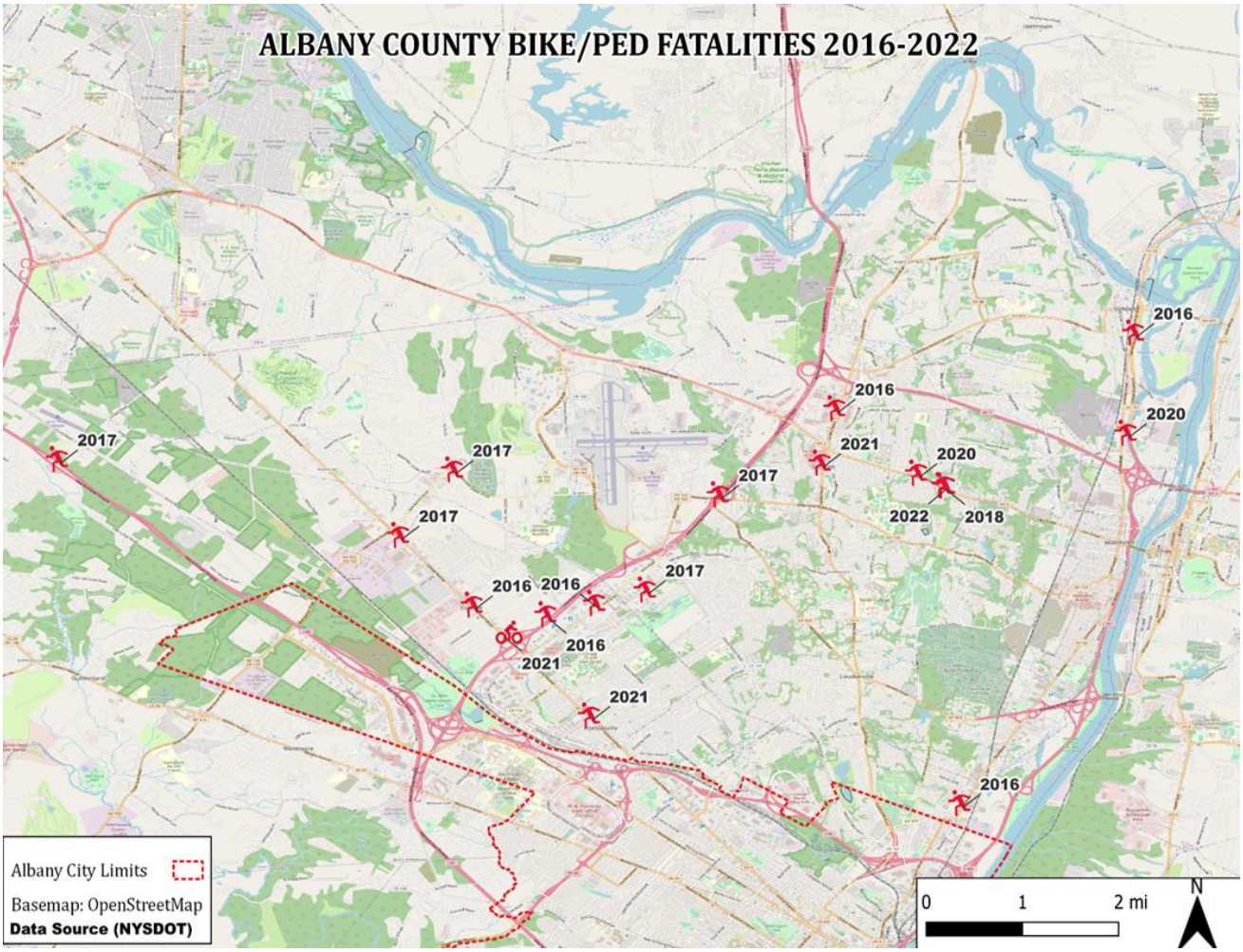


**Figure 6: County Bike/Ped Fatalities**

[11] https://wnyt.com/top-stories/family-seeks-justice-in-fatal-hit-and-run/
[12] https://projects.cdta.org/purple-line-projects

Several deaths near Latham Circle are also shown, an especially dangerous area that was spotlighted by the Times Union in 2022.[13]

This insightful quote from Chris Churchill could apply to all the Capitol Region, not just Latham Circle.

> *Until the lives of pedestrians are given the value and respect they deserve, more deaths on the roads around Latham circle are inevitable. But let's be clear about two things: the people on foot are not to blame for that, and the state has not done all it can.*

## Serious Injuries

It is important to look at fatalities, but serious injuries from crashes are also important to map to spotlight areas of concerns. The damages from being hit by a car are extremely harmful even if no death occurs. The definition of a serious injury from the NHTSA is included below:

> "*Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person could perform before the injury occurred. This includes severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness at or when taken from the crash scene, and unable to leave the crash scene without assistance.*"

**Figure 7** maps the 96 serious pedestrian injuries that occurred within city limits between 2016-2022.

[13] https://www.timesunion.com/churchill/article/Walking-through-a-pedestrian-hellscape-in-Latham-17023116.php

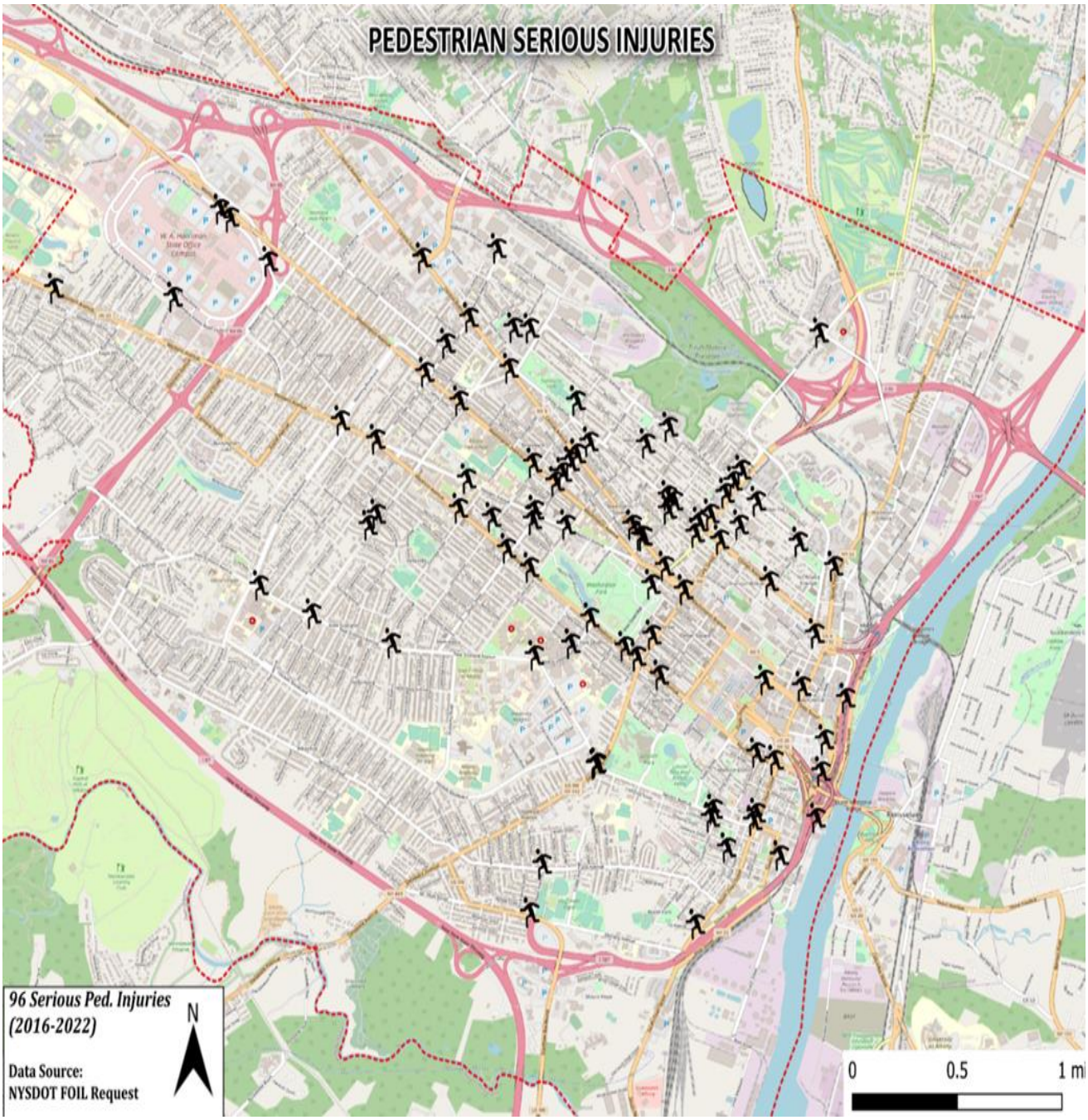


**Figure 7:Pedestrian Serious Injuries**

Quail Street is again shown to be a major area of concern as an important cross street. Henry Johnson Blvd right after the highway exit is also a major source of serious injuries, with high speeds occurring from drivers entering and exiting I-90. The high traffic volume streets Central, Washington, and Madison not surprisingly have an abundance of serious injuries reported for pedestrians. The South End neighborhood is another area of concern with a plethora of serious injuries despite lower traffic volume. The lower income and diverse residential population results in more walking and transit use and traffic safety should prioritized here.

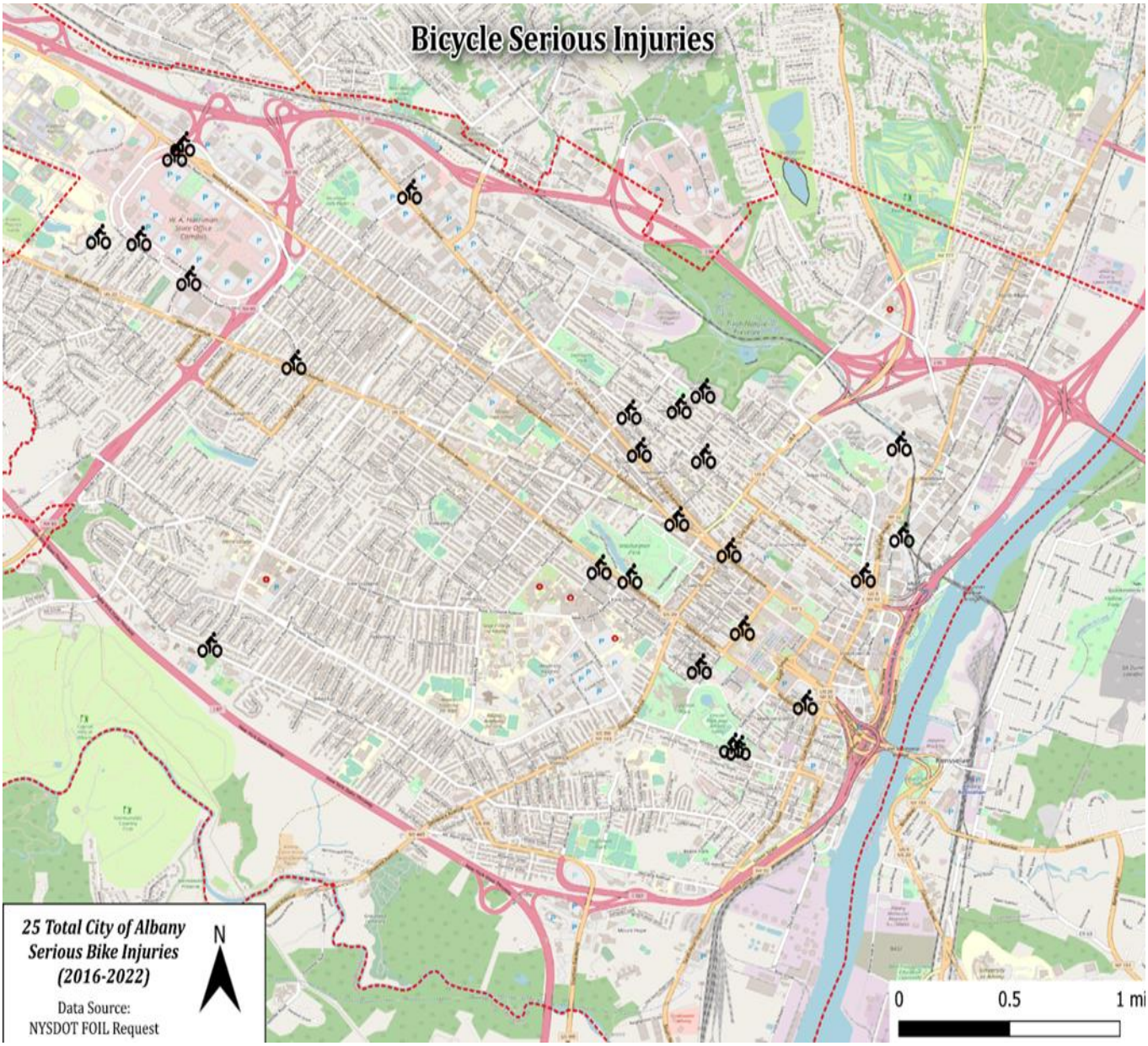


**Figure 8: Bicycle Serious Injuries**

Bicycle serious injuries in **Figure 8** do not display as much clustering as pedestrian serious injuries, with 25 total occurring between 2016-2022. However, the cluster of serious injuries near the Harriman Campus and another highway exit is a cause of concern.