City of Ann Arbor

2019 Annual Crash Review

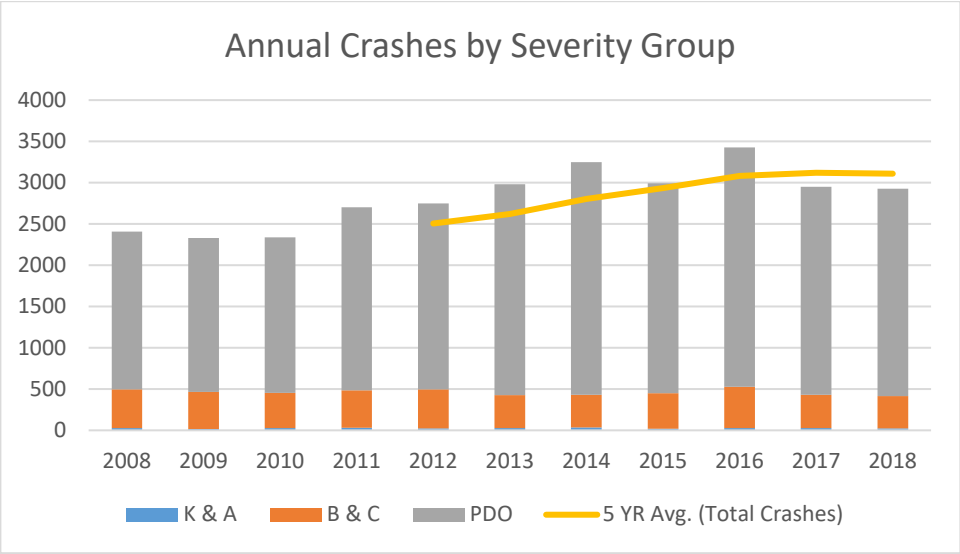
Calendar Years 2014-2018



August 2019

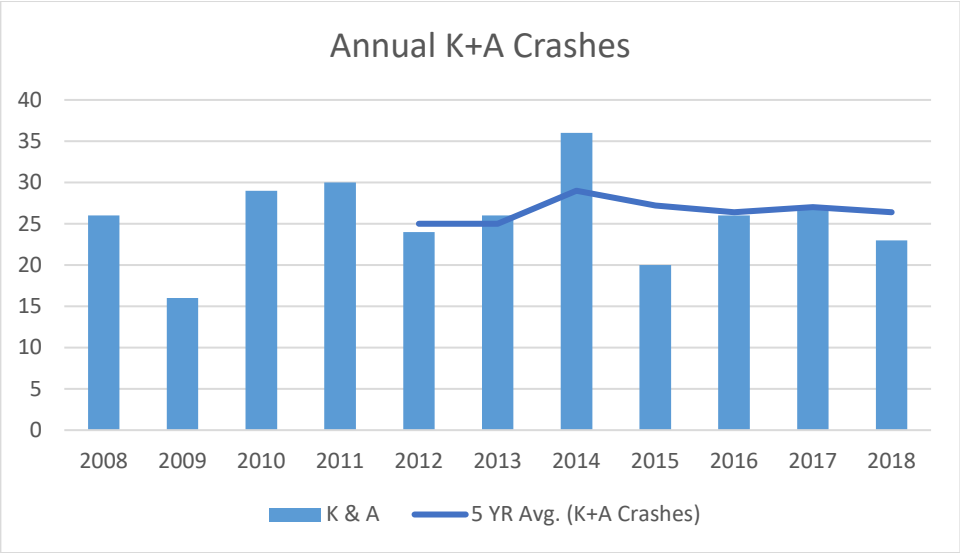
Crash Performance by Severity

All Crashes



Observations:

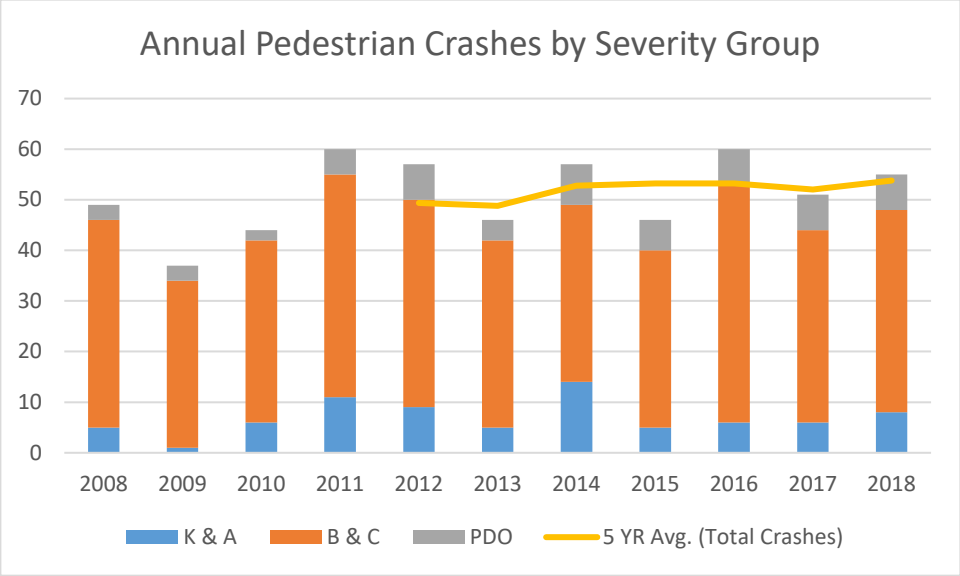
- The overall number of crashes has an upward trend line from 2012 to 2016.
- The Five Year Average trend line shows stabilization between 2016 and 2018
- 85% of the Five Year Average Crashes result in no injury.
- 14% of the Five Year Average Crashes result in non-severe injury.
- 1% of the Five Year Average Crashes result in serious injury.
- 0.1% of the Five Year Average Crashes result in fatal injury.



Observations:

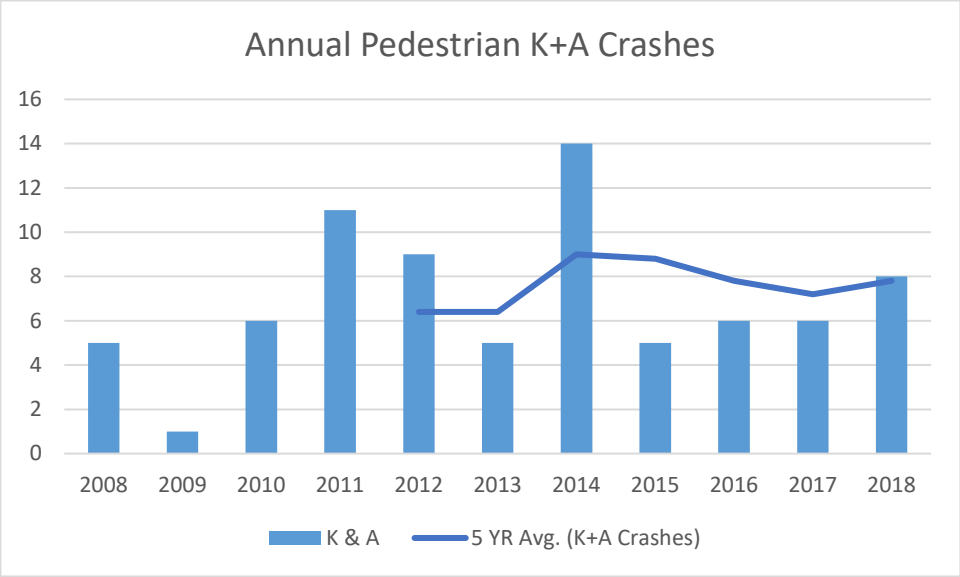
- This graph presents annual crash history for all severe injury crashes.
- While 2014 had a significant increase in severe injury crashes, creating a spike in the rolling five year average trend line, the overall trend line shows a steady average.
- The trend line analysis indicates an expected 25 – 30 serious injury crashes based on current conditions.

Pedestrian Involved Crashes



Observations:

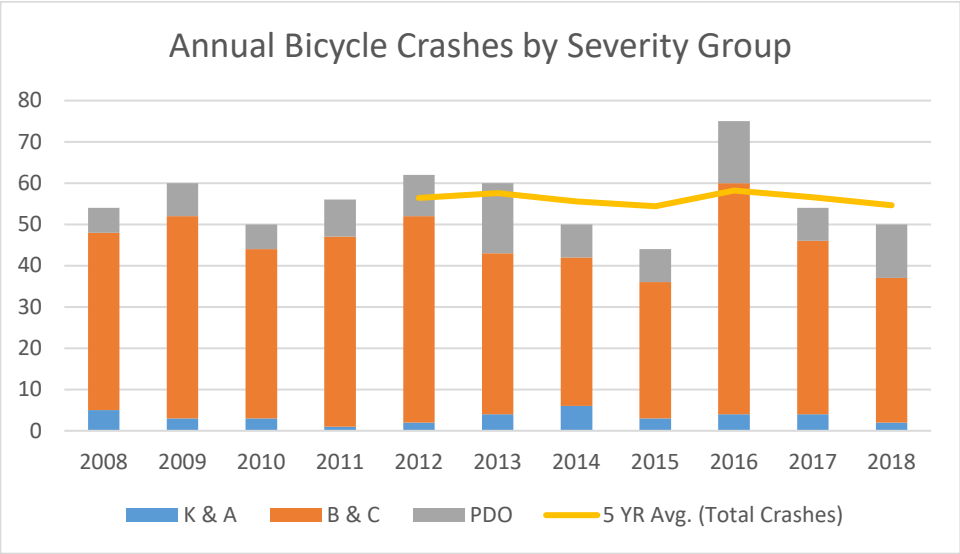
- The overall number of pedestrian crashes elevated after 2009.
- The overall crash occurrence trend has remained steady since 2014.
- The City's crash trend of increased severity of crashes after 2011 is consistent with the national trend.
- 85% of the Five Year Average Crashes result in no injury.
- 14% of the Five Year Average Crashes result in non-severe injury.
- 1% of the Five Year Average Crashes result in serious injury.
- 0.1% of the Five Year Average Crashes result in fatal injury.



Observations:

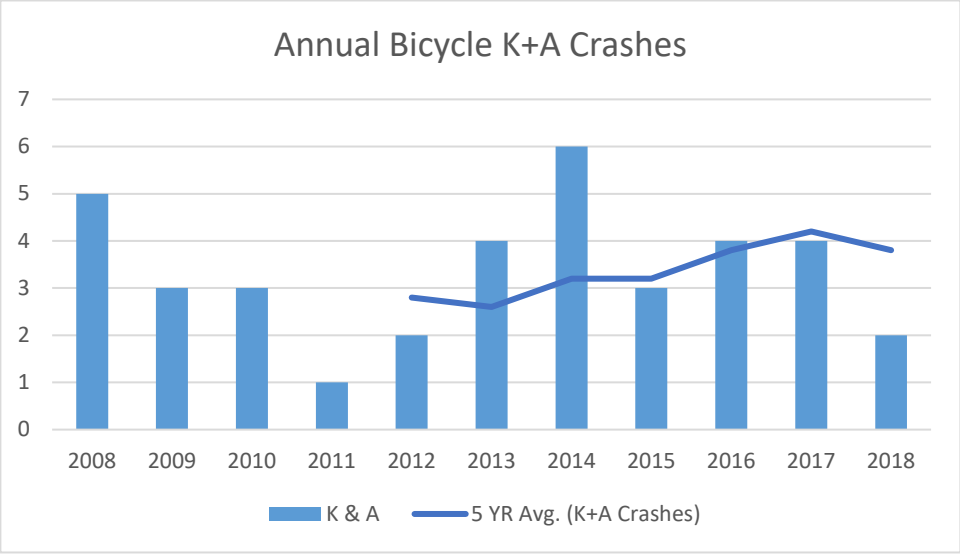
- 2014 had a significant increase in severe injury crashes, 14 crashes.
- The years following 2014 have had significantly fewer occurrences with severe injury crashes ranging from 5-8 crashes annually.

Bicyclist Involved Crashes



Observations:

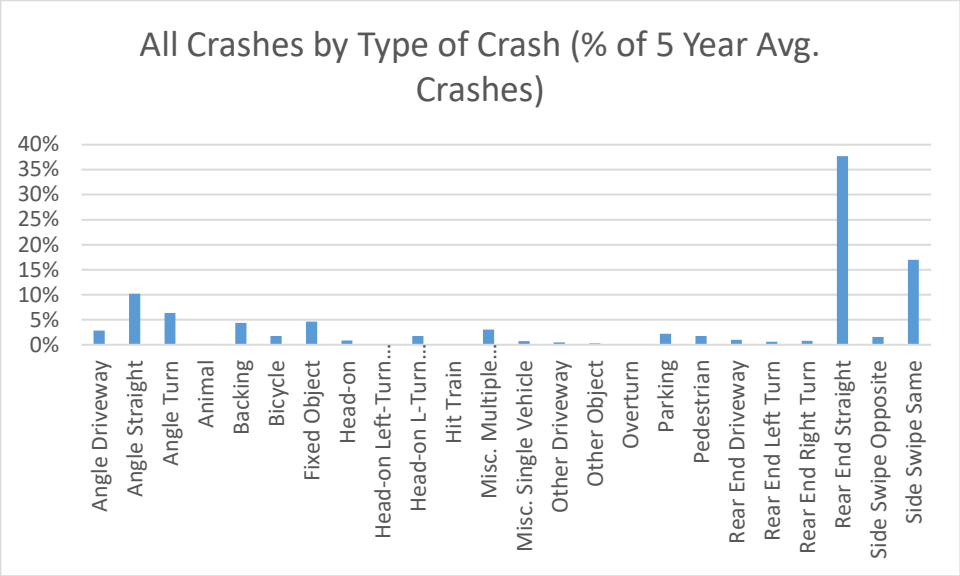
- The overall number of bicyclist crashes does not result in an upward or downward stable trend as the overall number of bicycle crashes varies widely from year to year.
- The five year rolling average trend line shows a fairly stable average crash history ranging between 54 and 59 crashes in any given year.



Observations:

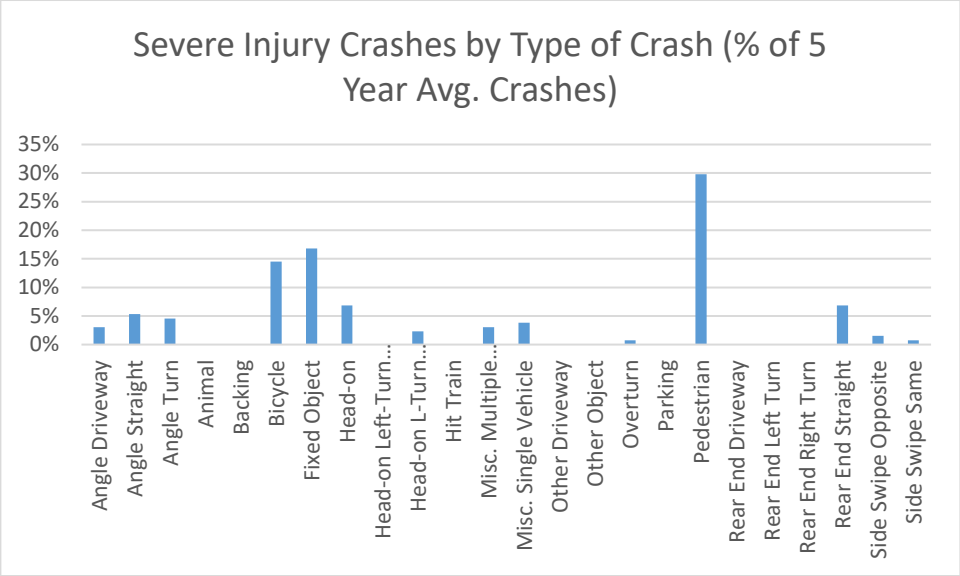
- The overall number of serious injury crashes with people who ride bikes also varies widely from year to year.
- However, unlike overall crashes, the five year rolling average trend line shows a distinctly upwards trend of severe injury crashes.
- 2014 experienced an unusually high number of serious injury crashes (6).
- 2018 experienced the second lowest number of serious injury crashes (2).

Crash Performance by Type



Observations:

- The overall crash pattern is dominated by rear end collisions.
    - 40% of all crashes are rear-end type.
- The second highest type of crash is sideswipe same.
    - 17% of all crashes are side swipe same type.
- The third highest type of crash is angle straight.
    - 10% of all crashes are angle straight.

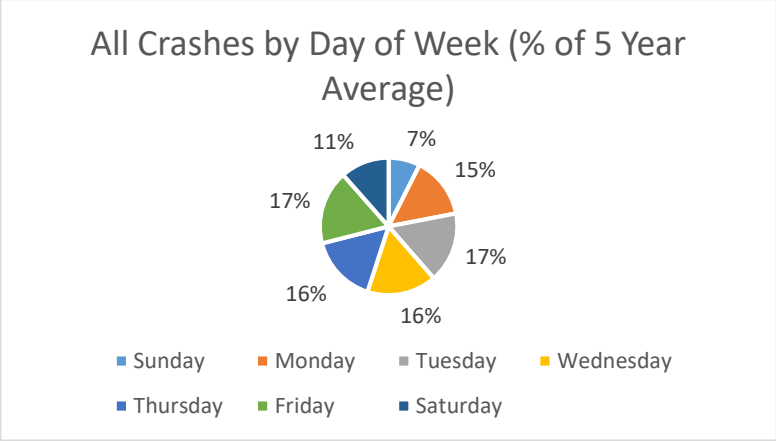


Observations:

- The severe injury crash pattern is dominated by vulnerable road user crashes
    - 30% of all serious injury crashes involve a person walking.
    - 15% of all serious injury crashes involve a person bicycling.
- The second highest severe injury crash type involves crashes with a fixed object.
    - 17% of all serious injury crashes result from striking a fixed object.

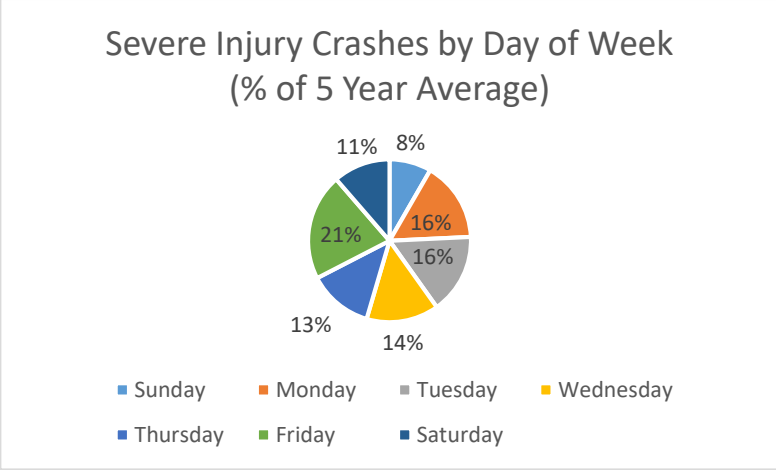
Crash Performance by Temporal Conditions

Day of Week



Observations:

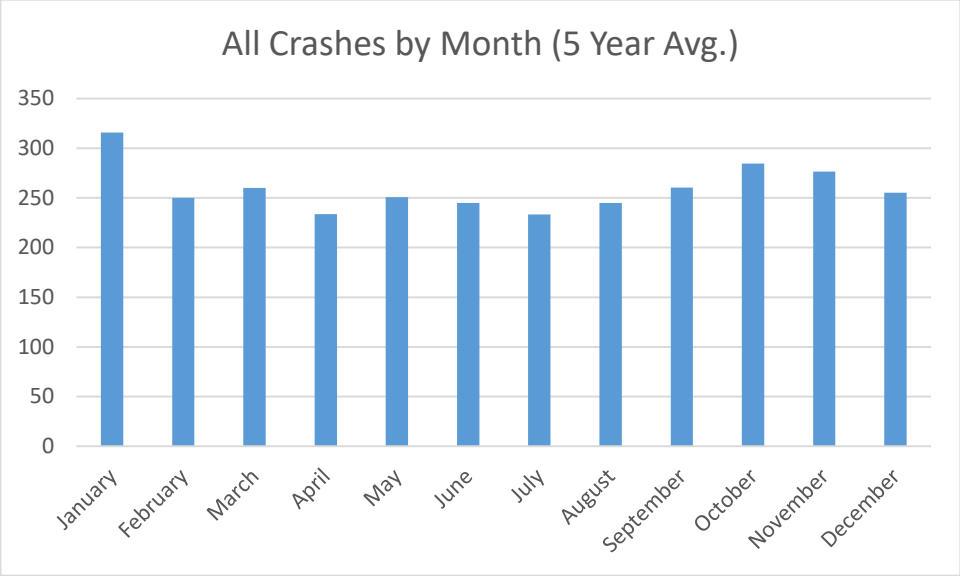
- Sunday receives a slightly lower occurrence of crashes. This result is expected as traffic volumes tend to be significantly lower on Sundays.
- Friday receives a slighter higher occurrence of crashes.



Observations:

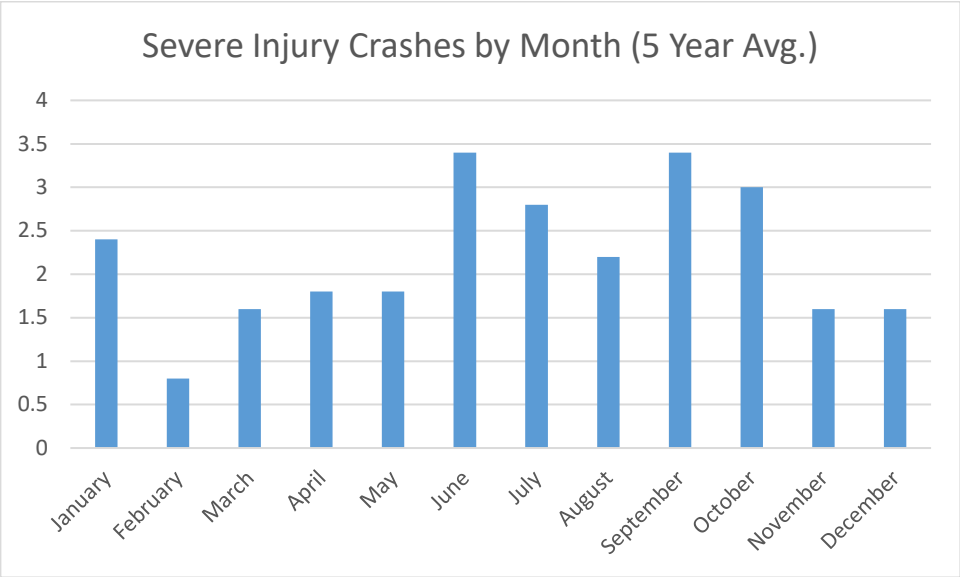
- Severe injury crashes have a similar distribution to the overall crash pattern.

Month of Year



Observations:

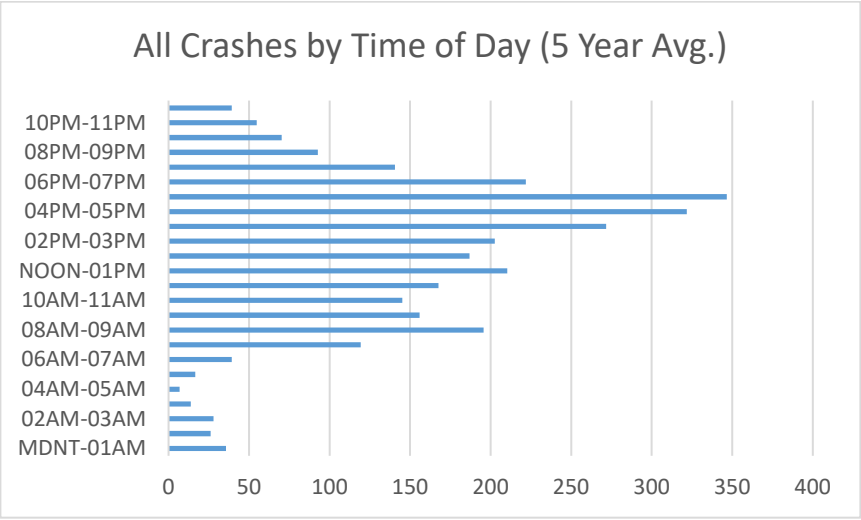
- April and July have the lowest occurrence of crashes.
- Crash occurrences elevate in the fall, including September, October, and November. This trend is to be expected as the fall combines generally favorable weather conditions with shortened daylight hours.
- January has the most number of overall crash occurrences; this may be contributed to weather conditions.
- Overall the number of crashes is evenly distributed throughout the year.



Observations:

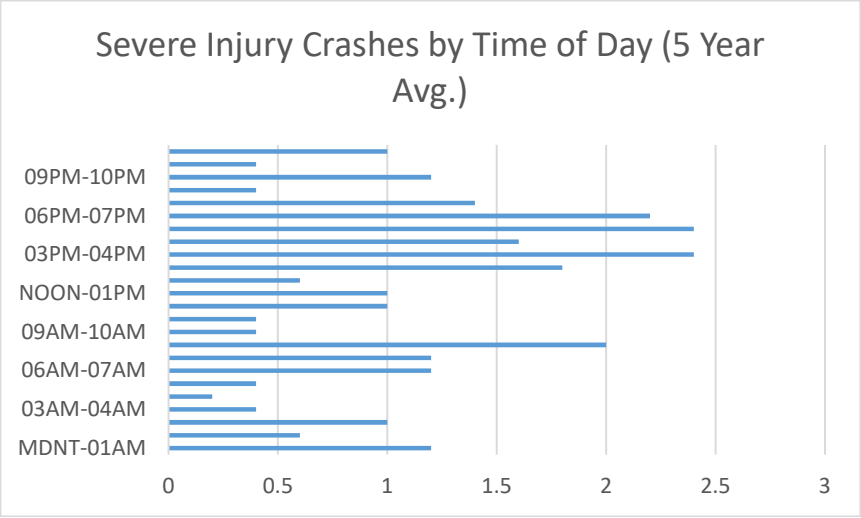
- Severe injury crash occurrences do not following the same trends as the overall crash pattern.
- Severe injury crashes are concentrated in the months between June and October, which is consistent with the highest activity months for vulnerable road users.
- Severe injury crashes also have a slightly higher occurrence in January.

Time of Day



Observations:

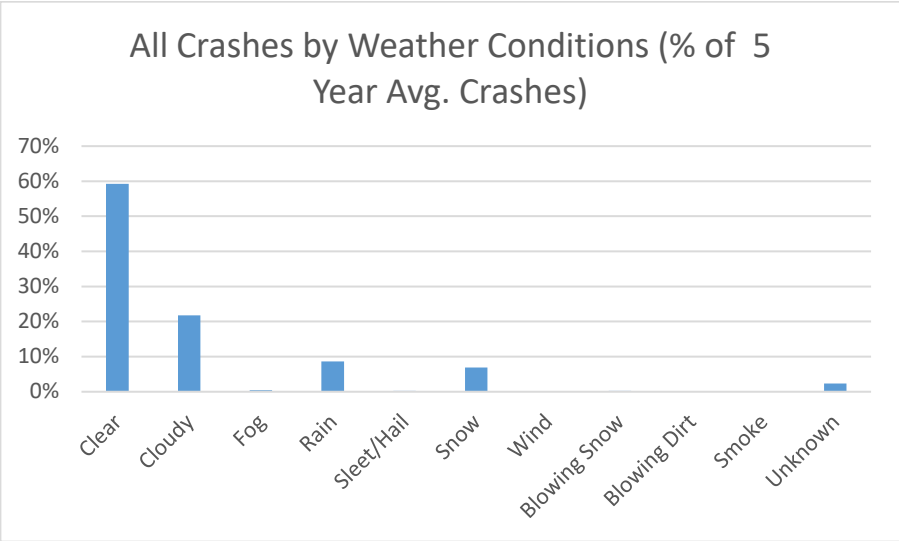
- Overall crash occurrences throughout the day follow a pattern consistent with the general trends of traffic volumes throughout the day.
- The highest number of crashes occur during the hours associated with traditional PM peak travel.



Observations:

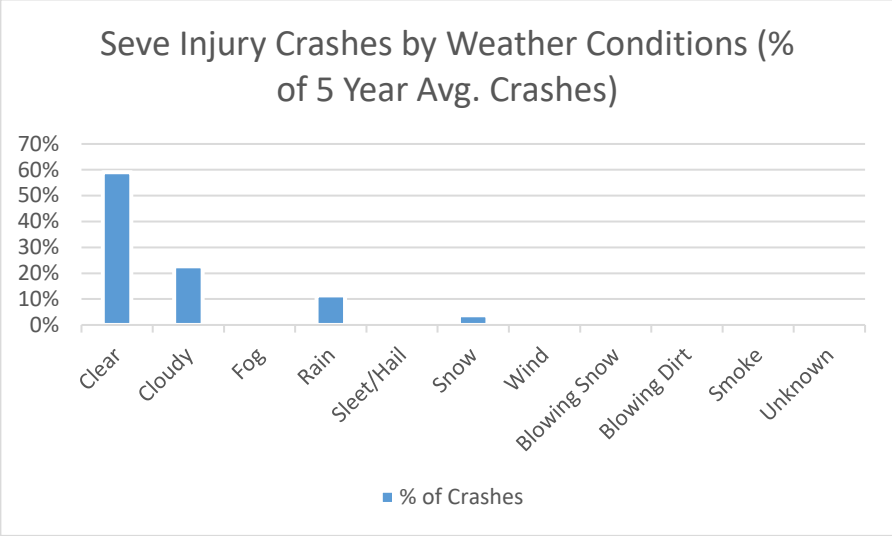
- Overall severe injury crash occurrences throughout the day follow a pattern consistent with daily traffic volumes.
- The increase in severe injury crashes occurring during the traditional AM peak hour is more pronounced than in the overall crash pattern.
- Overnight severe injury crash occurrences are at a level more consistent with mid-day crash occurrences, unlike the overall crash pattern.

Weather Conditions



Observations:

- The majority of crashes occur during non-inclement weather (81%).



Observations:

- Severe injury crashes occur in a similar manner (82%)

Crash Locations & Density
2014 - 2018

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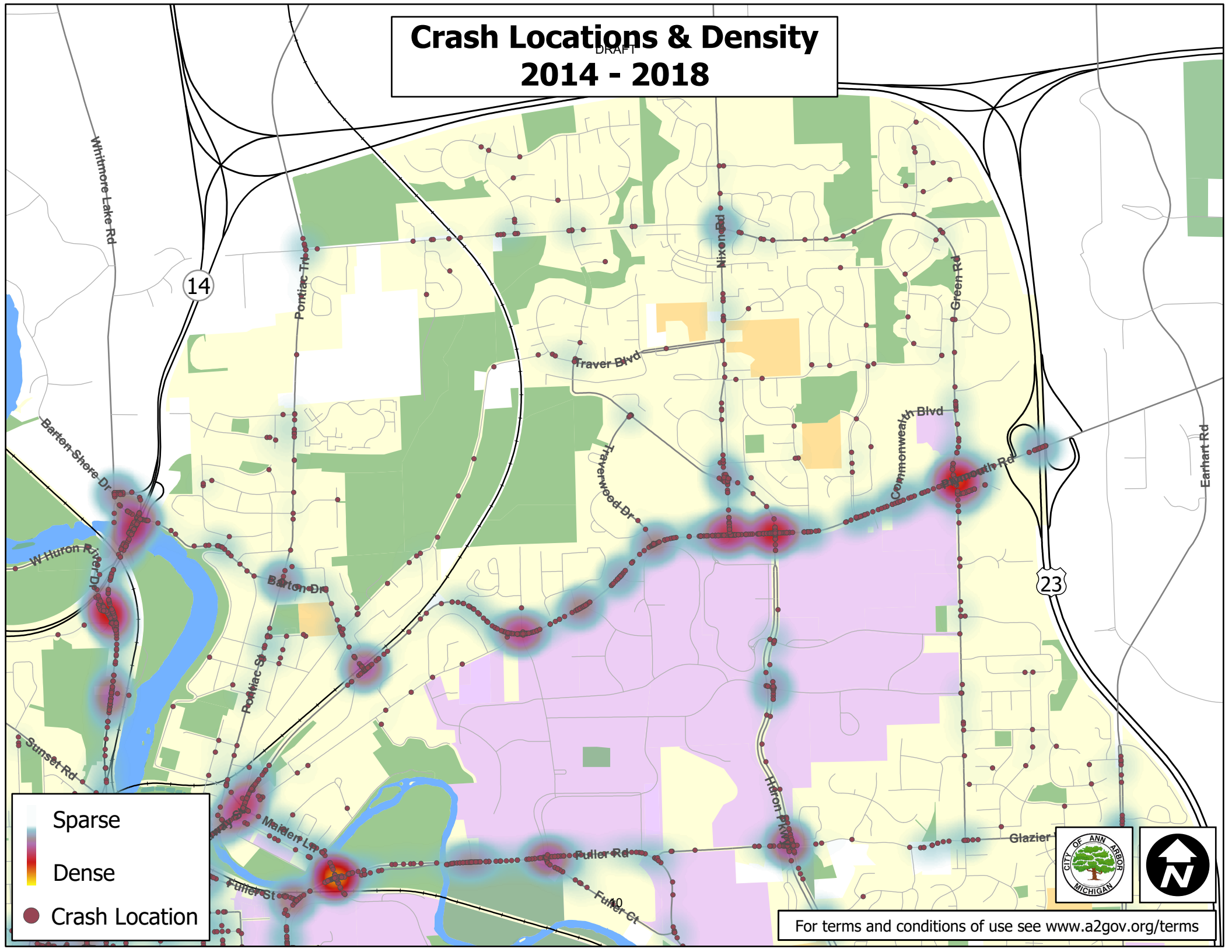

Crash Locations & Density
2014 - 2018

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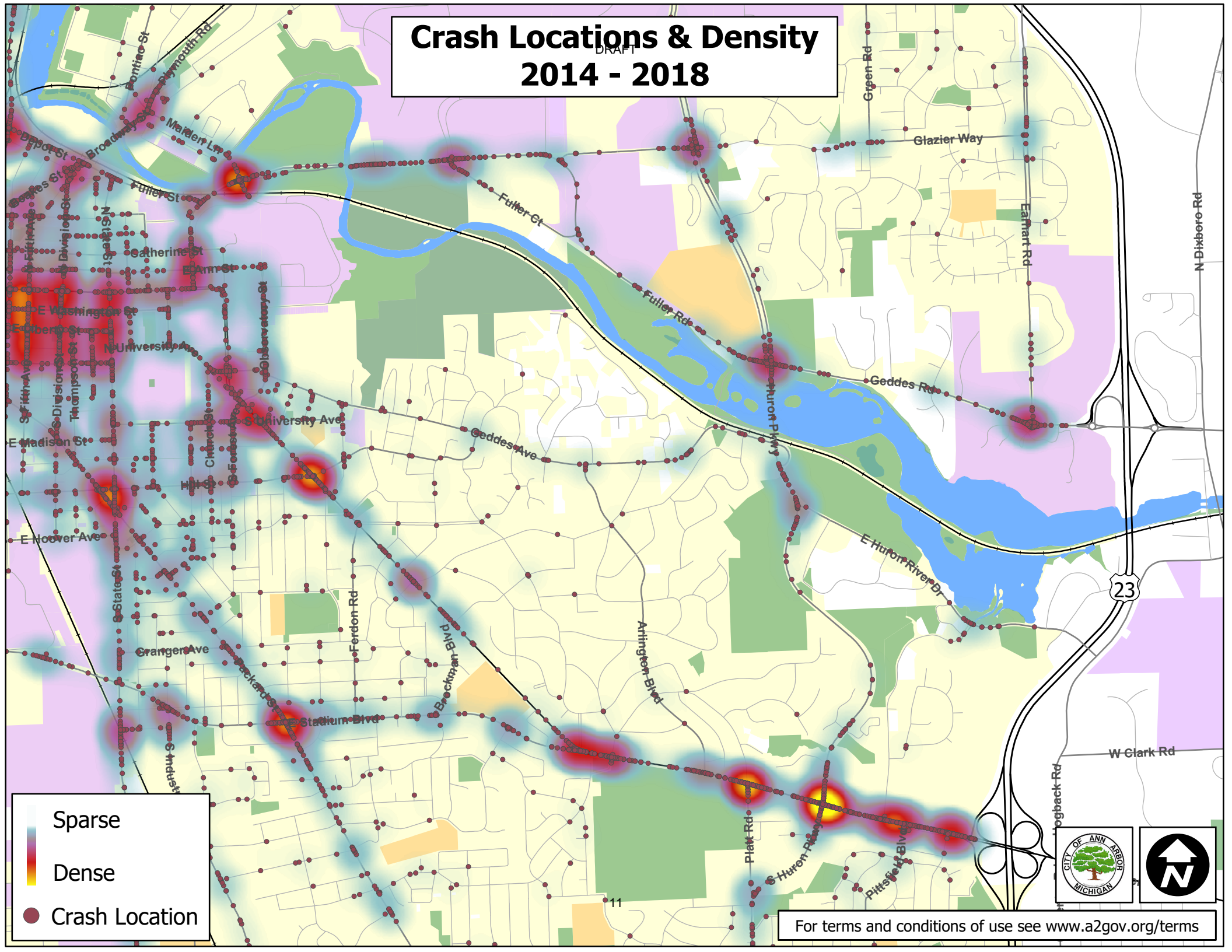

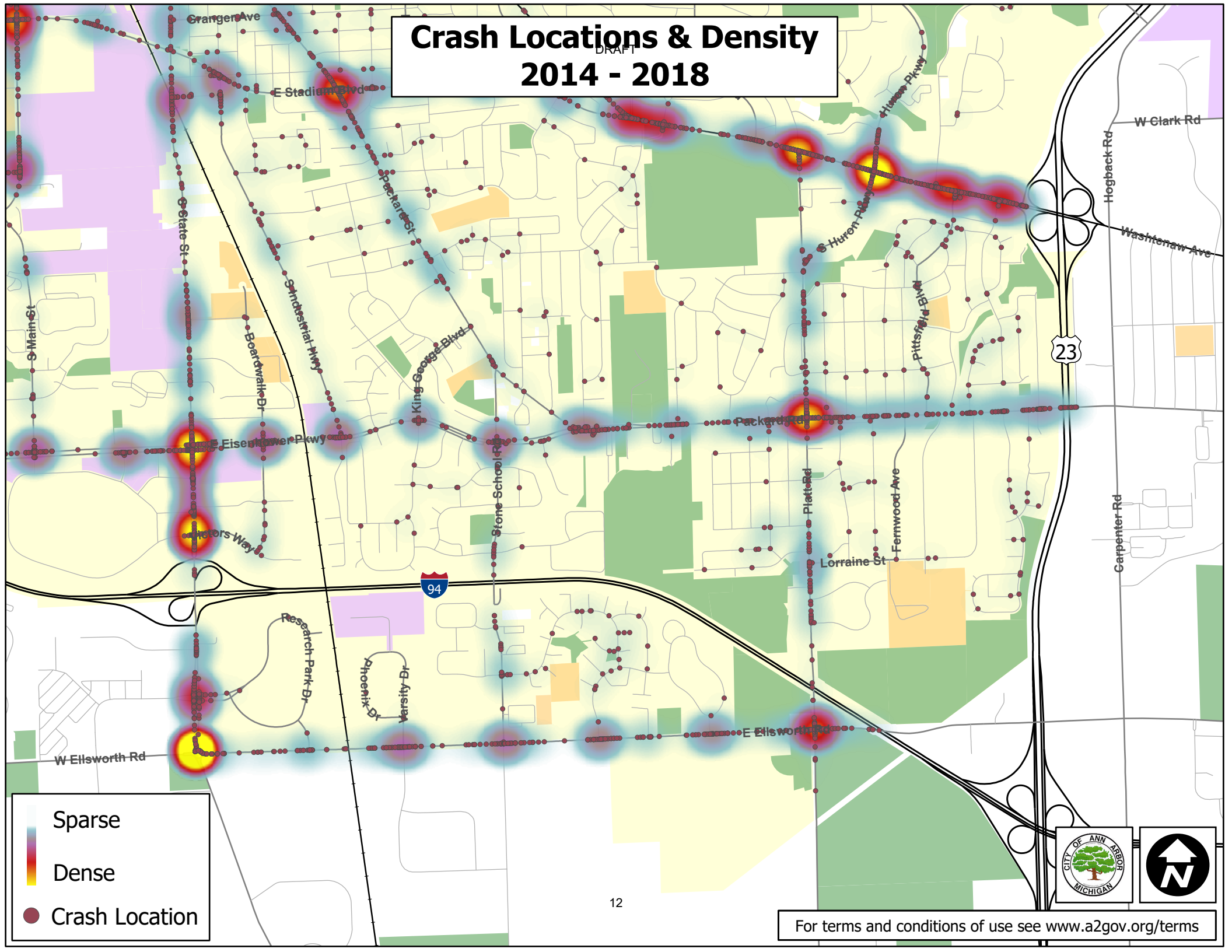
Crash Locations & Density
2014 - 2018
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Sparse
Dense
Crash Location
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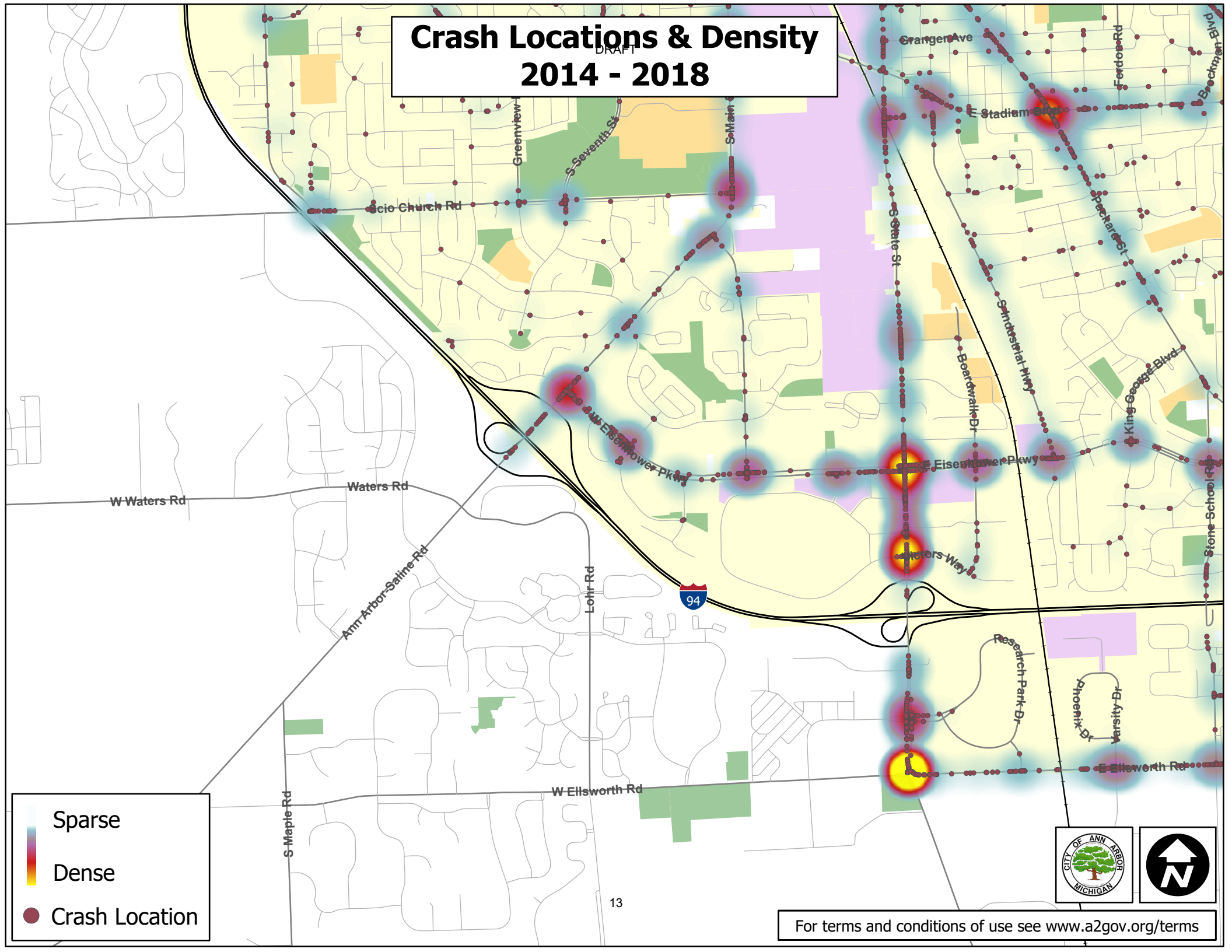
Crash Locations & Density
2014 - 2018
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Scio Church Rd
Greenview
S Seventh St
S Main
Granger Ave
E Stadium Blvd
Ferdon Rd
Packard St
S State St
Industrial Hwy
Boardwalk Dr
King George Blvd
Stone School Rd
Eisenhower Pkwy
Waters Rd
W Waters Rd
Ann Arbor-Saline Rd
Lohr Rd
94
Visitors Way
Research Park Dr
Phoenix Dr
Varsity Dr
E Ellsworth Rd
W Ellsworth Rd
S Maple Rd
Sparse
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Crash Location
13
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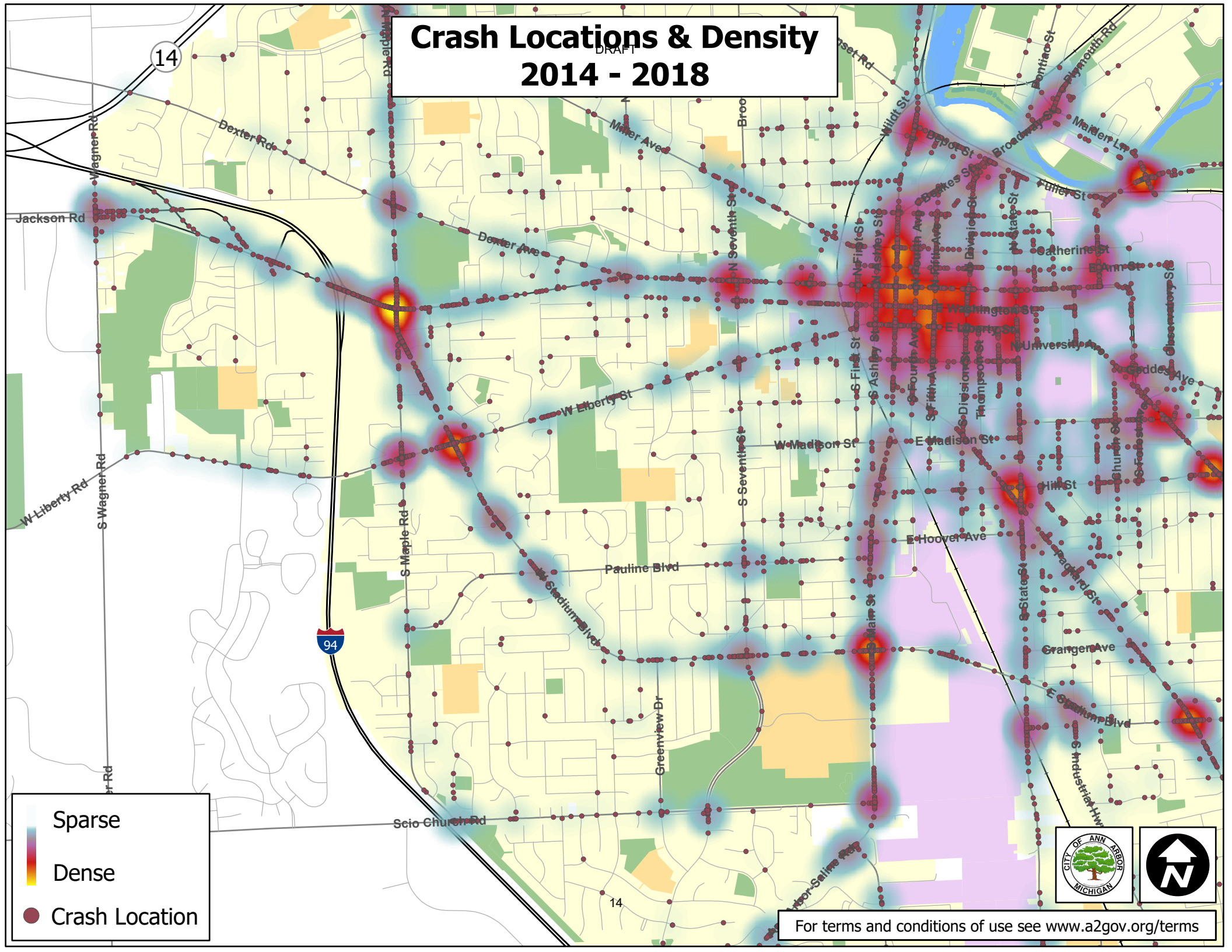
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94
Jackson Rd
Dexter Rd
Dexter Ave
Miller Ave
W Liberty St
E Liberty St
W Washington St
E Washington St
W Madison St
E Madison St
Hill St
E Hoover Ave
Pauline Blvd
Stadium Blvd
E Stadium Blvd
Granger Ave
Scio Church Rd
Greenview Dr
S Maple Rd
S Wagner Rd
W Liberty Rd
S Seventh St
N Seventh St
S First St
N First St
S Ashley St
N Ashley St
S Main St
S State St
N State St
S Division St
N Division St
S Industrial Hwy
Plymouth Rd
Broadway St
Maiden Ln
Depot St
Fuller St
Catherine St
E Ann St
N University Ave
Geddes Ave
Church St
Forest Ave
Observatory St
Packard St
Wagner Rd
Jackson-Saline Rd

Crash Locations & Density
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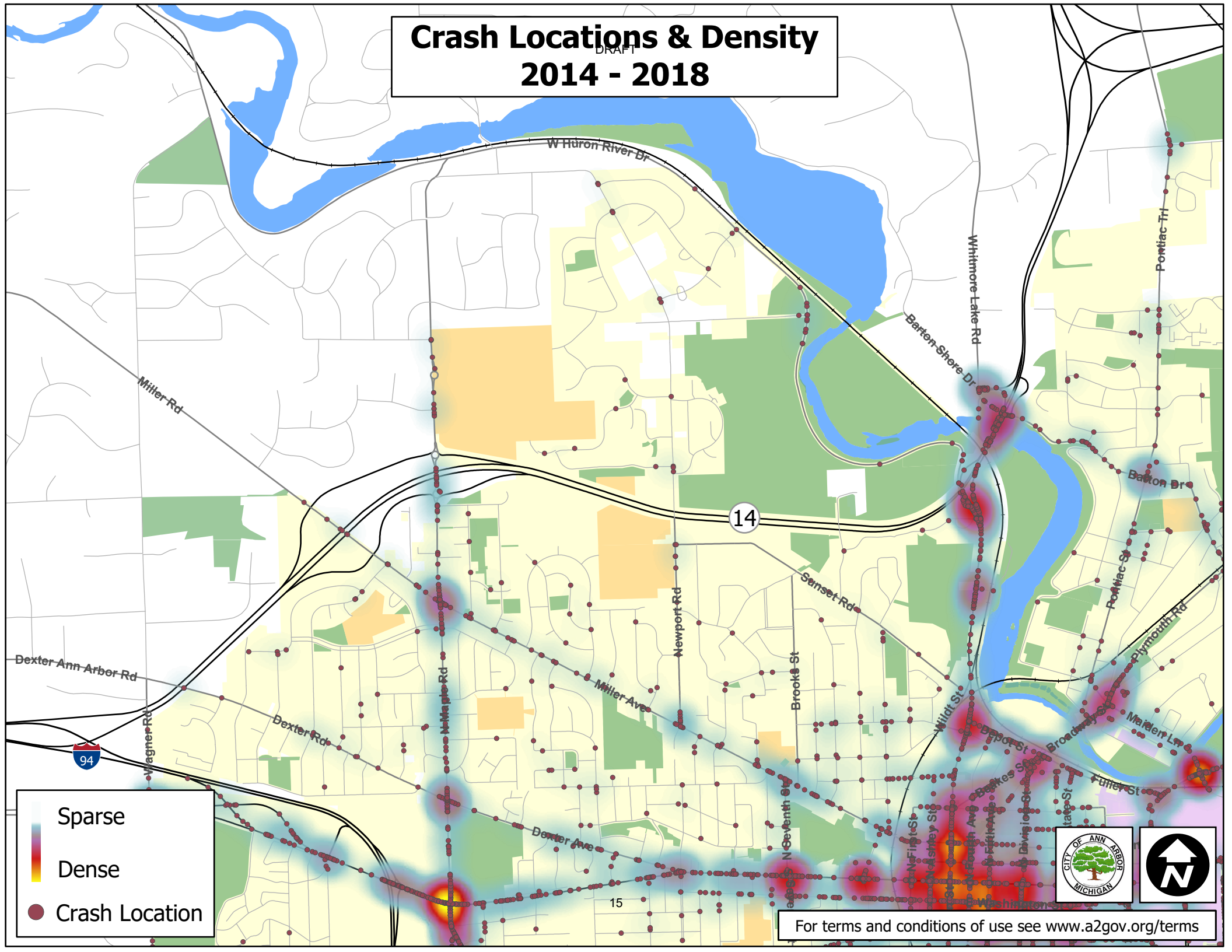

Crash Severity & All Crash Density
2014 - 2018

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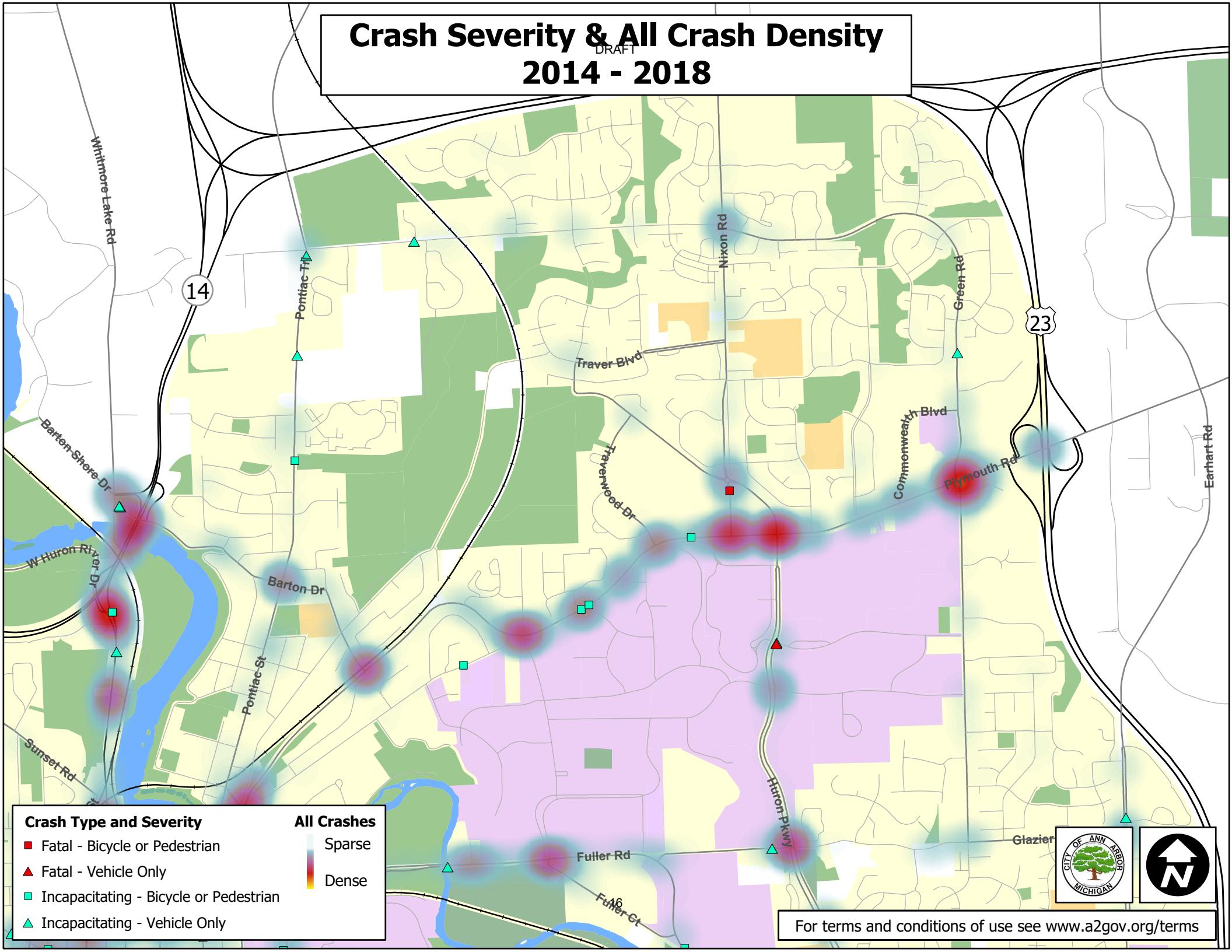

Crash Type and Severity

- Fatal - Bicycle or Pedestrian
- Fatal - Vehicle Only
- Incapacitating - Bicycle or Pedestrian
- Incapacitating - Vehicle Only

All Crashes

Sparse

Dense

Crash Severity & All Crash Density
2014 - 2018

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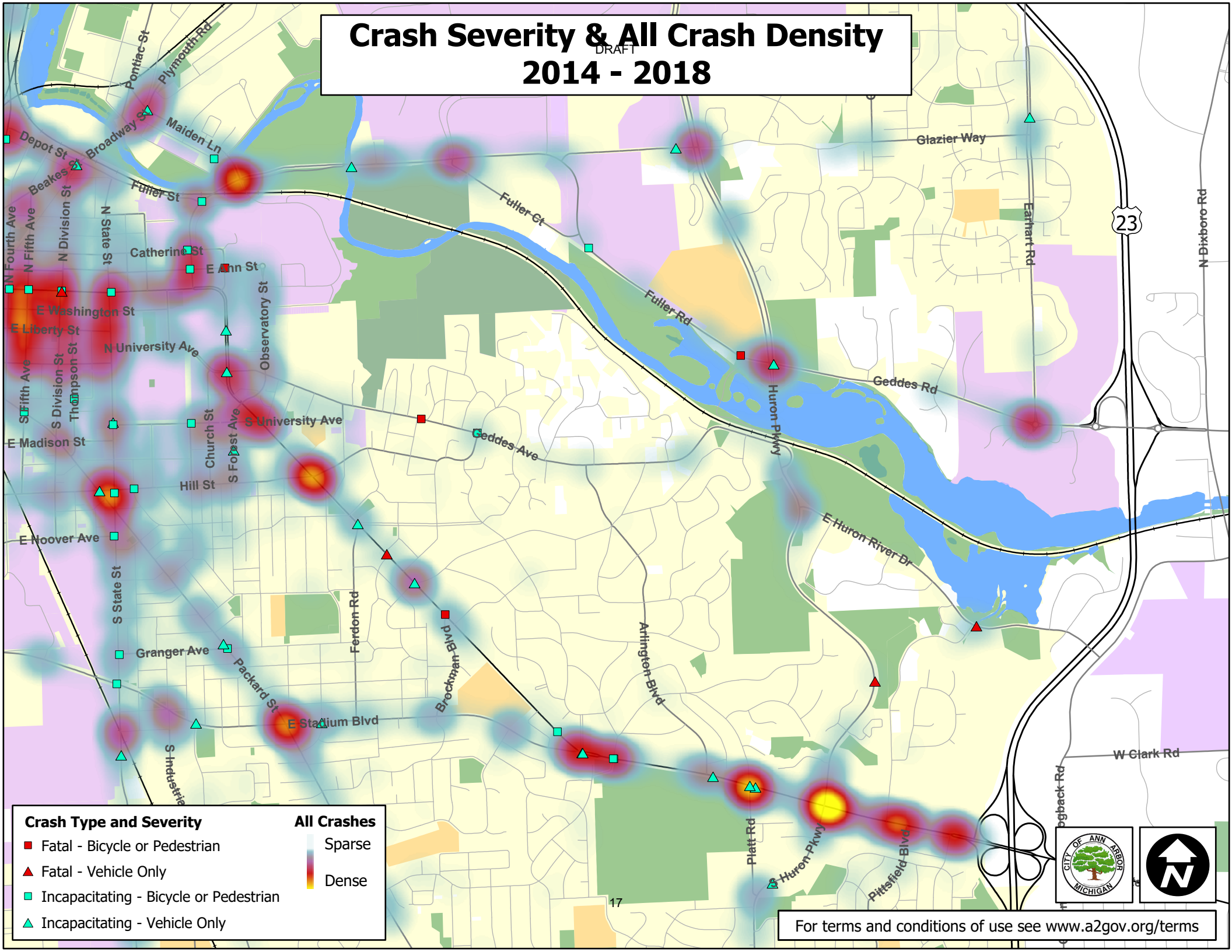

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Dense

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2014 - 2018

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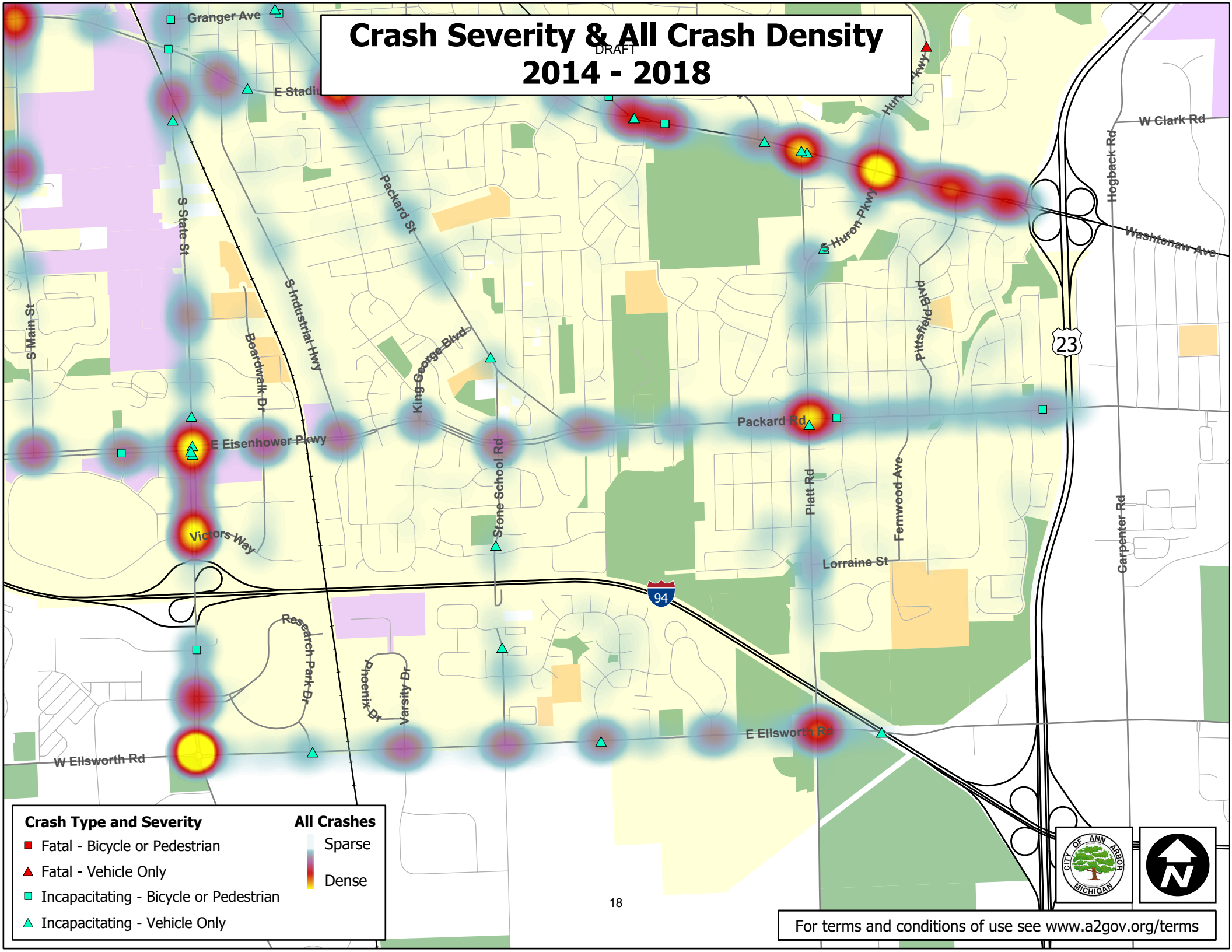

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Crash Severity & All Crash Density
2014 - 2018

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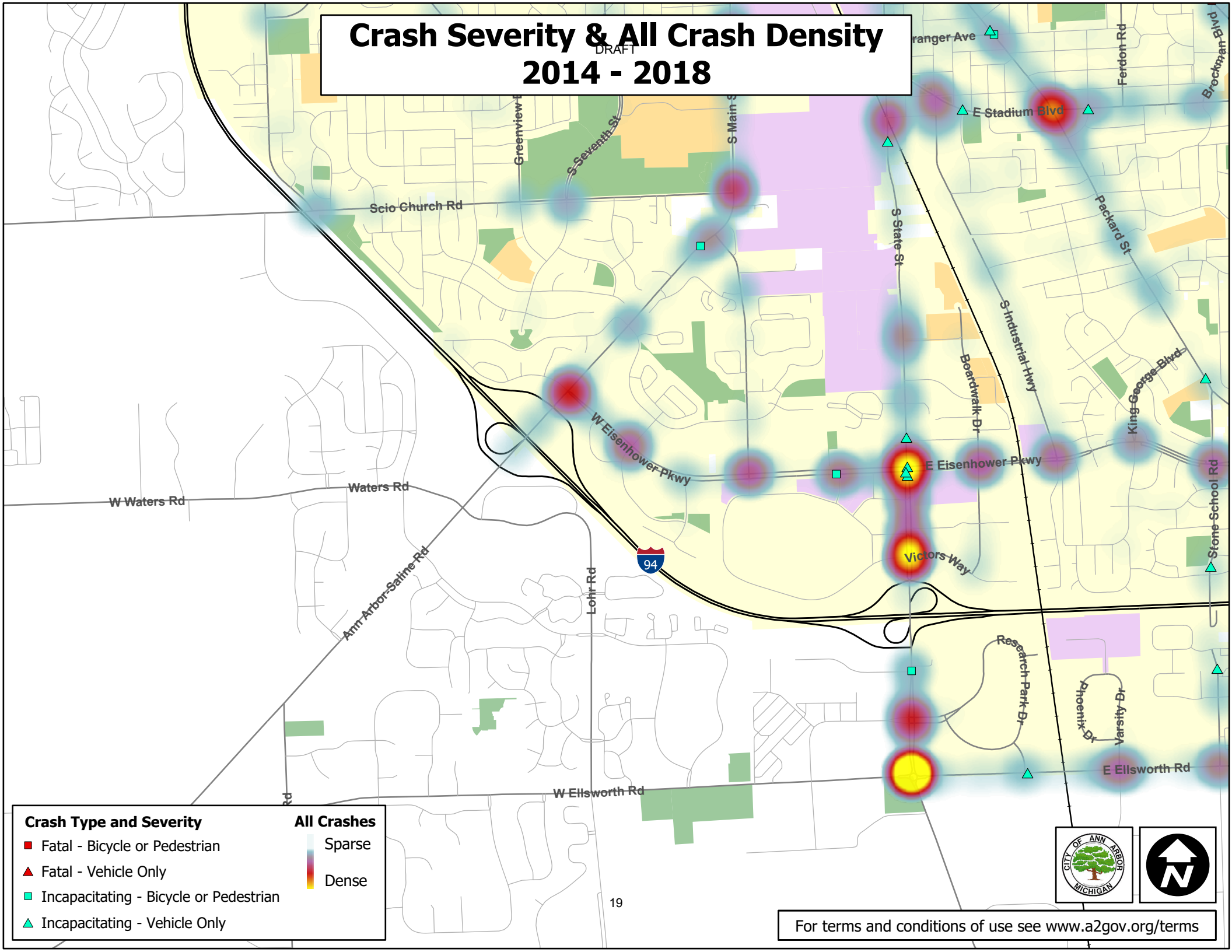

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Crash Severity & All Crash Density
2014 - 2018

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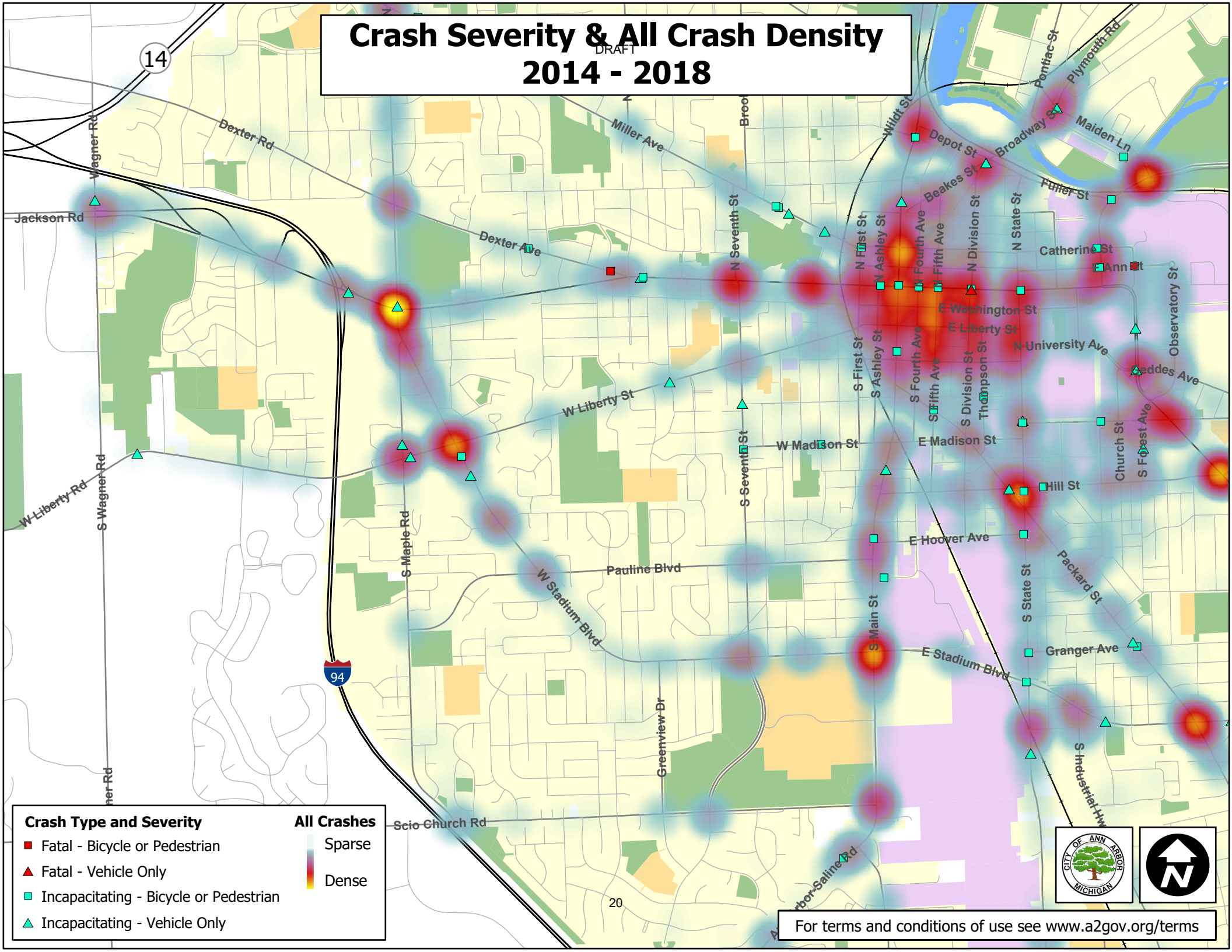

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All Crashes

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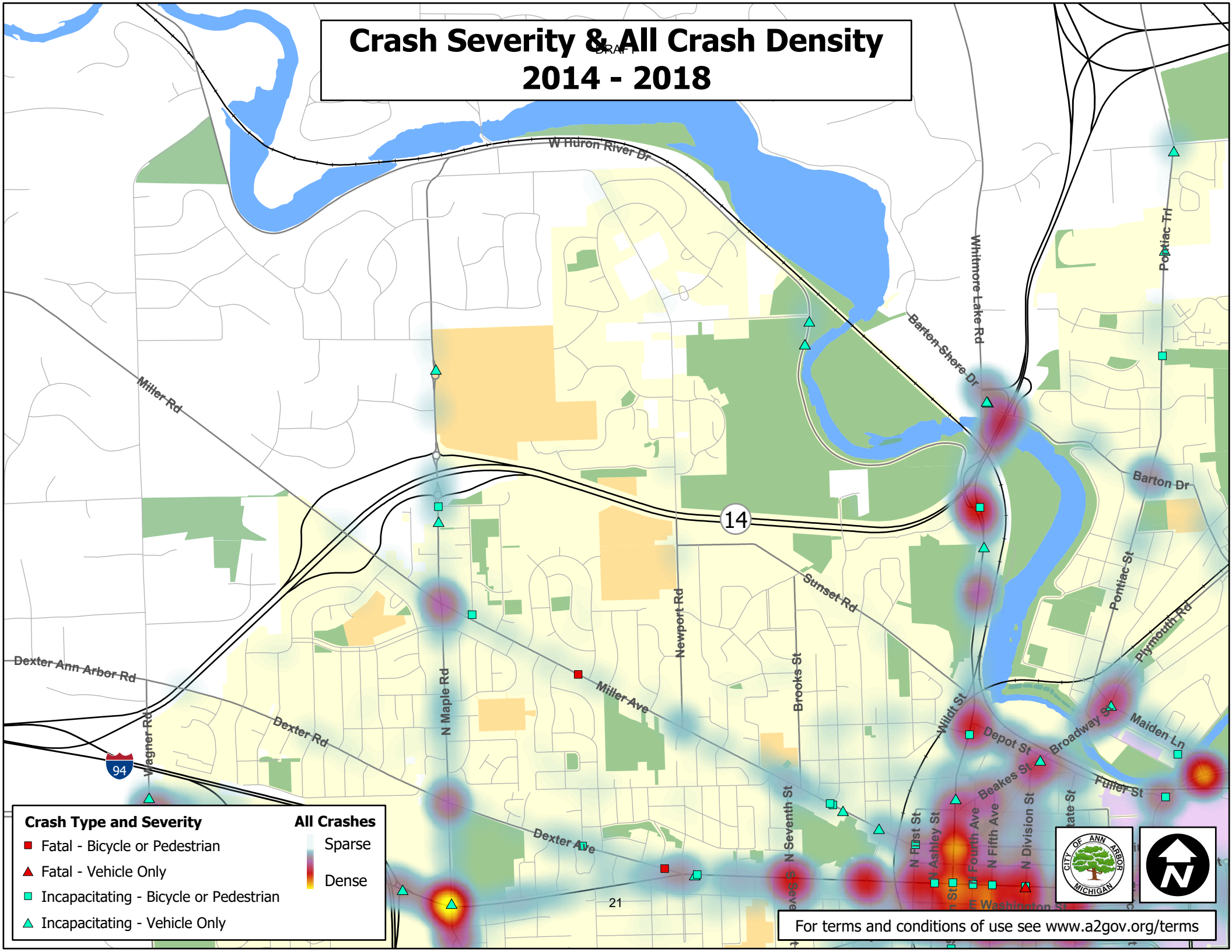
Dense

Crash Severity & All Crash Density
2014 - 2018



Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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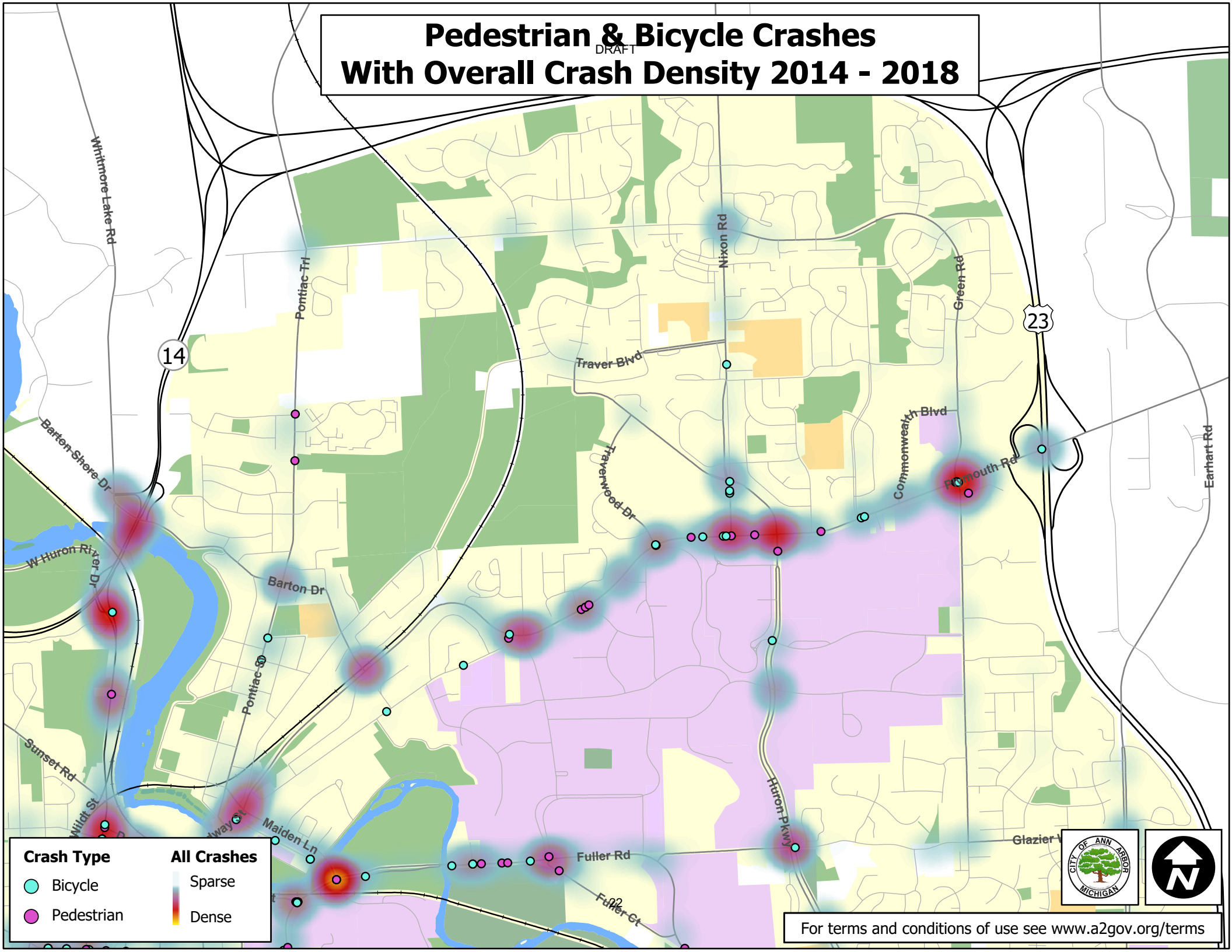

Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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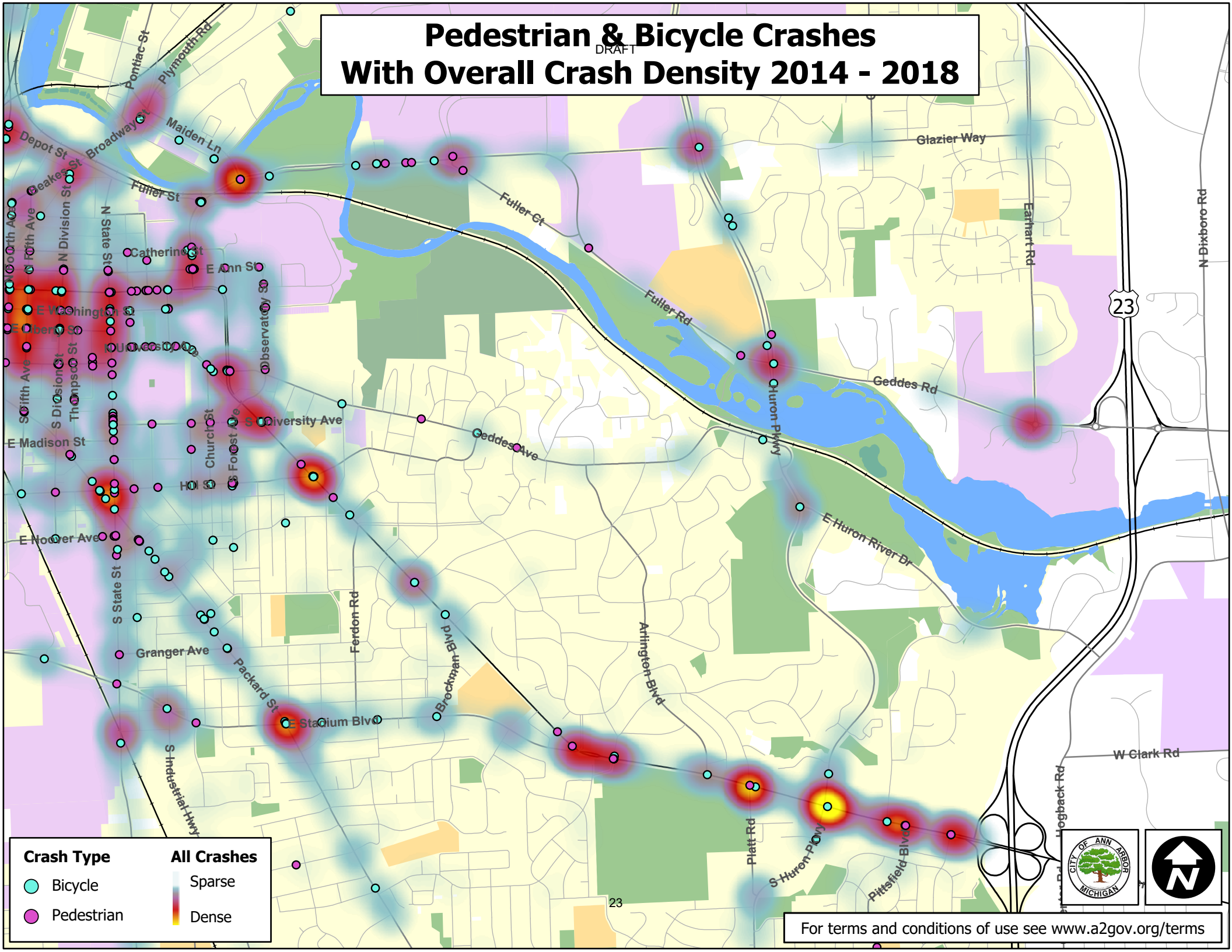

Crash Type

- Bicycle
- Pedestrian

All Crashes

- Sparse
- Dense

Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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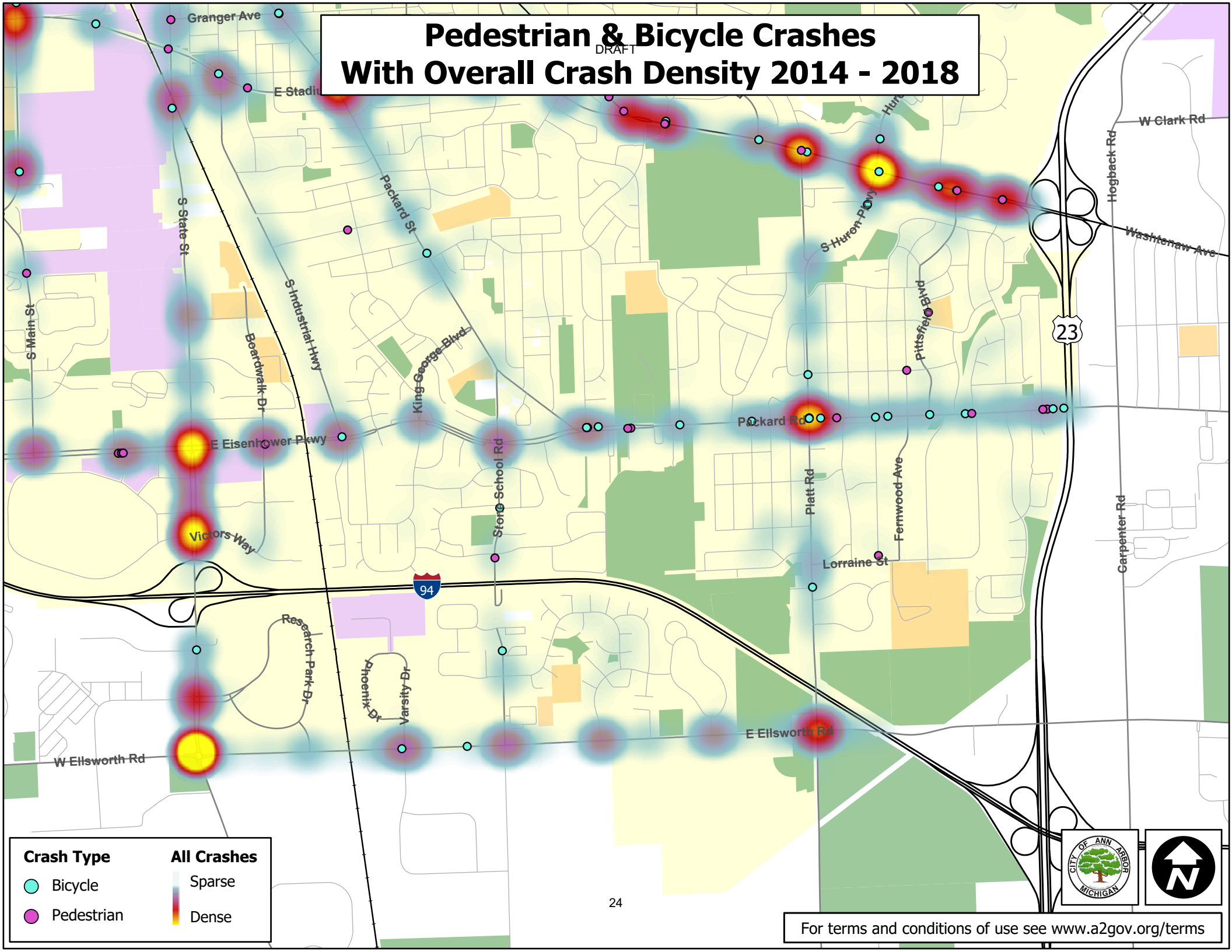

Crash Type

- Bicycle
- Pedestrian

All Crashes

- Sparse
- Dense

Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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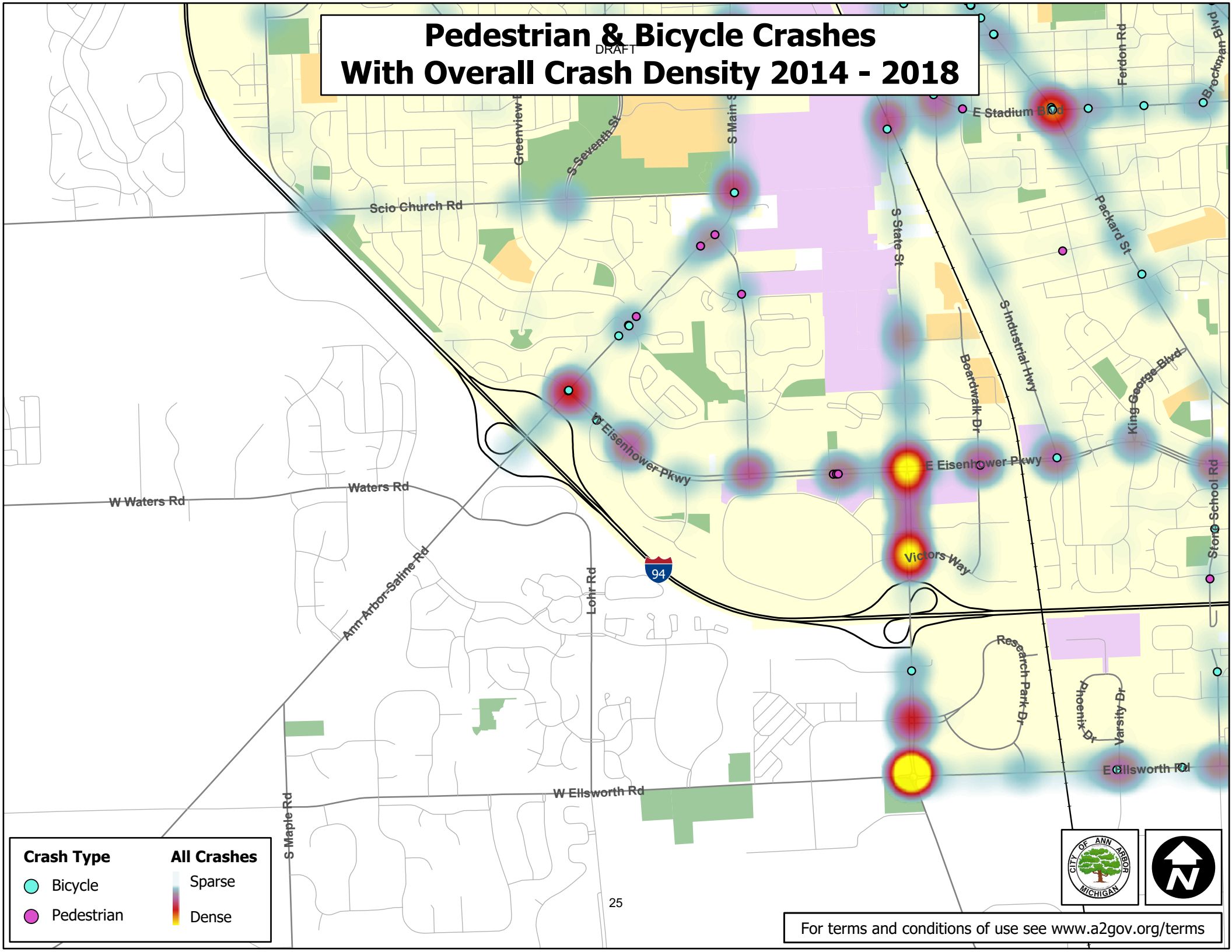

Crash Type

- Bicycle
- Pedestrian

All Crashes

- Sparse
- Dense

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Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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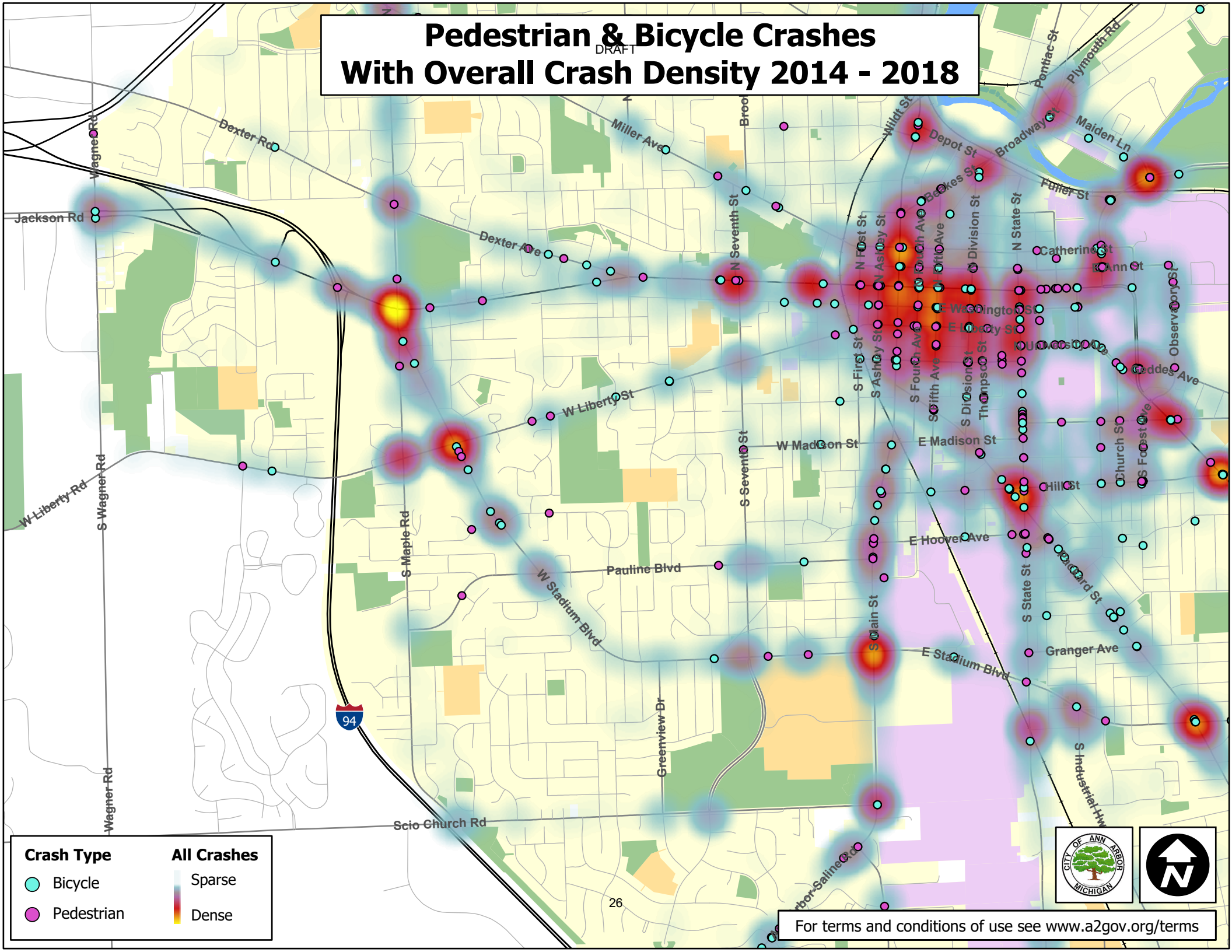

Pedestrian & Bicycle Crashes With Overall Crash Density 2014 - 2018

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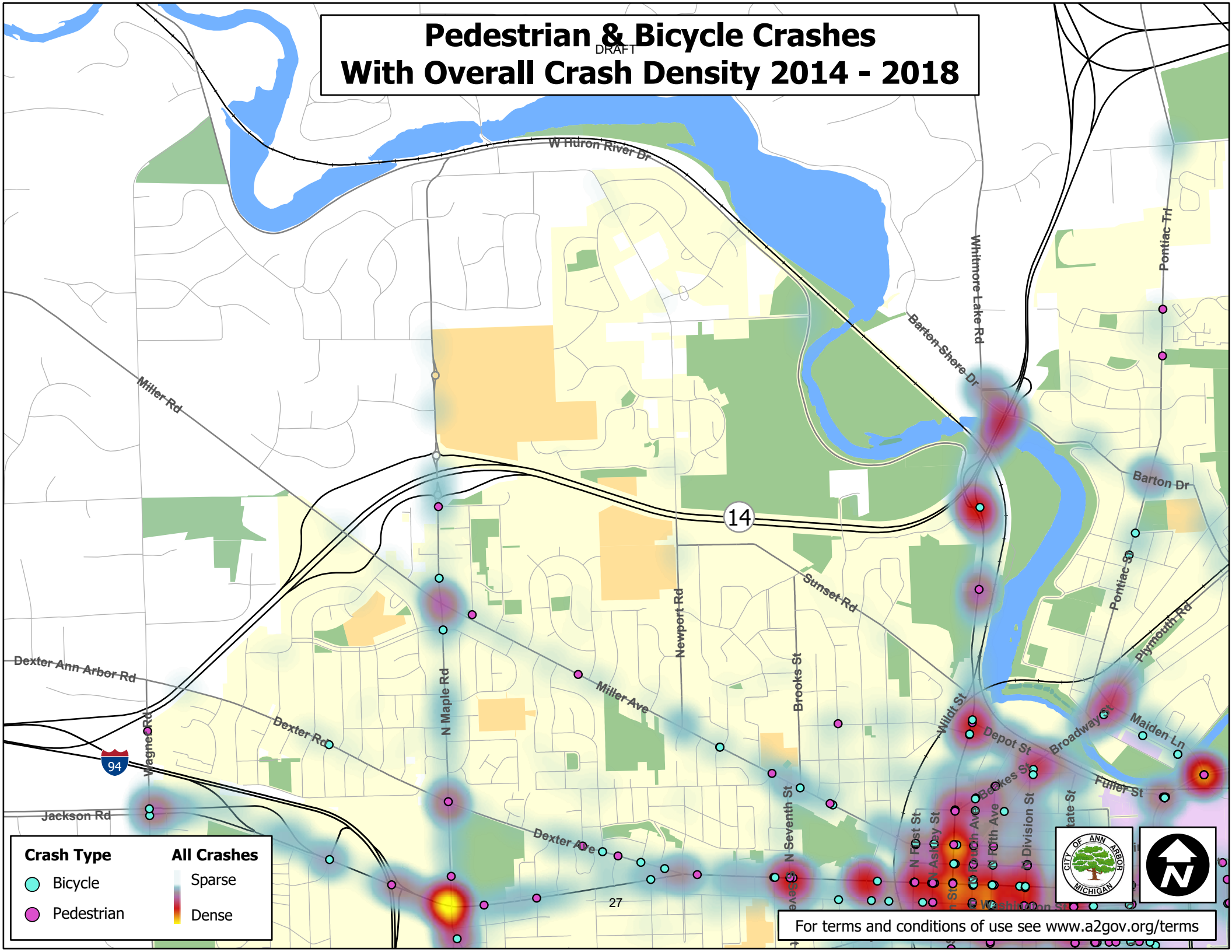
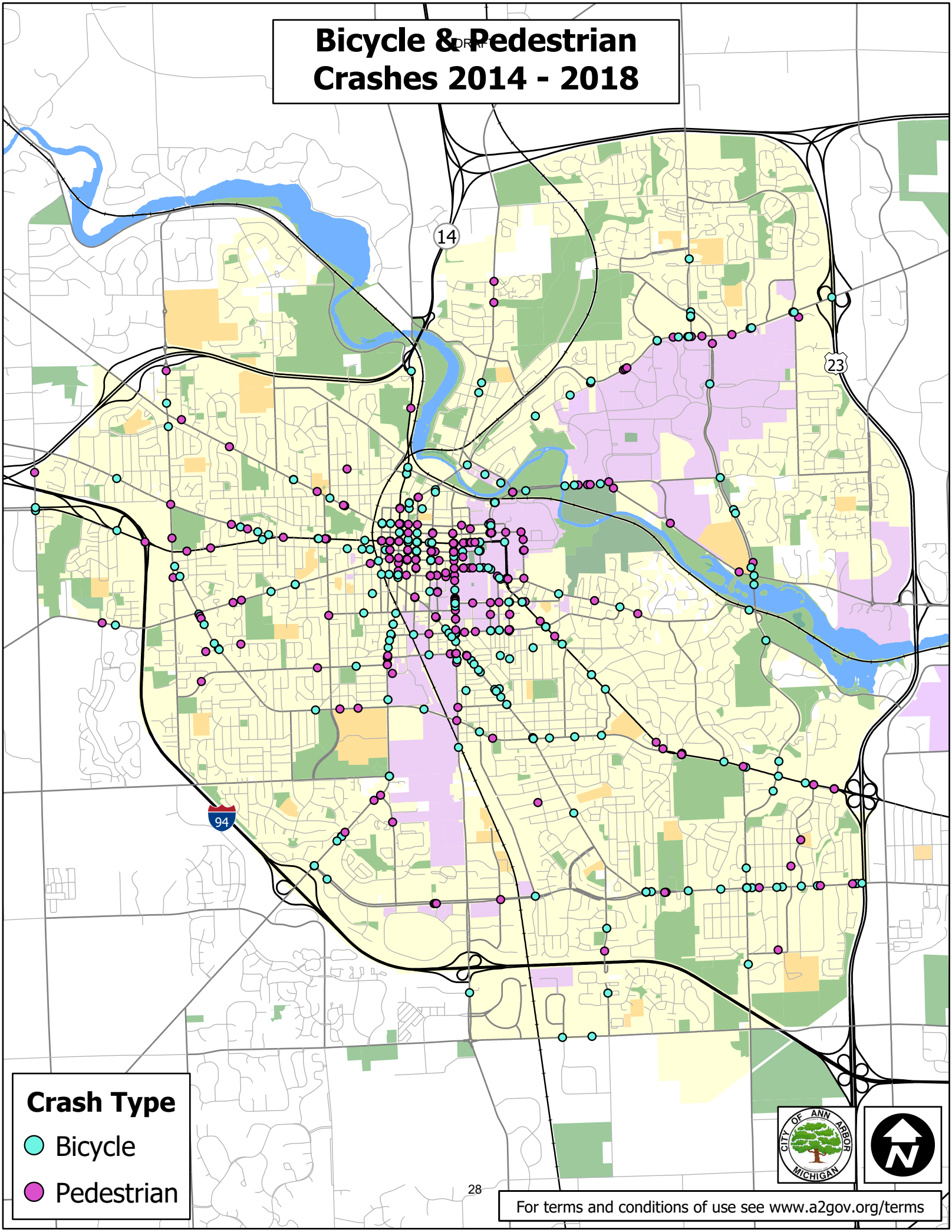


Bicycle & Pedestrian Crashes 2014 - 2018



Fatal or Incapacitating Crashes 2014 - 2018