

Gurnee Police Department Memorandum

TO: Chief Woodside

FROM: Traffic Safety Technician Chris Parr

SUBJECT: Follow-up Evaluation Report

DATE: 12/26/2017

Chief Woodside,

Per the Illinois Department of Transportation policy on Red Light Running Camera Systems (RLR), we are required to present an evaluation report one year after operation of a photo enforced intersection(s) and every three years after.

In accordance with their policy the following information is needed for the evaluation report:

- Intersection Location(s).
- Date of implementation.
- RLR Camera System manufacturer and contractor name.
- Crash data specific to the RLR location(s) for the 3-year period prior to and for the period post RLR Camera installation. The crash data shall include yearly collision diagrams of the intersection(s).
- An analysis of the crash data, including a summary of any increases or decreases in crash types.
- Signal timings and other settings before and after RLR Camera installation.
- Traffic volumes before and after RLR Camera System installation. The traffic volumes shall include both Average Daily and Peak Period traffic.
- Recommendations to further reduce red light violations and severe crashes and to improve the operation of the intersection(s).
- Summary of adjudication experience and results.

Overview

The Village of Gurnee is required to provide a follow-up evaluation report to the Illinois Department of Transportation for the intersection(s) of Route 41 & Delany, Route 132 & Route 21, Route 132 & Dilleys and Route 132 & Hunt Club Road one year after the installation of a RLR Camera System.

On December 3, 2007, the Village of Gurnee entered into agreement with Redflex Traffic Systems Inc. to install RLR Camera Systems at several intersections throughout the village. The RLR Camera Systems were installed at each of the intersections listed below. Once the testing and warning phase was completed the RLR Systems went fully operational with citations being issued on:

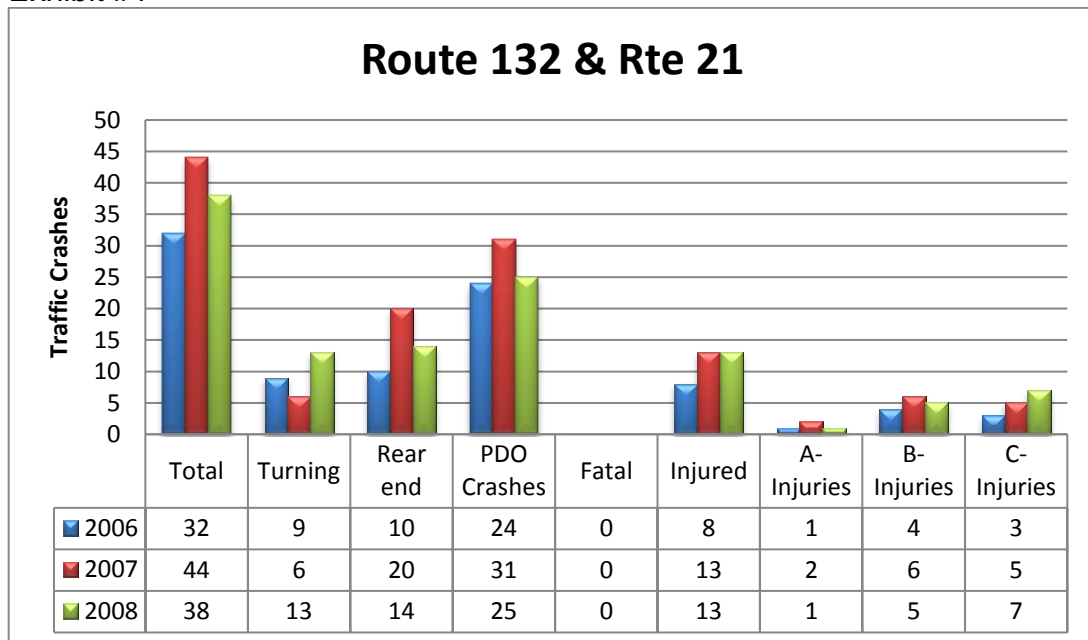
Route 132 & Route 21                      June 6, 2009  
 Route 132 & Hunt Club Road              June 6, 2009  
 Route 132 & Dilleys Road                  June 17, 2009  
 Route 41 & Delany Road                    July 1, 2009

**Crash Data**

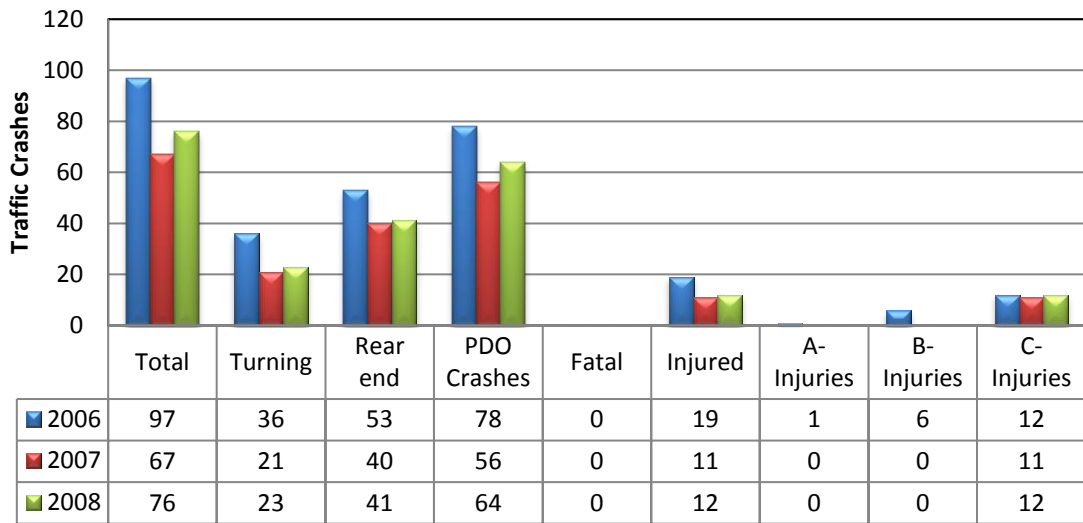
The crash data specific to the RLR location(s) for the 3-year period (Exhibit #1) prior to and for the period post (Exhibit #2, 3, 4, & 5) RLR Camera installation. The crash data shall include yearly collision diagrams of the intersection(s).

Note\*\*\*\* crash data source <http://lake.ms2soft.com/tcds>.

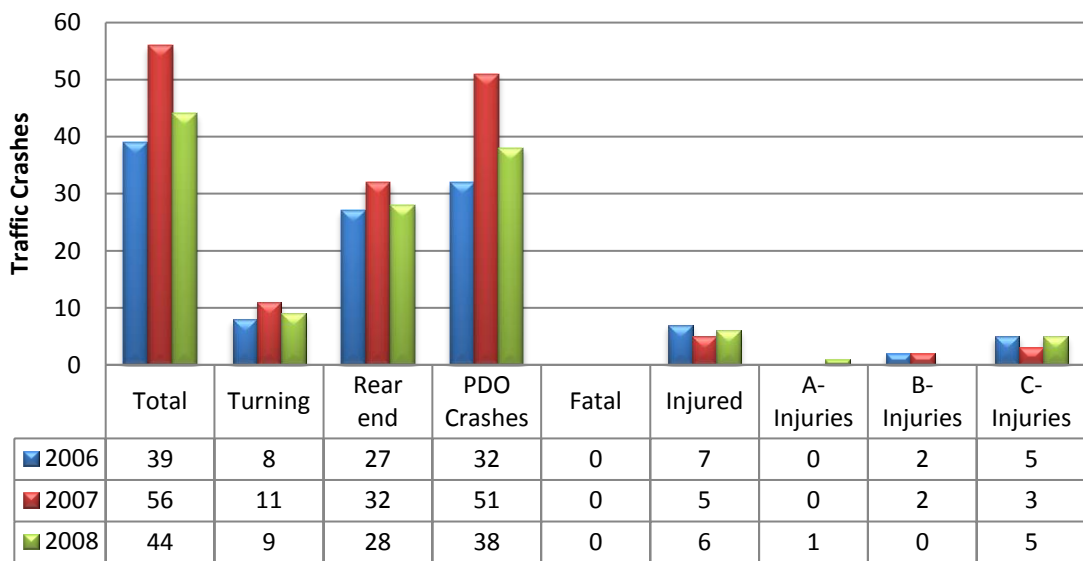
Exhibit #1



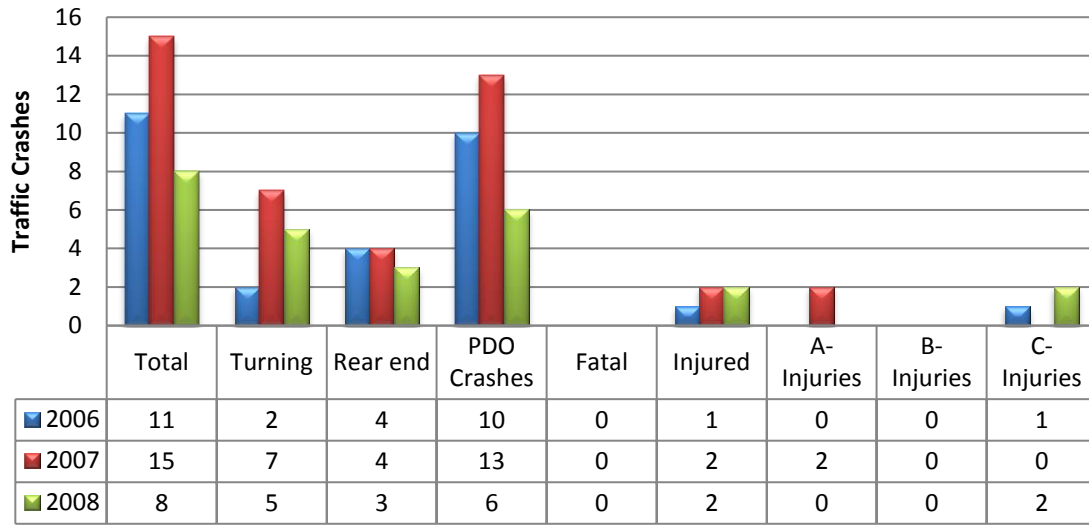
### Route 132 & Hunt Club Road



### Route 132 & Dilley's Road



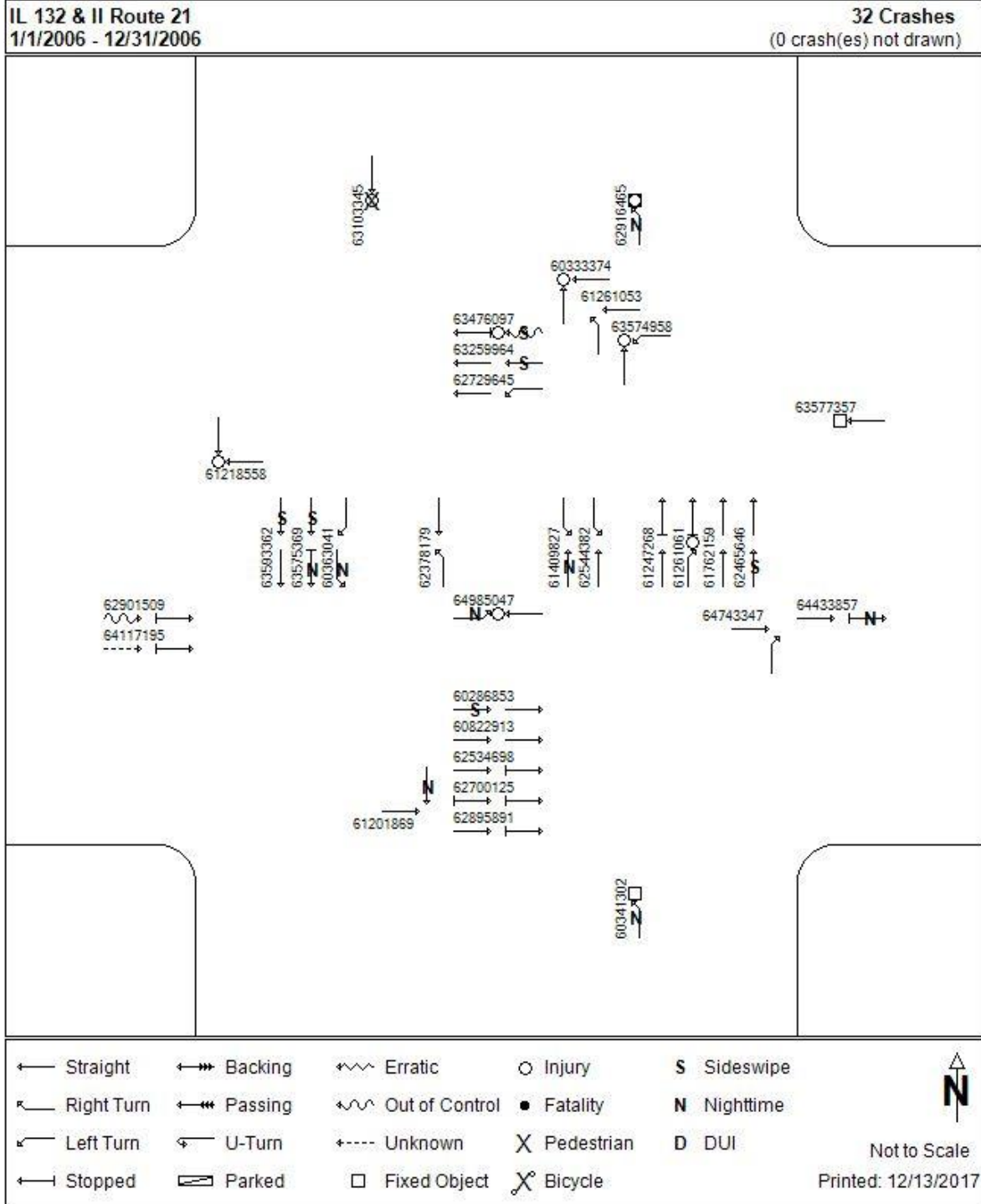
## Route 41 & Delany Road



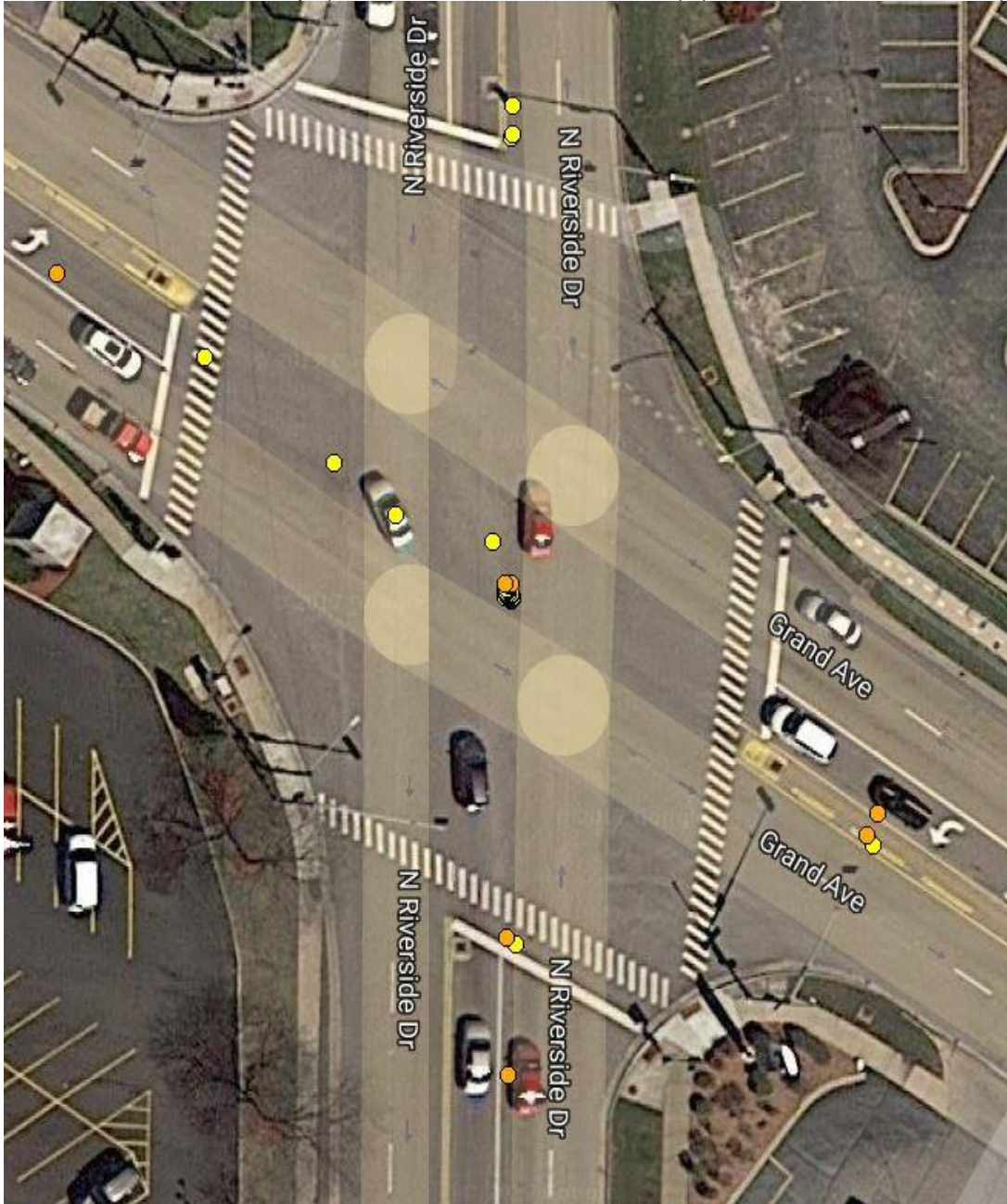
2006 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Route 21)



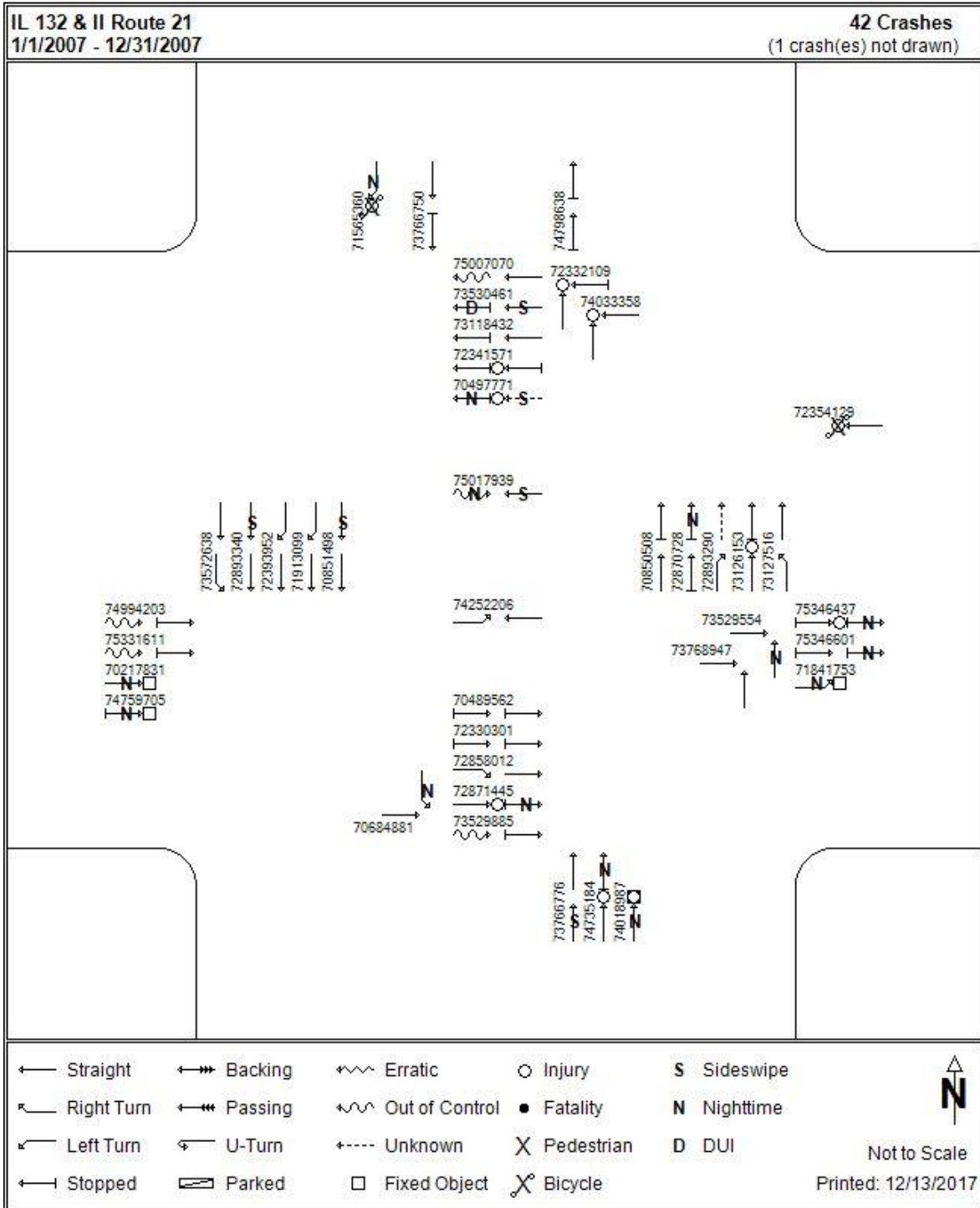
# 2006 Collision Diagram (Data located on Exhibit #1) (Route 132 & Route 21)



2007 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Route 21)

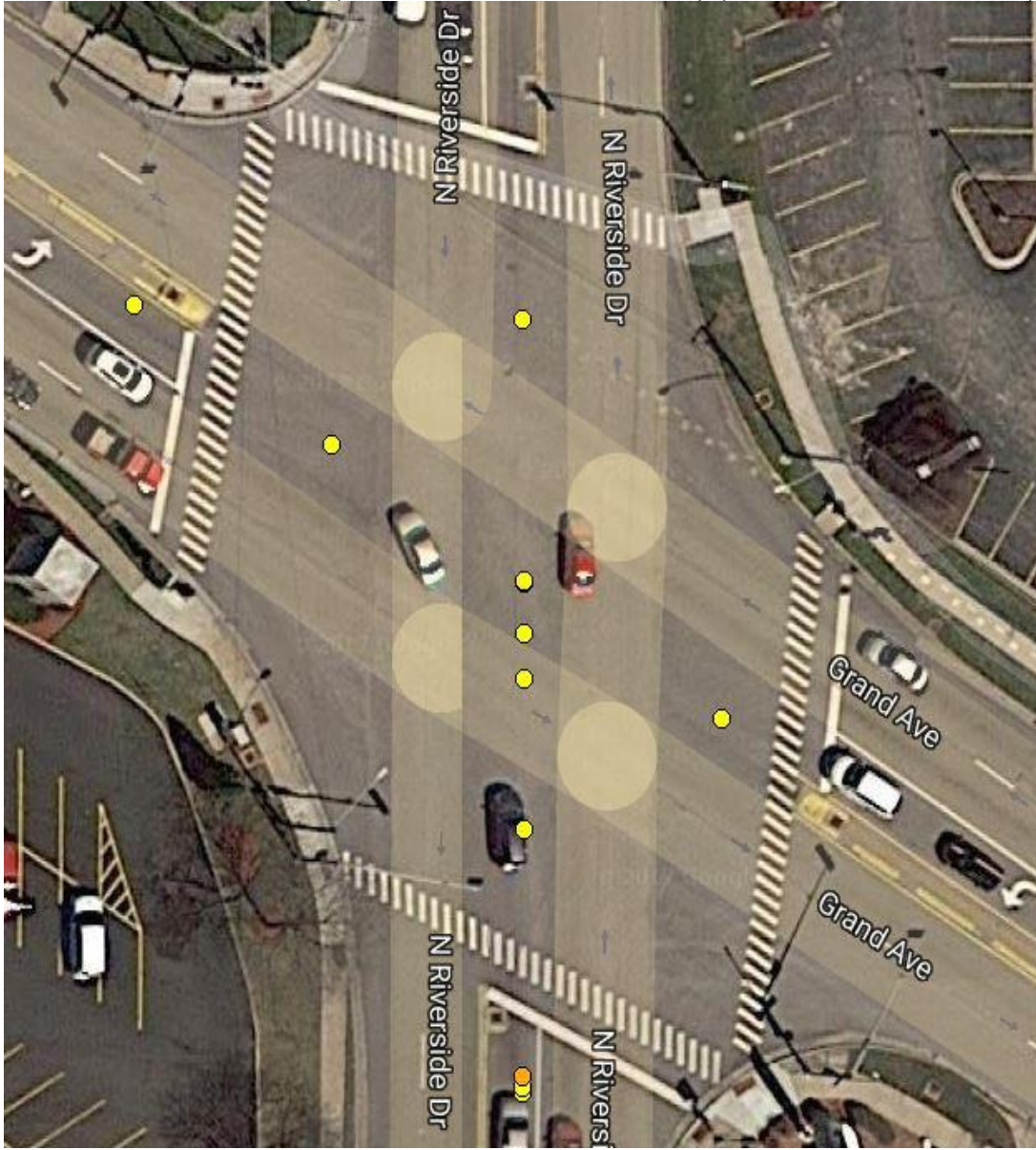


2007 Collision Diagram (Data located on Exhibit #1) (Route 132 & Route 21)

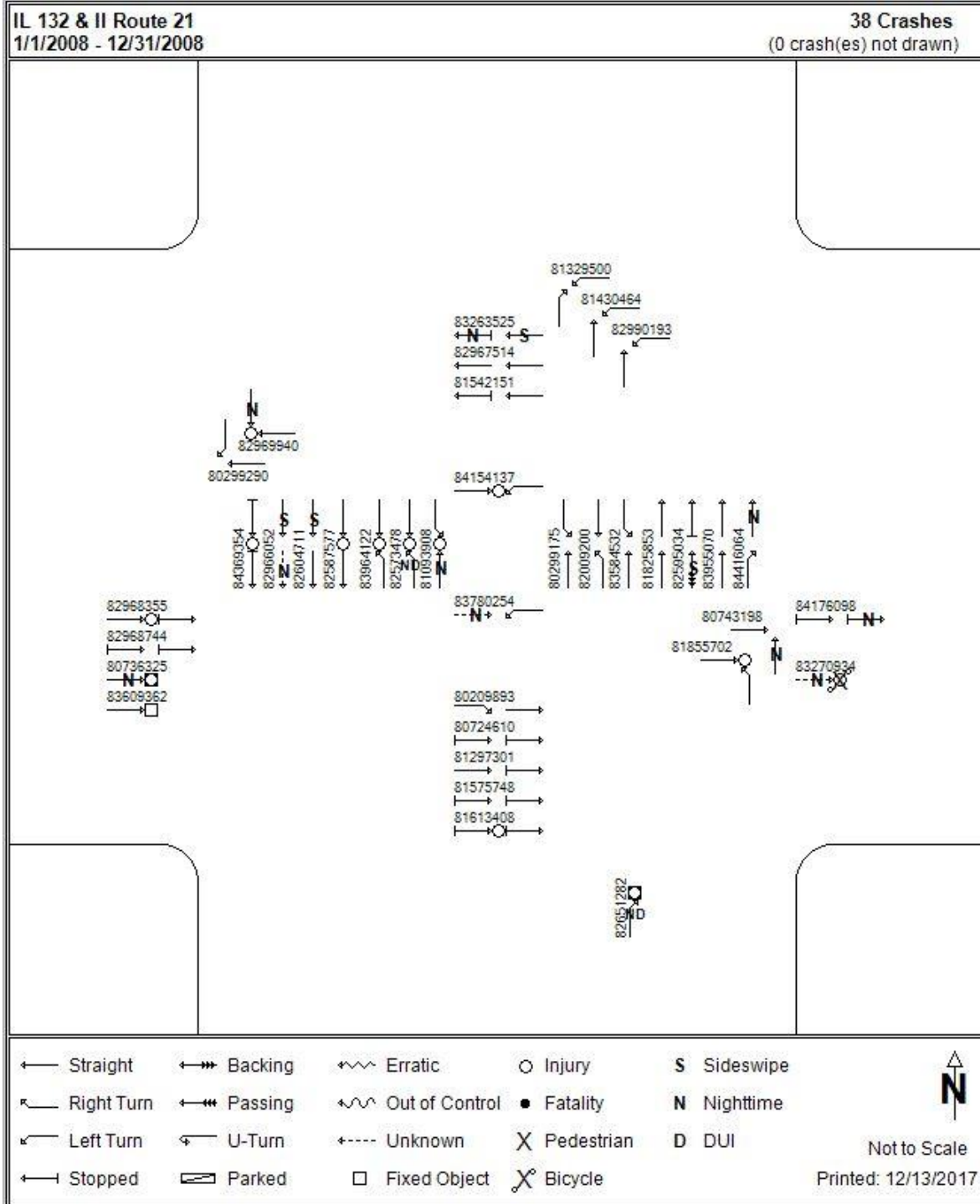




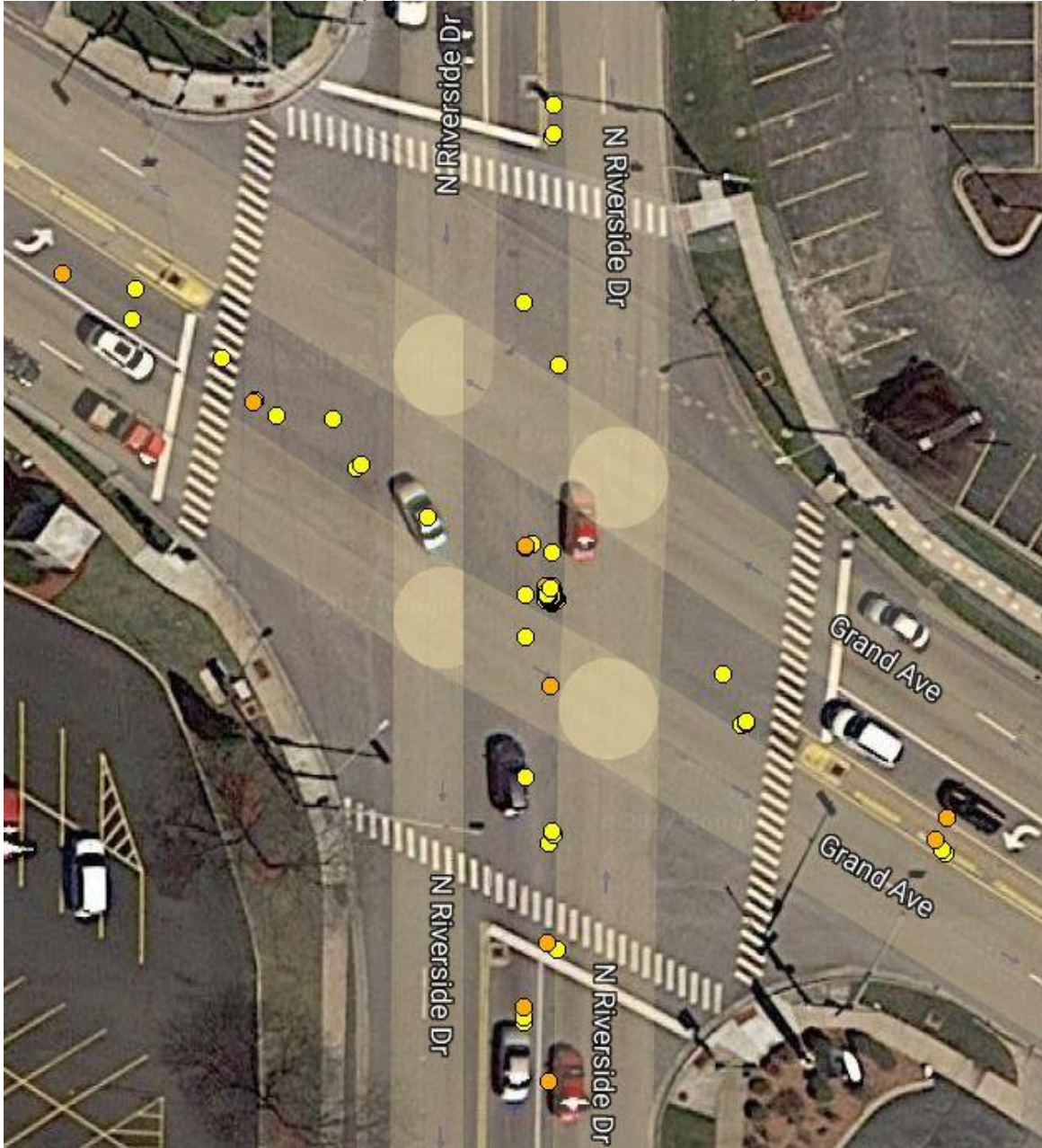
2008 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Route 21)



2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Route 21)



2006-2008 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Route 21)



2006-2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Route 21)

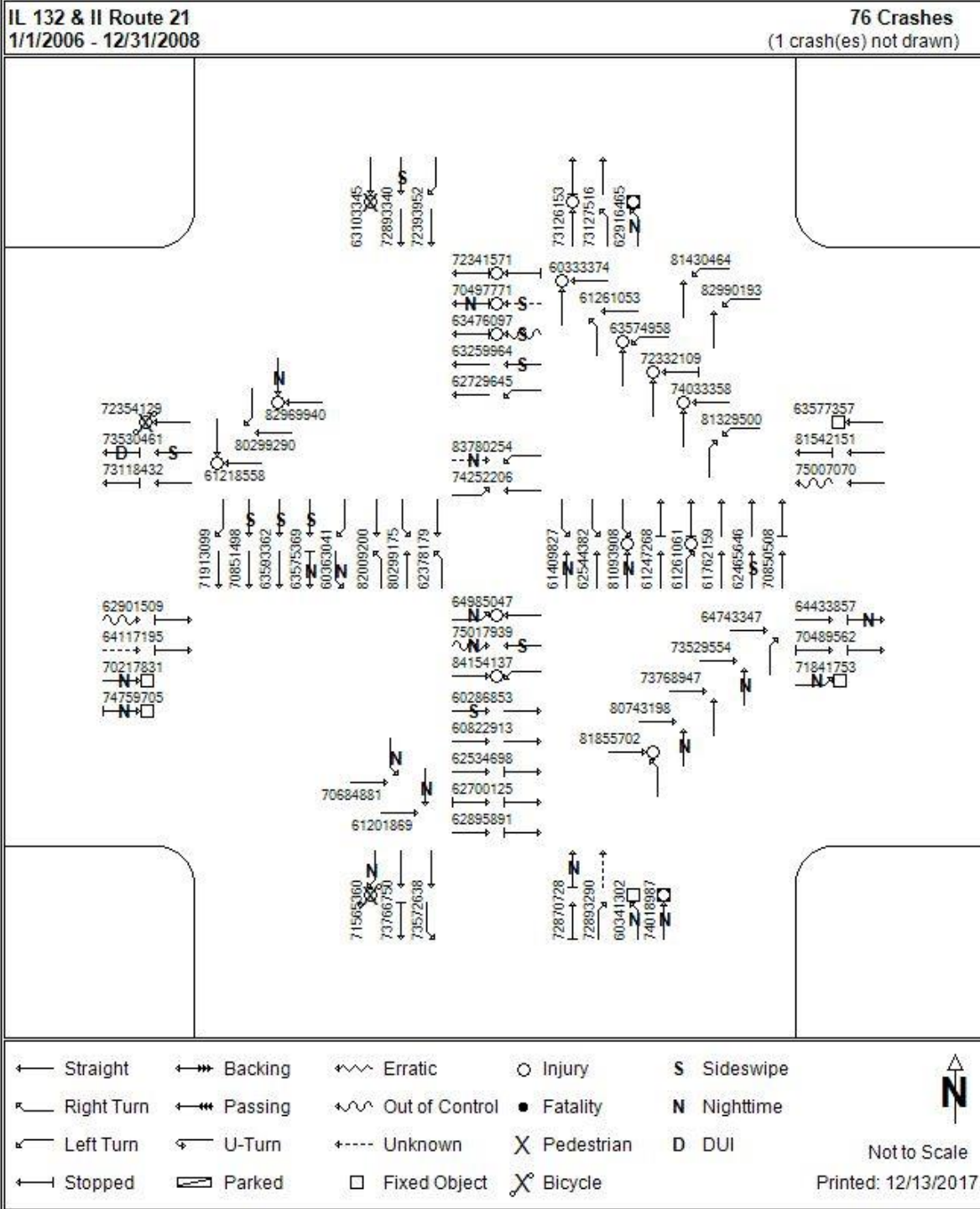
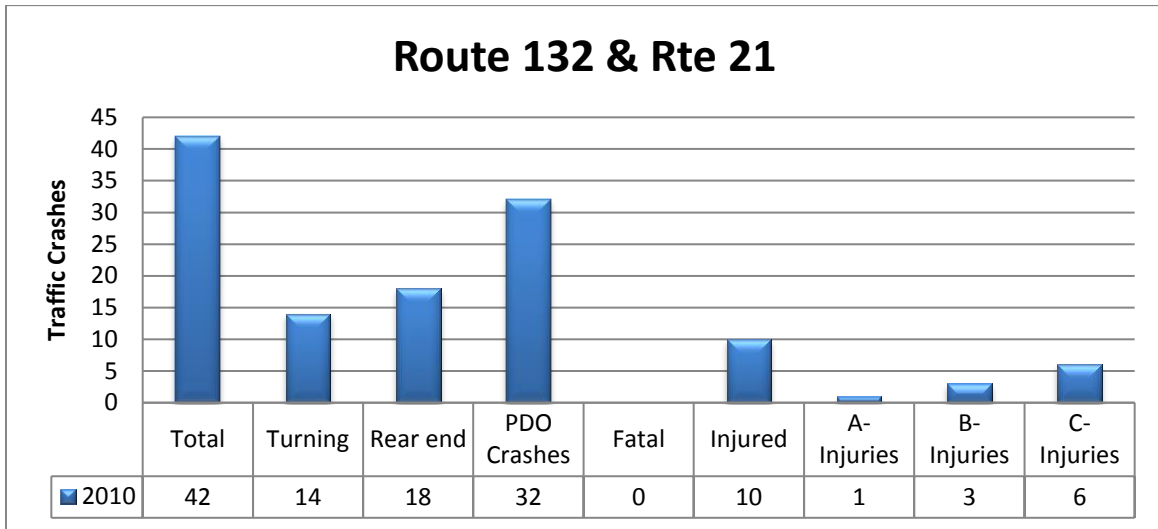


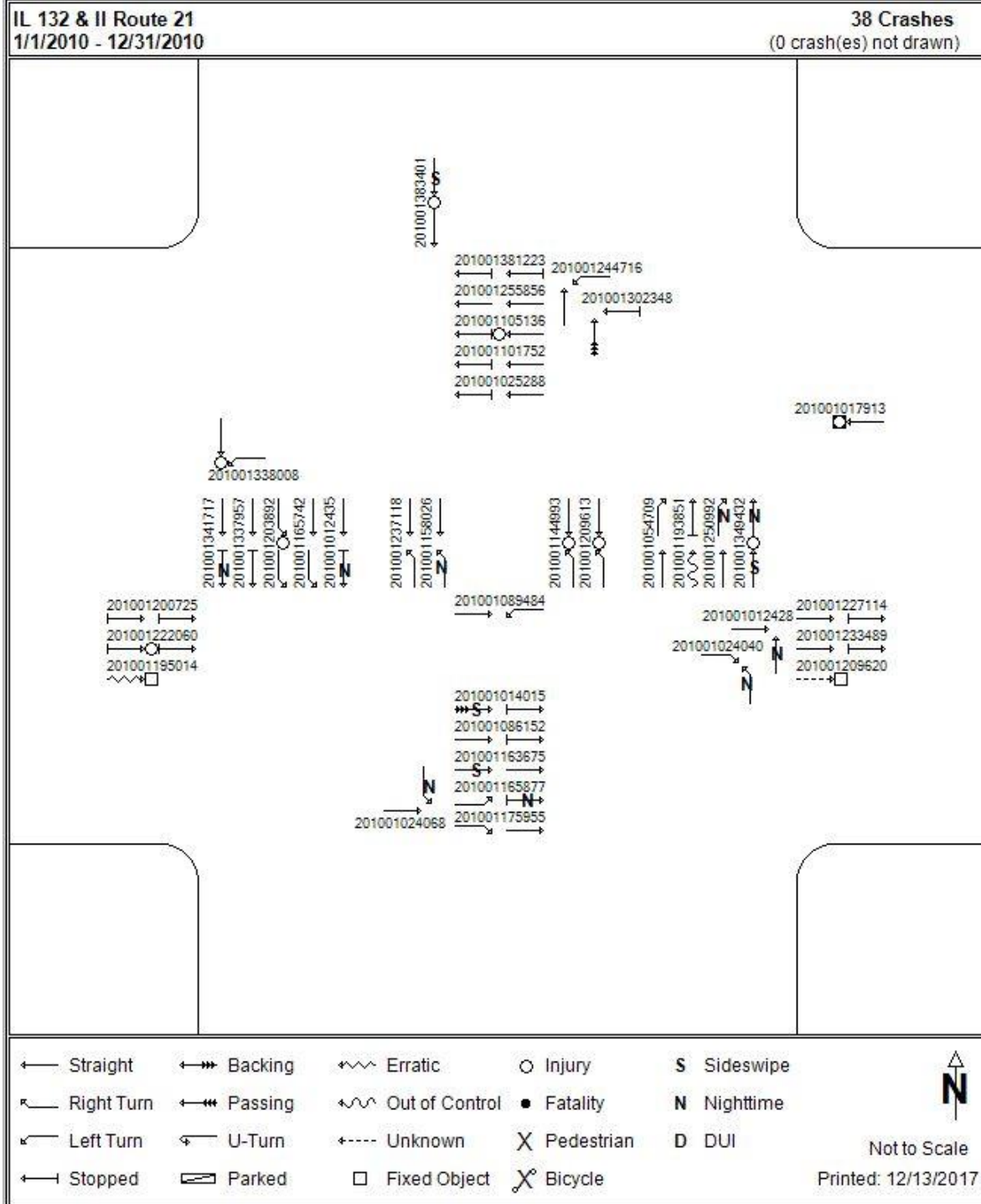
Exhibit #2



2010 Traffic Crash Map (Data located on Exhibit #2)



2010 Collision Diagram (Data located on Exhibit #2) (Route 132 & Route 21)

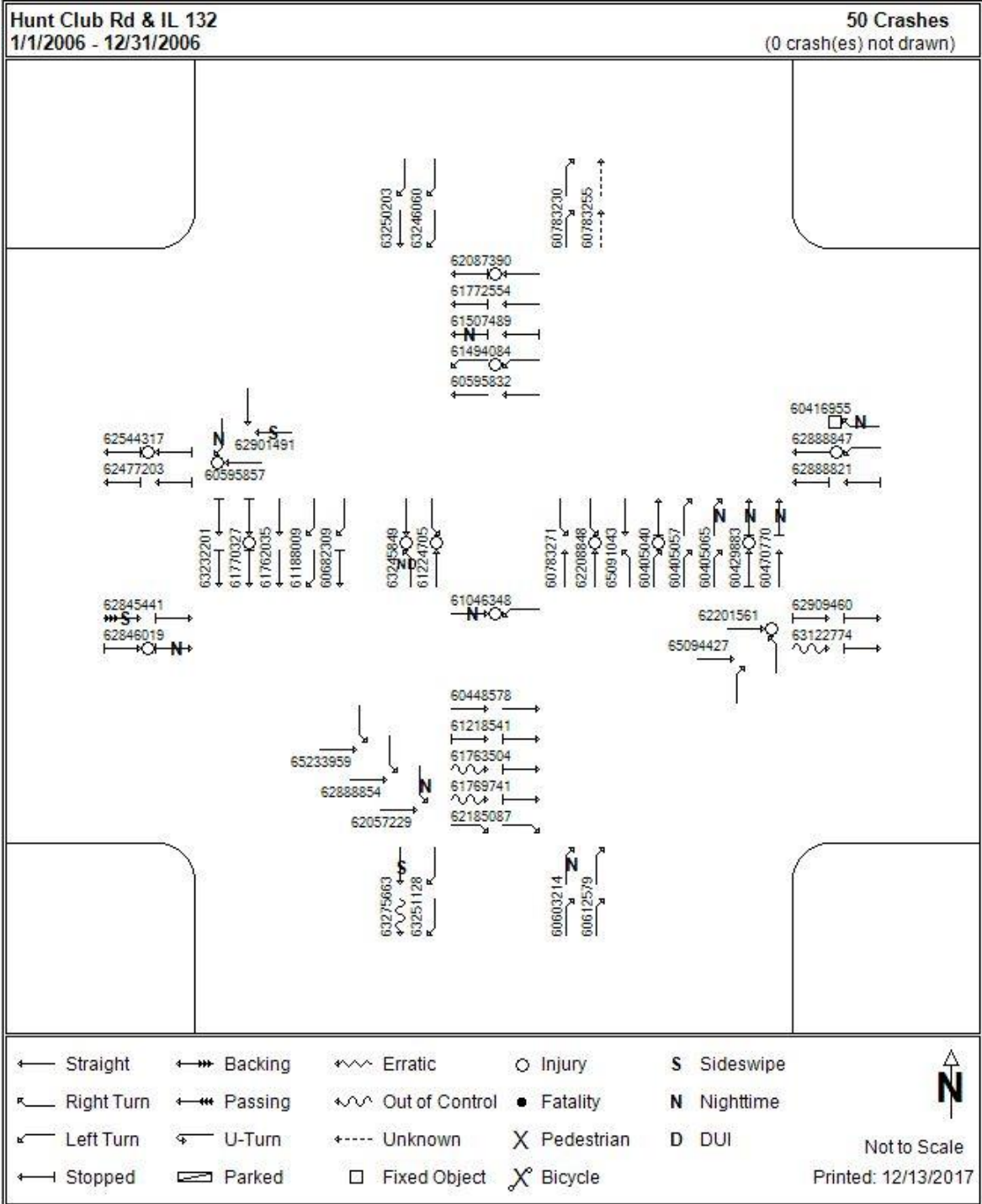


2006 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Hunt Club Road)





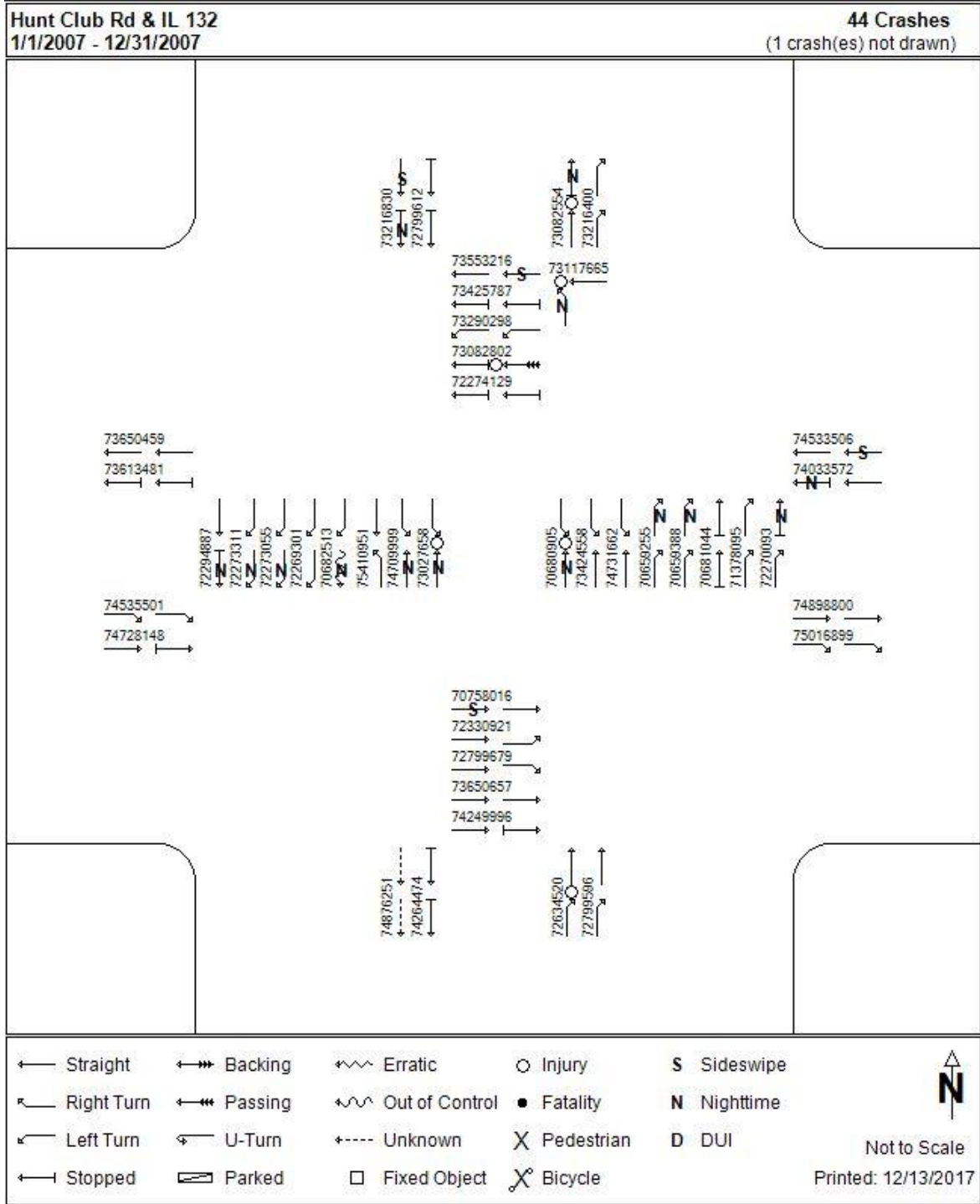
2006 Collision Diagram (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



2007 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



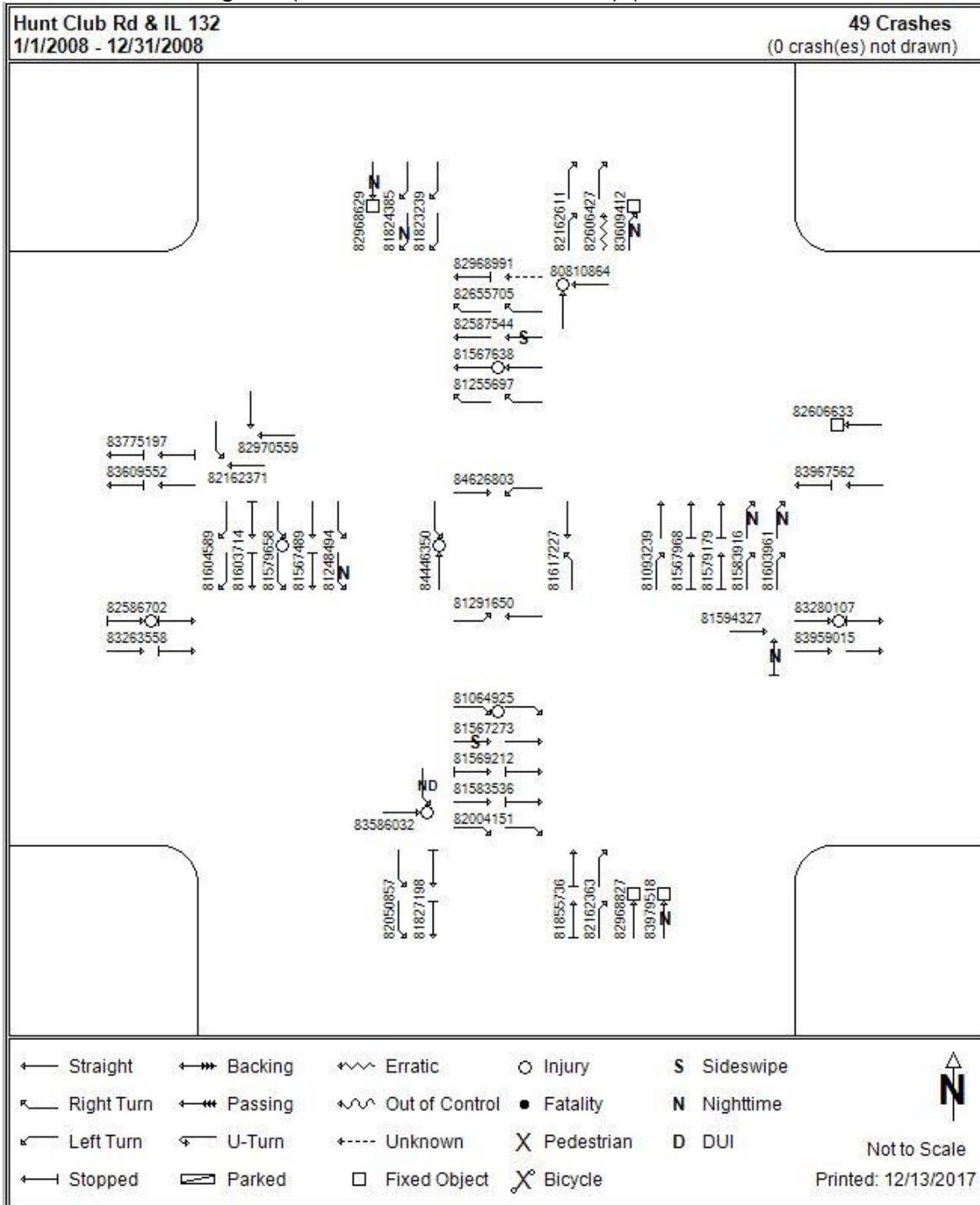
2007 Collision Diagram (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



2008 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



2006-2008 Crash Map (Data located on Exhibit #1) (Route 132 & Hunt Club Road)



2006-2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Hunt Club Road)

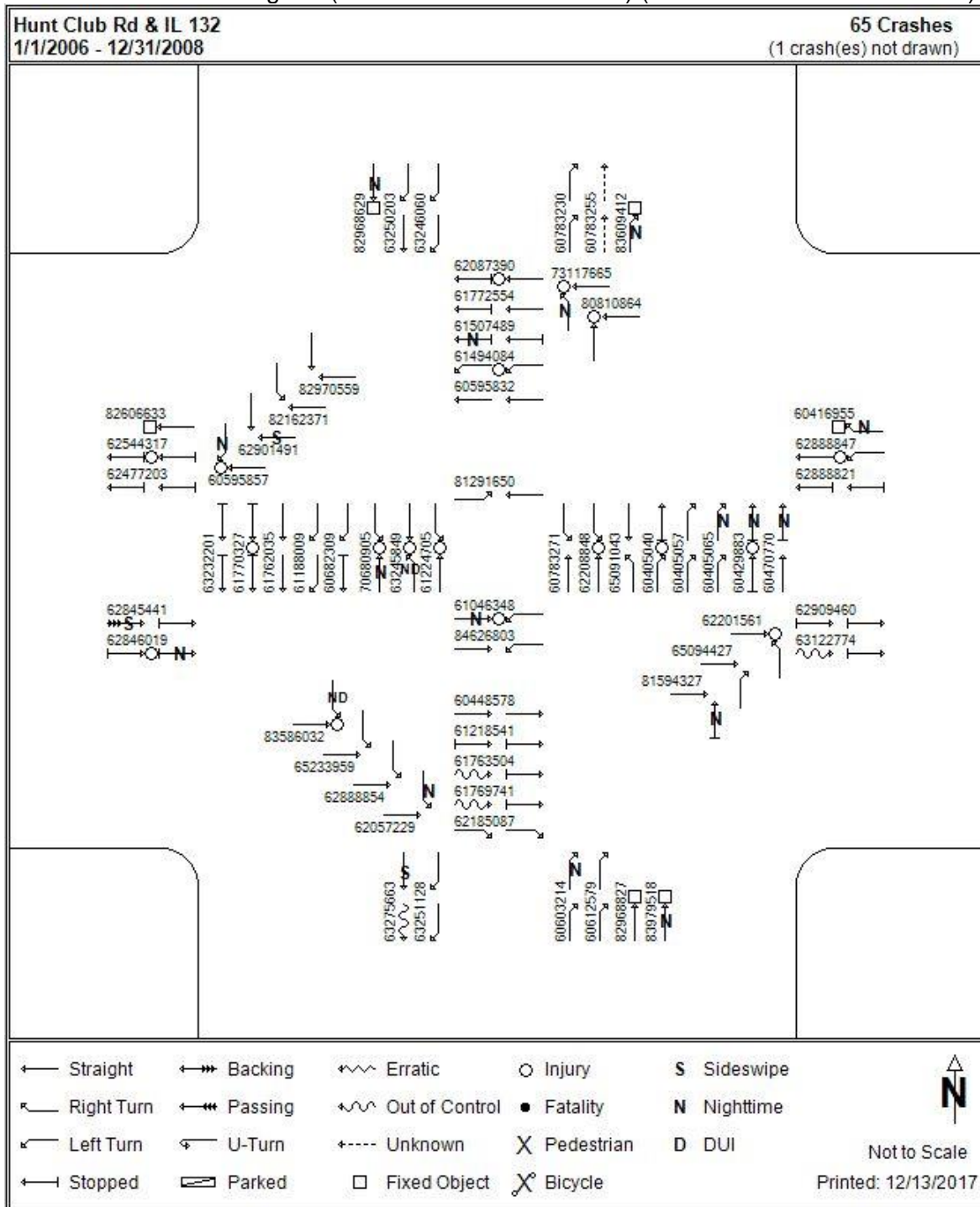
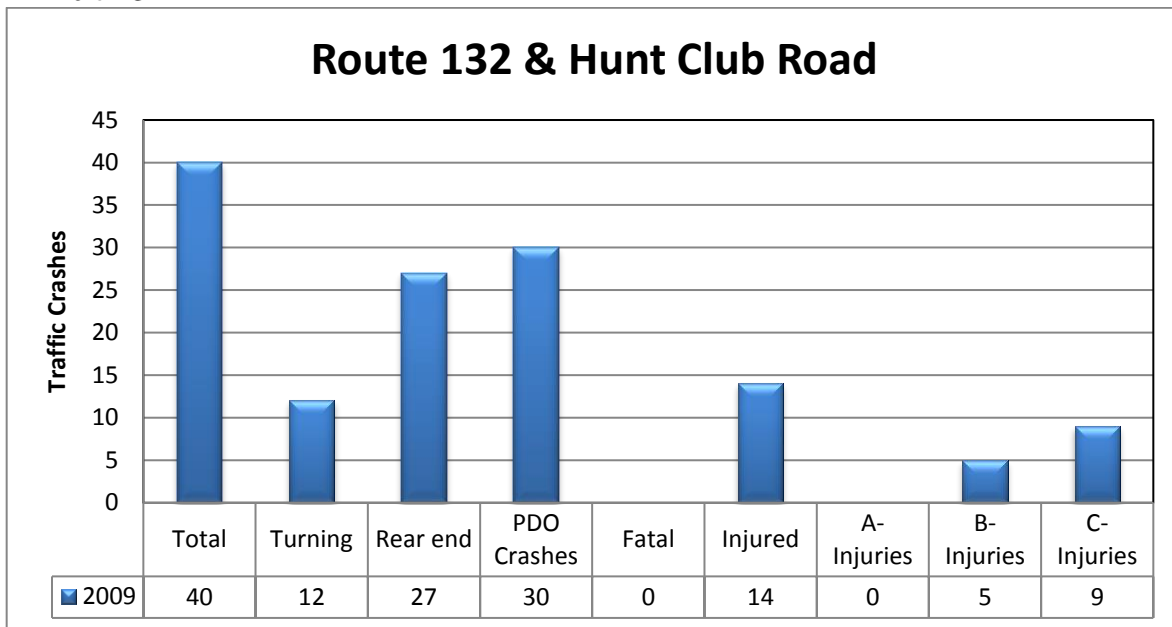


Exhibit #3

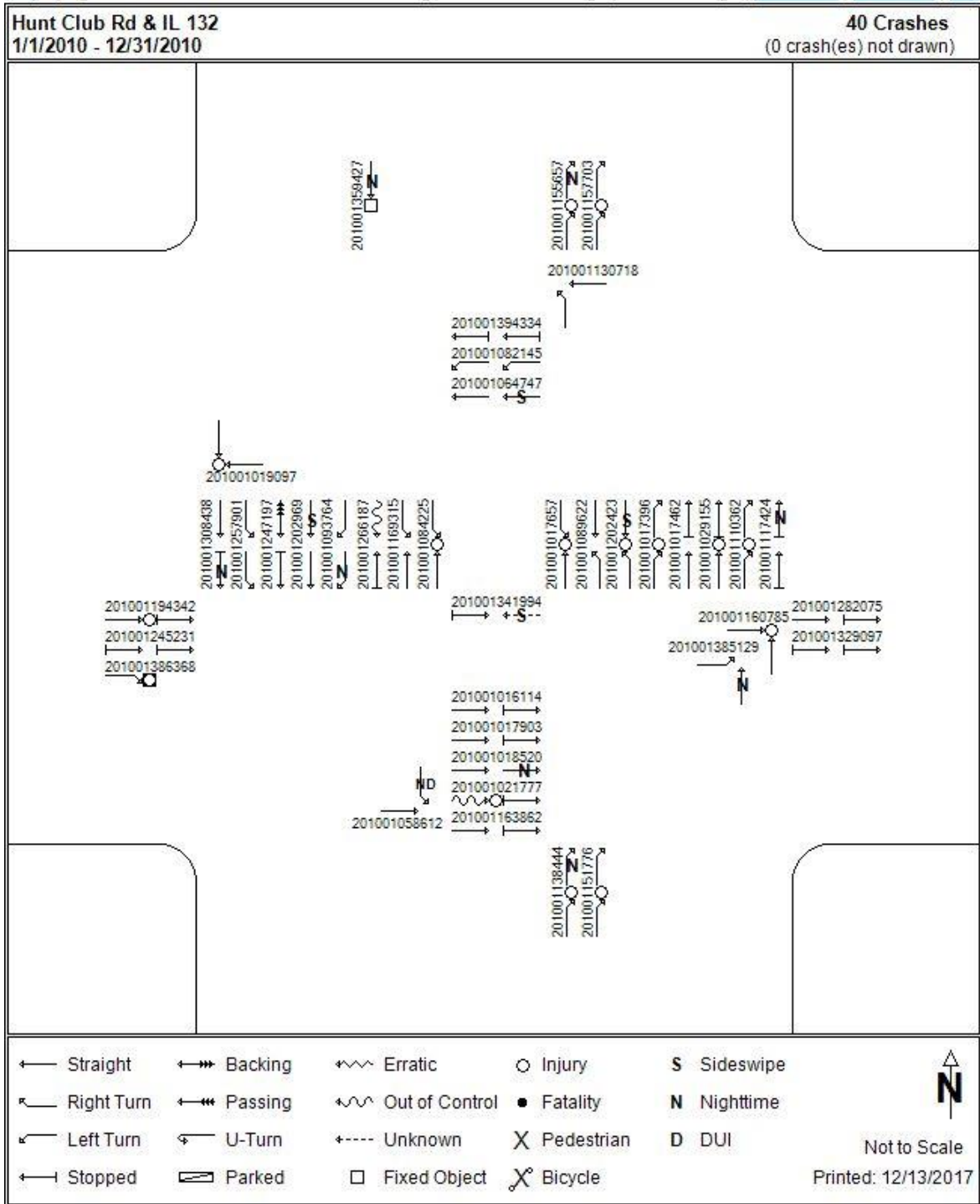




2010 Traffic Crash Map (Data located on Exhibit #3) (Route 132 & Hunt Club Road)



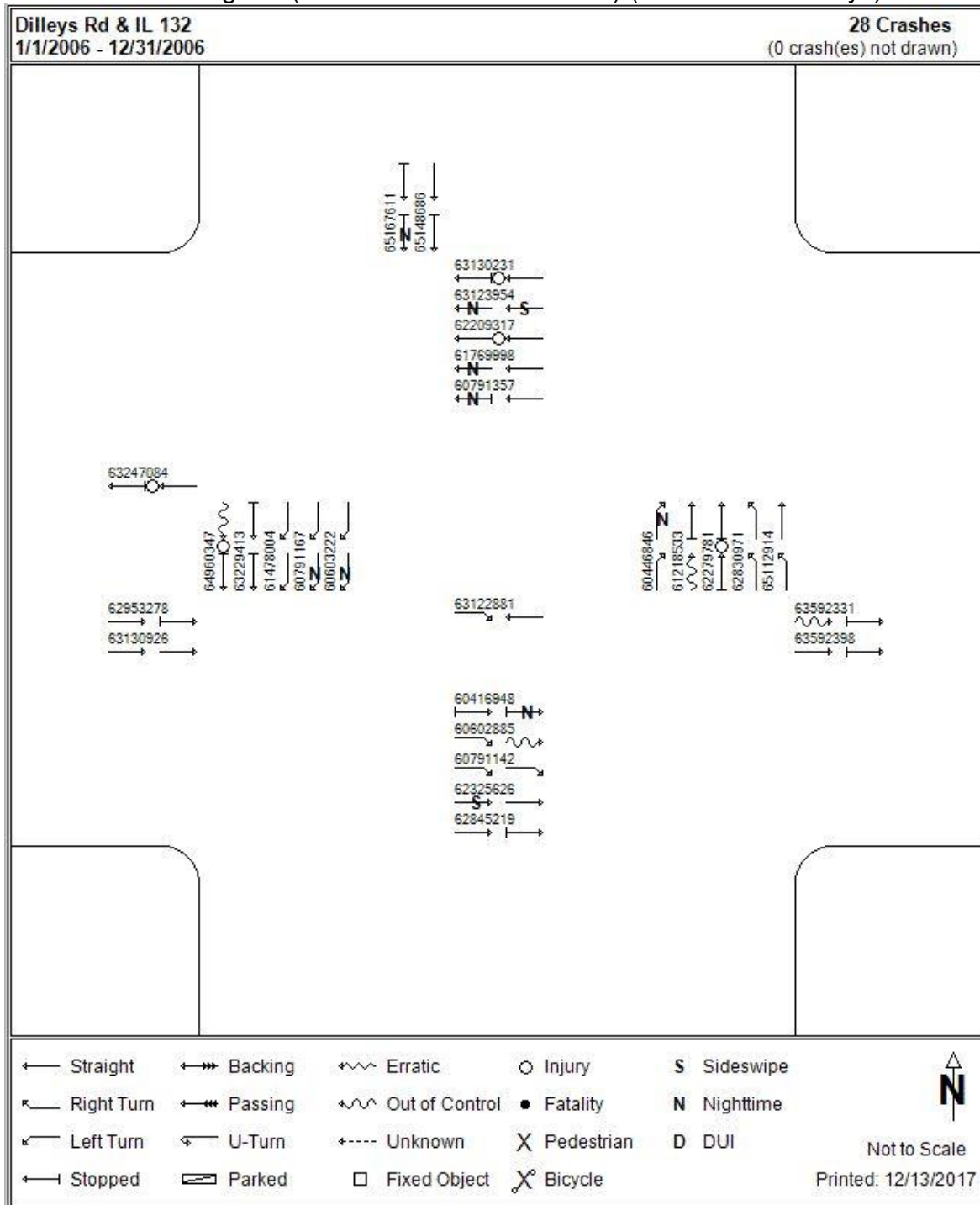
2010 Collision Diagram (Data located on Exhibit #3) (Route 132 & Hunt Club Road)



2006 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Dilleys)



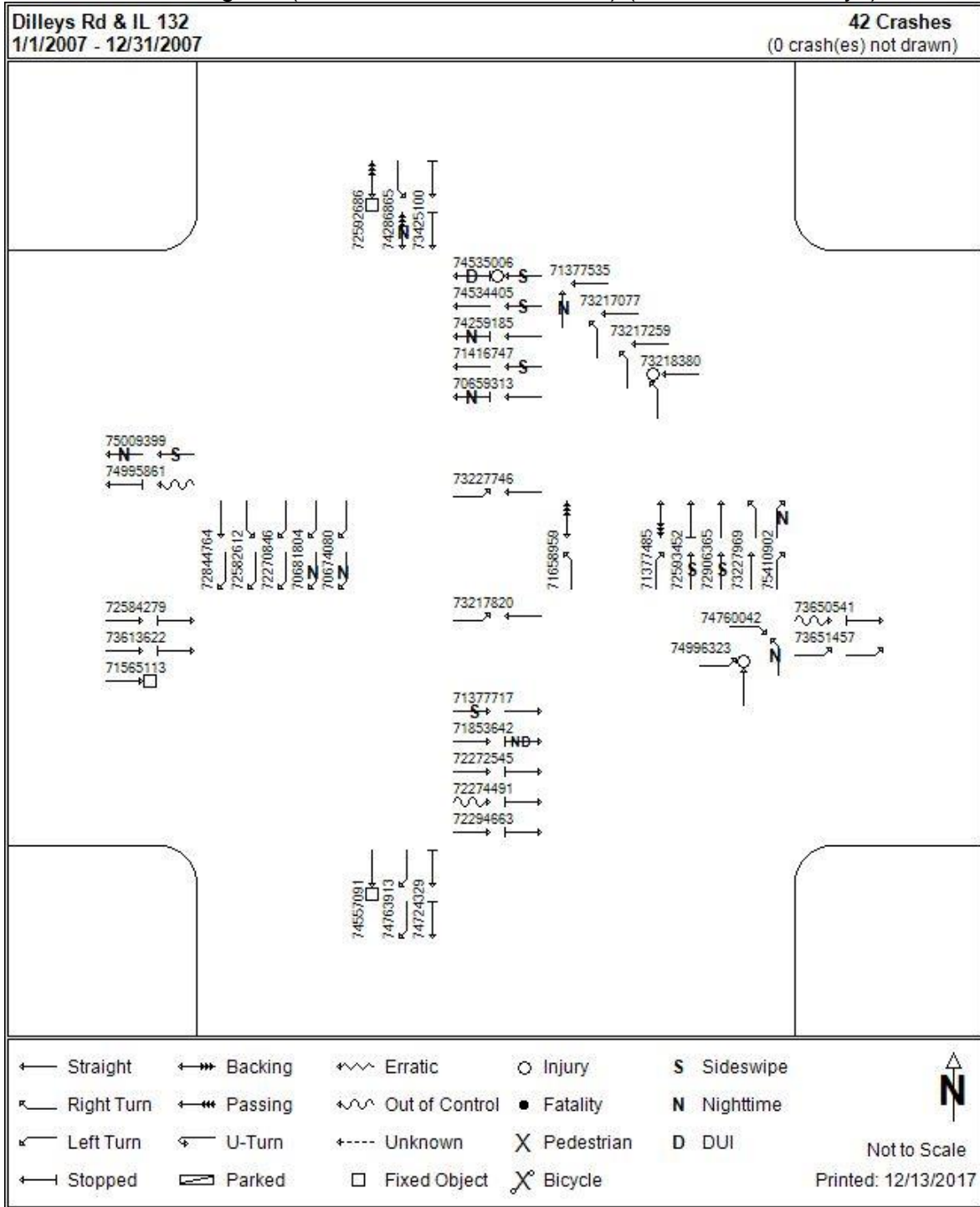
2006 Collision Diagram (Data located on Exhibit #1) (Route 132 & Dilleys)



2007 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Dilley's)



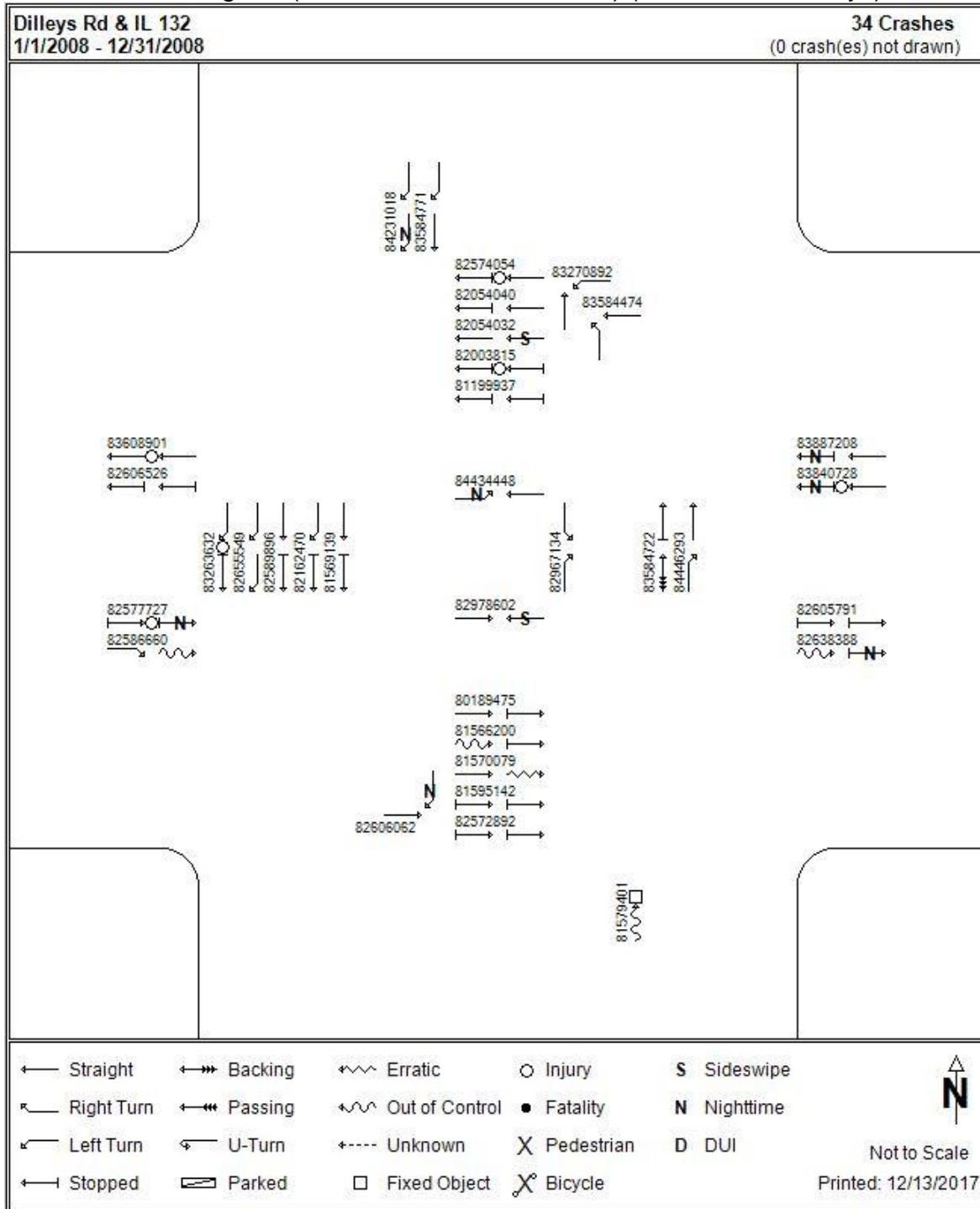
2007 Collision Diagram (Data located on Exhibit #1) (Route 132 & Dilleys)



2008 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Dilleys)

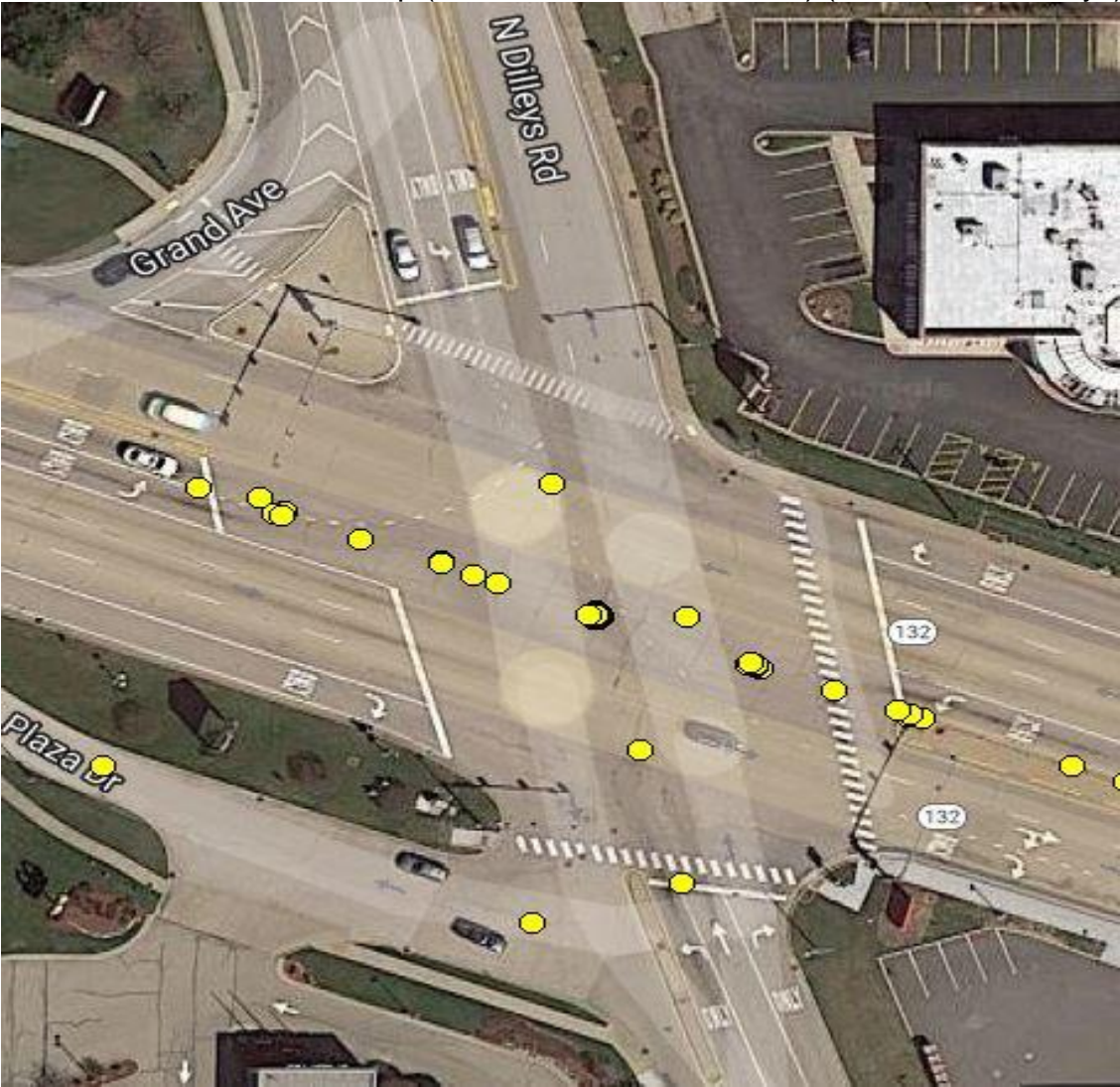


# 2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Dilleys)

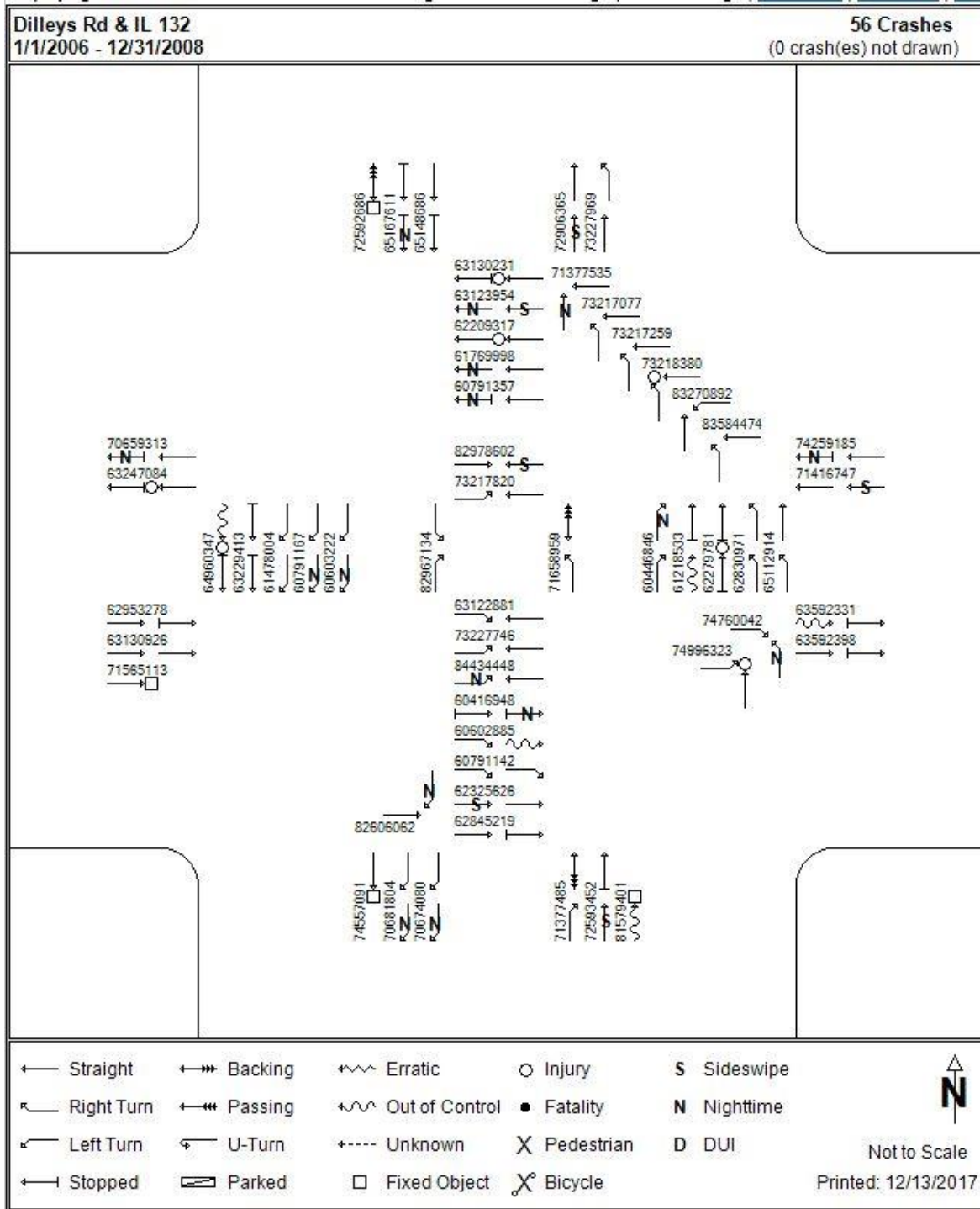




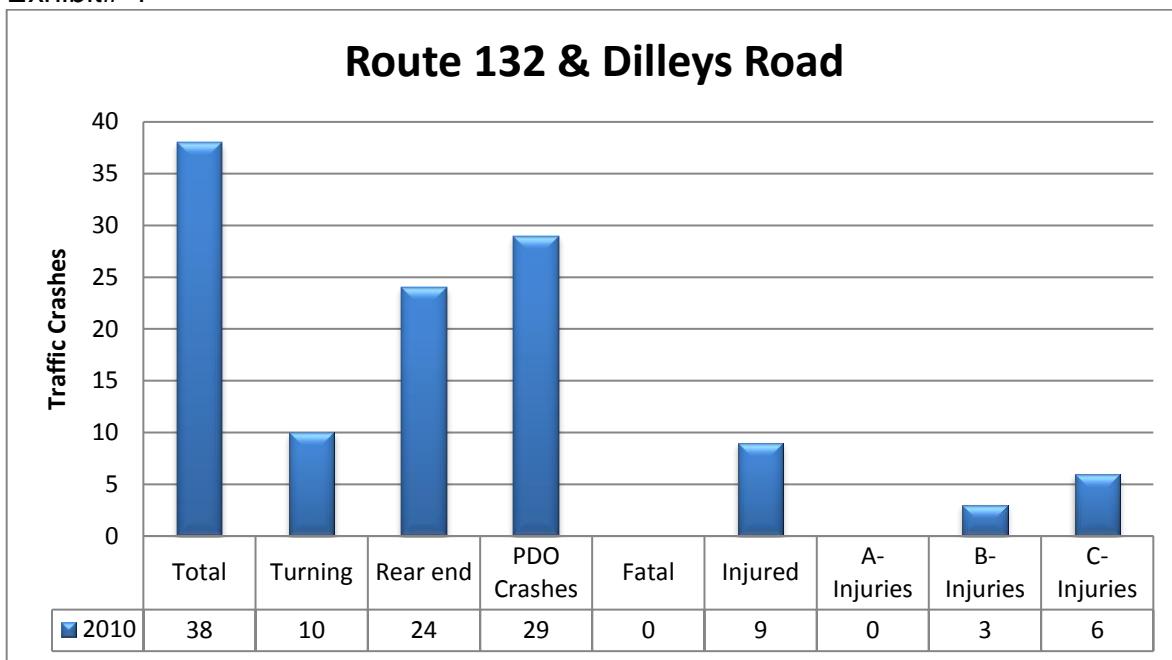
2006-2008 Traffic Crash Map (Data located on Exhibit #1) (Route 132 & Dilley's)



2006-2008 Collision Diagram (Data located on Exhibit #1) (Route 132 & Dilleys)



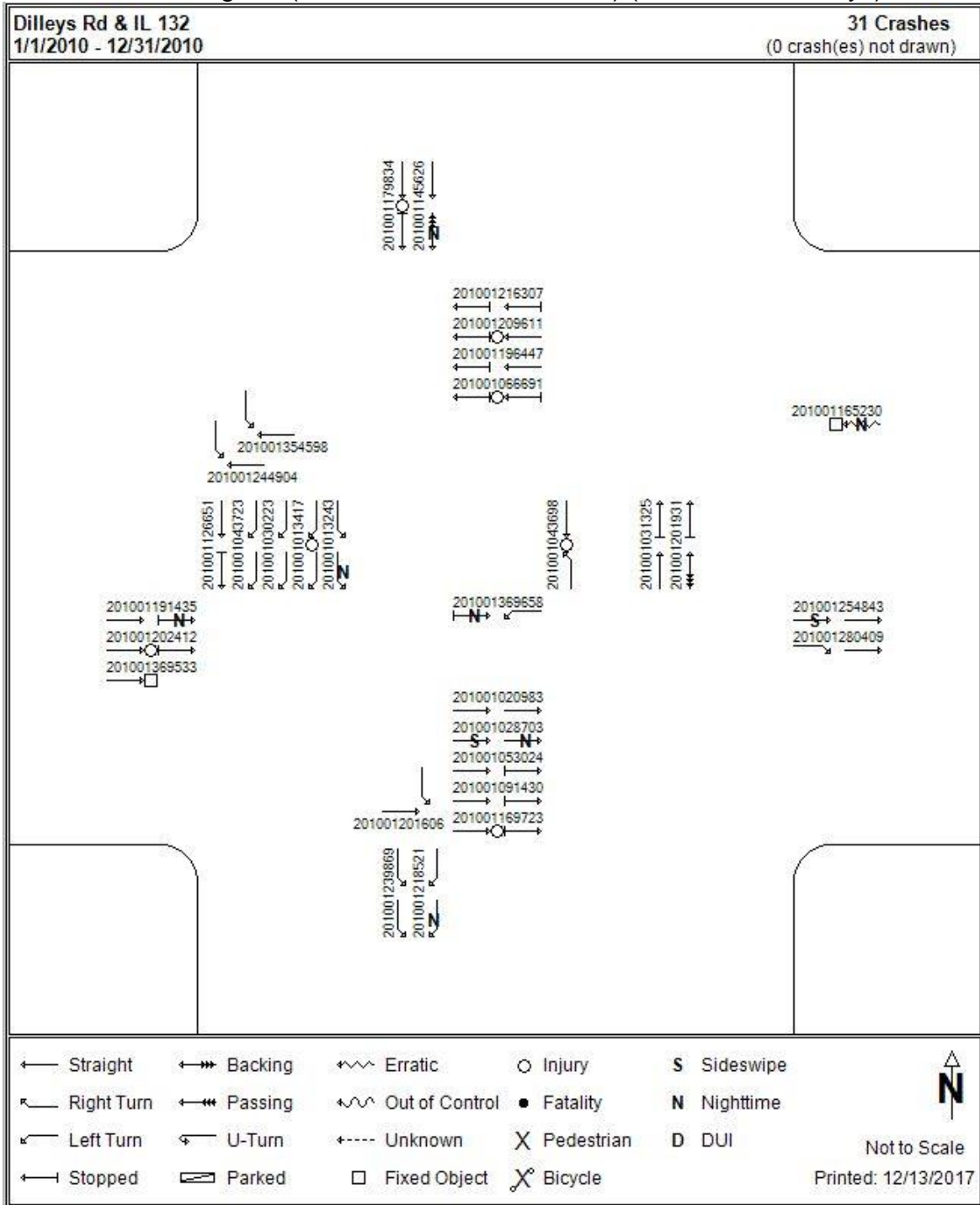
Exhibit# 4



2010 Traffic Crash Map (Data located on Exhibit #4) (Route 132 & Dilleys)



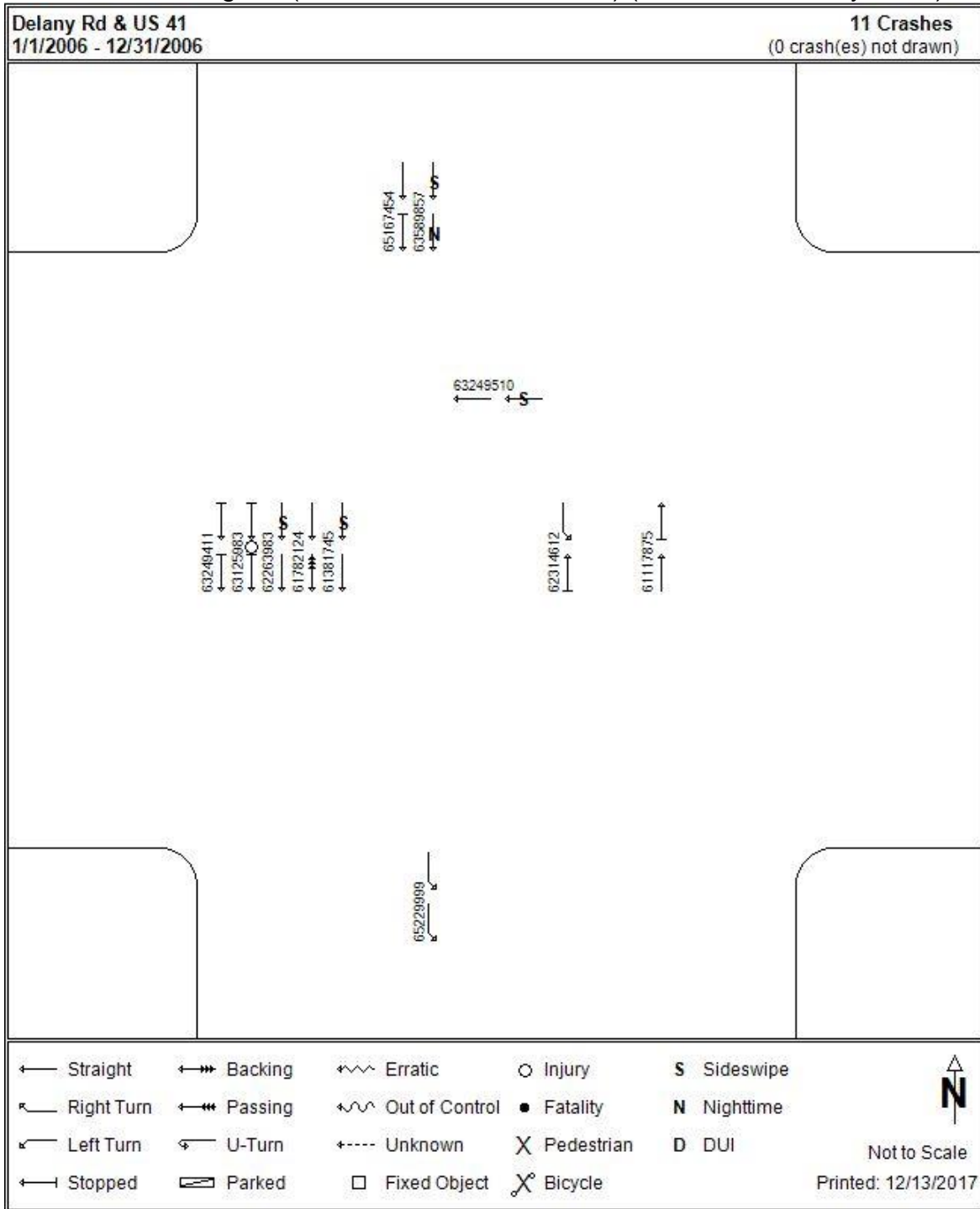
# 2010 Collision Diagram (Data located on Exhibit #4) (Route 132 & Dilleys)



2006 Traffic Crash Map (Data Located on Exhibit #1) (Route 41 & Delany Road)



### 2006 Collision Diagram (Data located on Exhibit #1) (Route 41 & Delany Road)

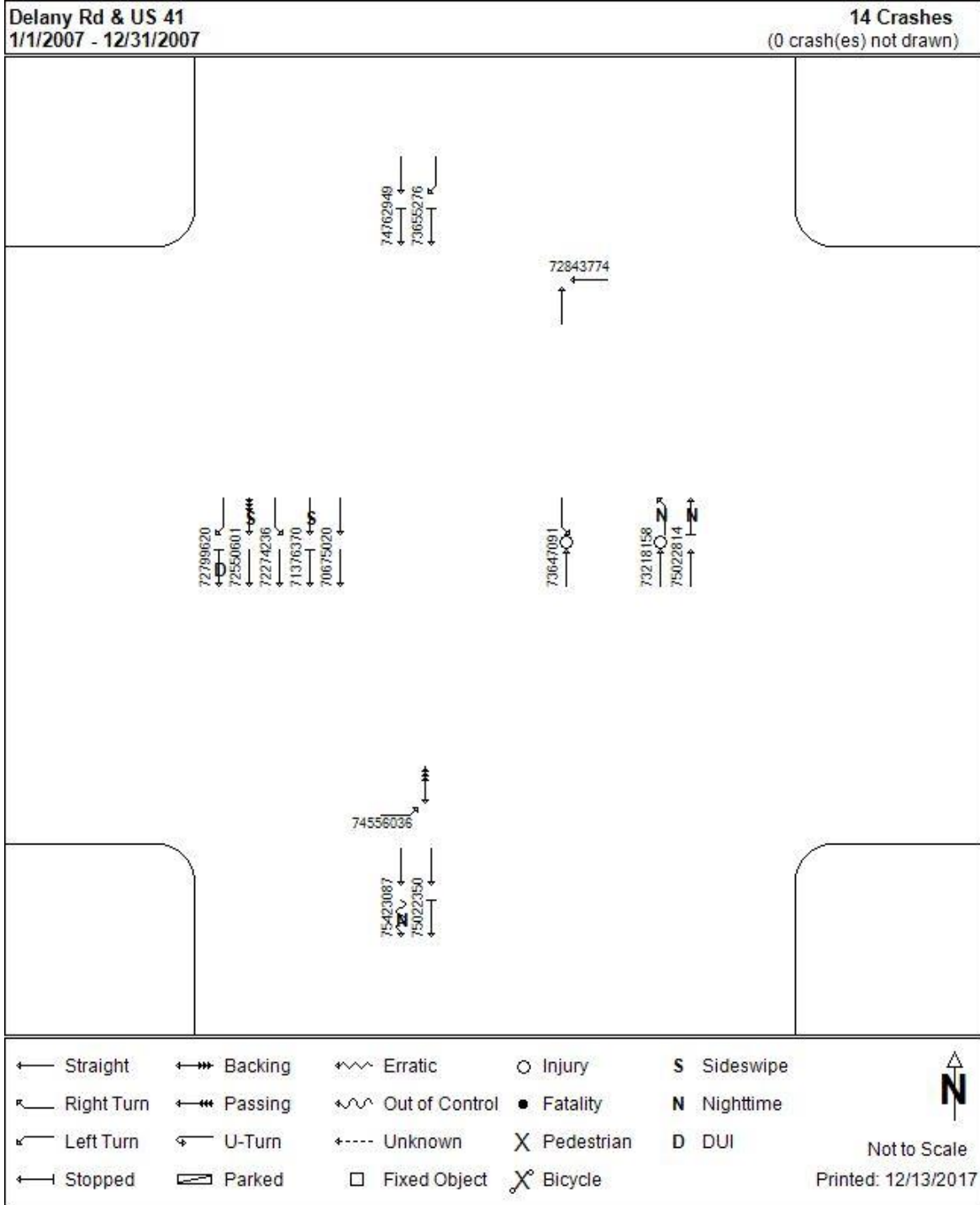


2007 Traffic Crash Map (Data Located on Exhibit #1) (Route 41 & Delany Road)





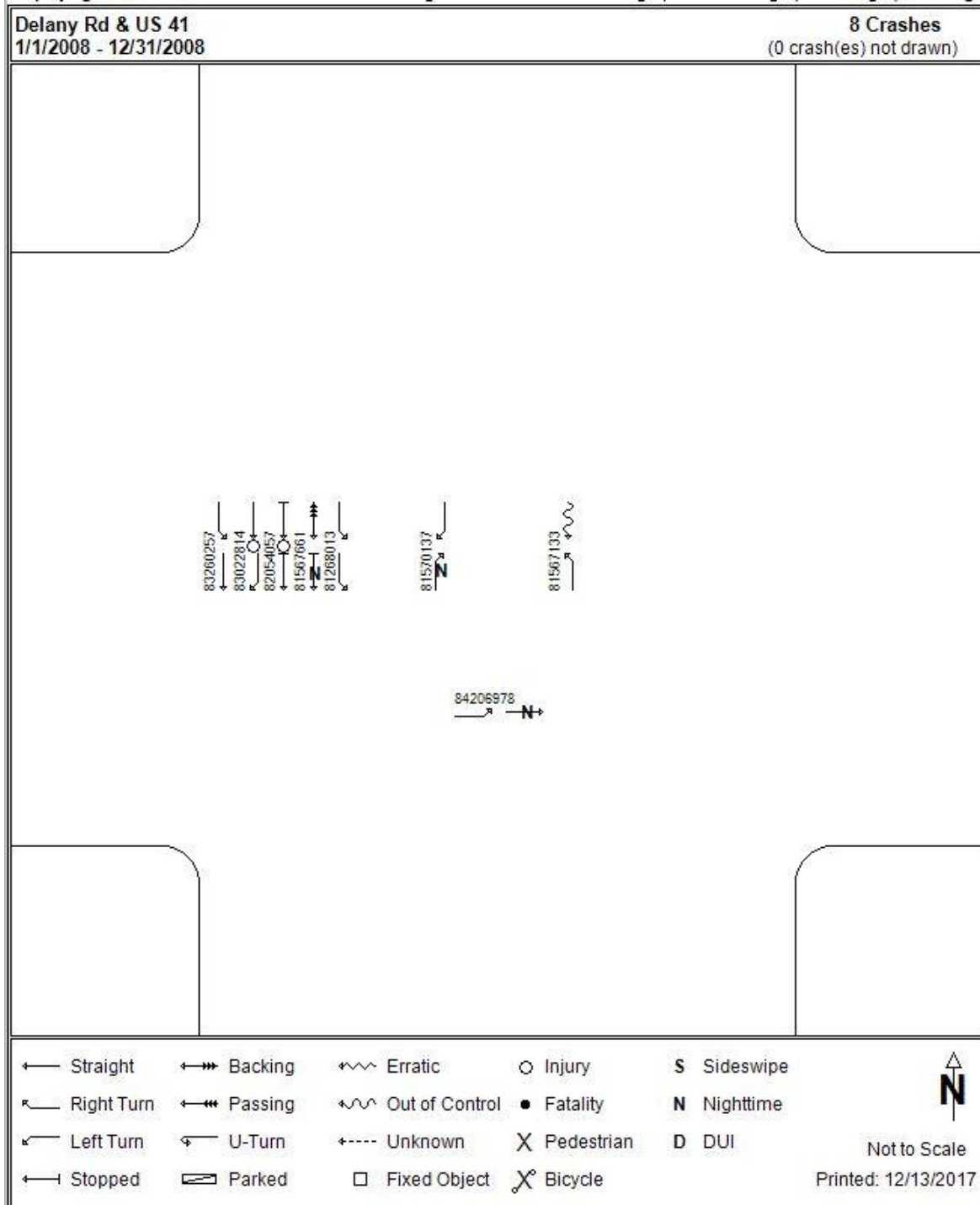
# 2007 Collision Diagram (Data located on Exhibit #1) (Route 41 & Delany Road)



2008 Traffic Crash Map (Data Located on Exhibit #1) (Route 41 & Delany Road)



2008 Collision Diagram (Data located on Exhibit #1) (Route 41 & Delany Road)



2006-2008 Crash Map (Data located on Exhibit #1) (Route 41 & Delany Road)



2006-2008 Collision Diagram (Data located on Exhibit #1) (Route 41 & Delany Road)

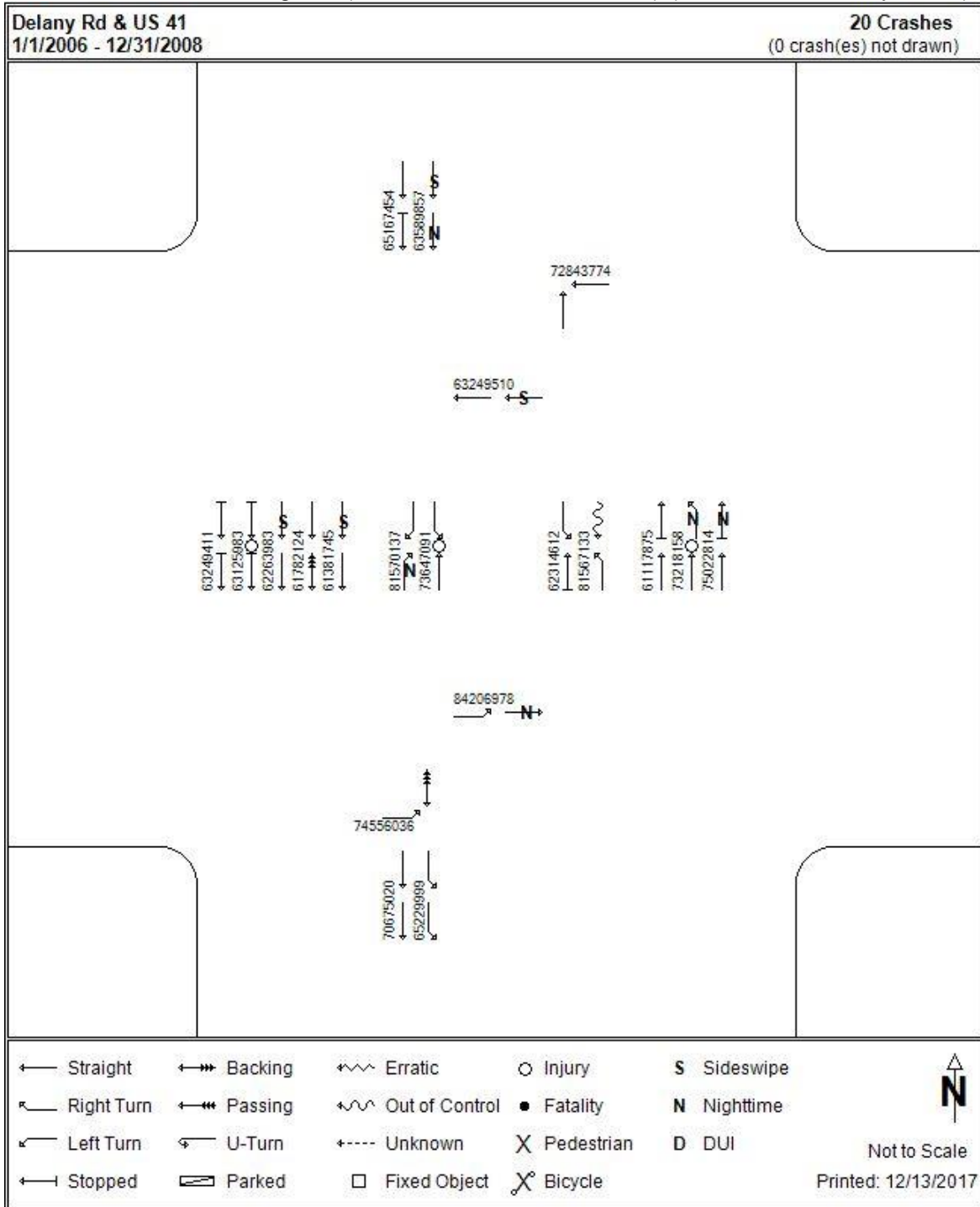
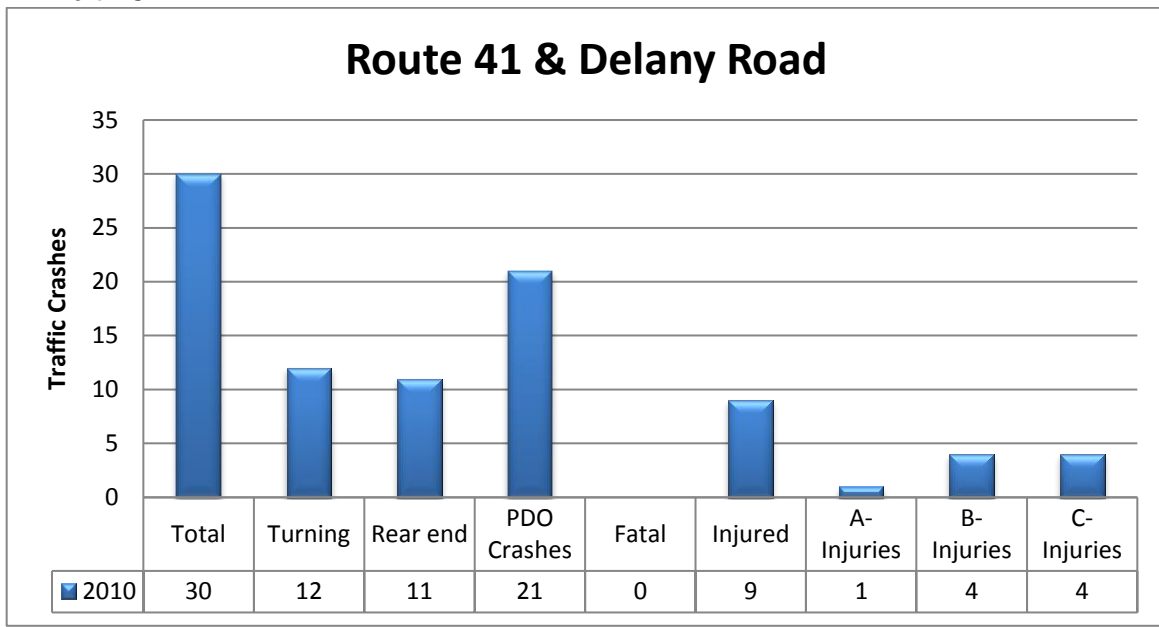
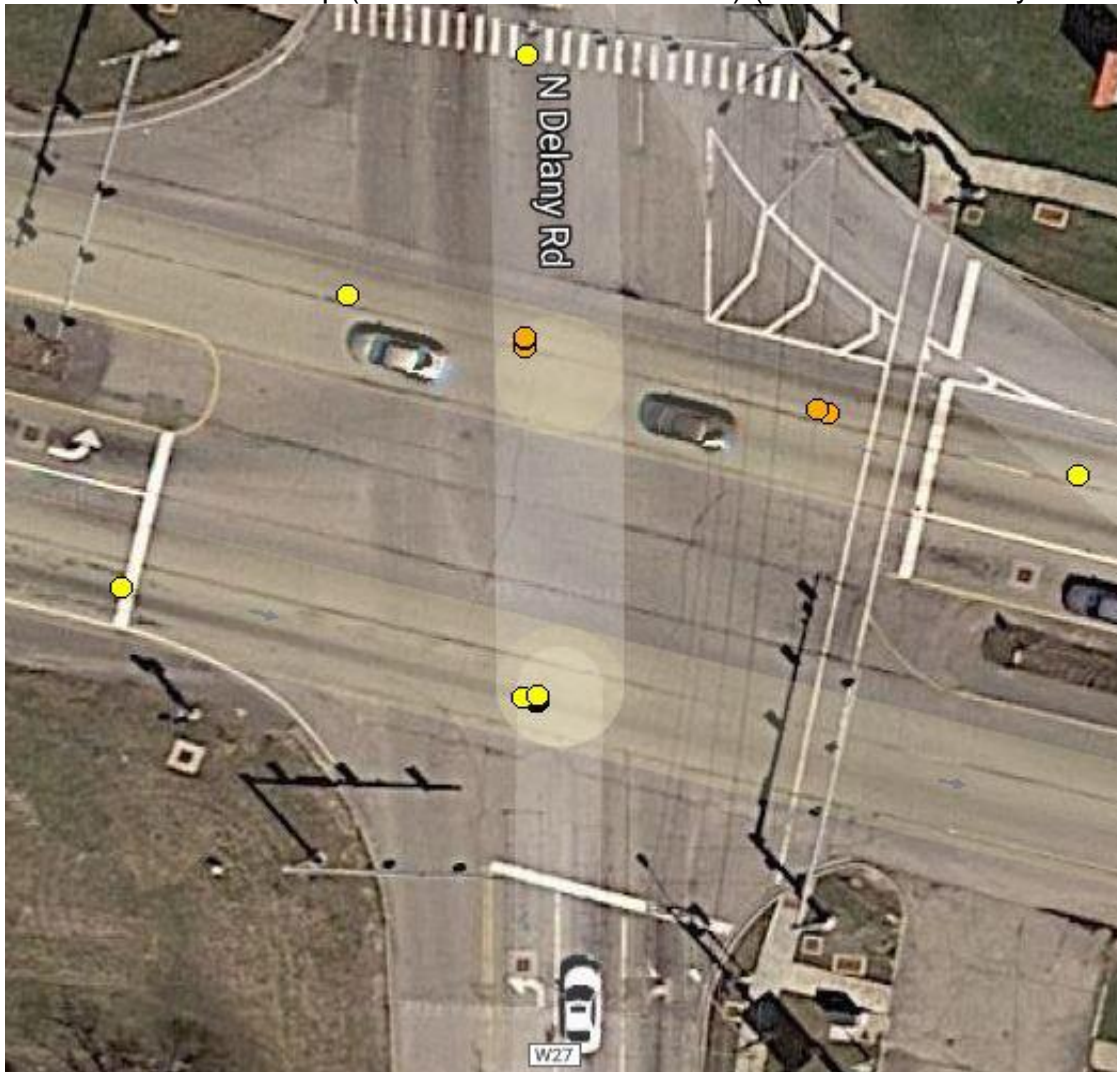


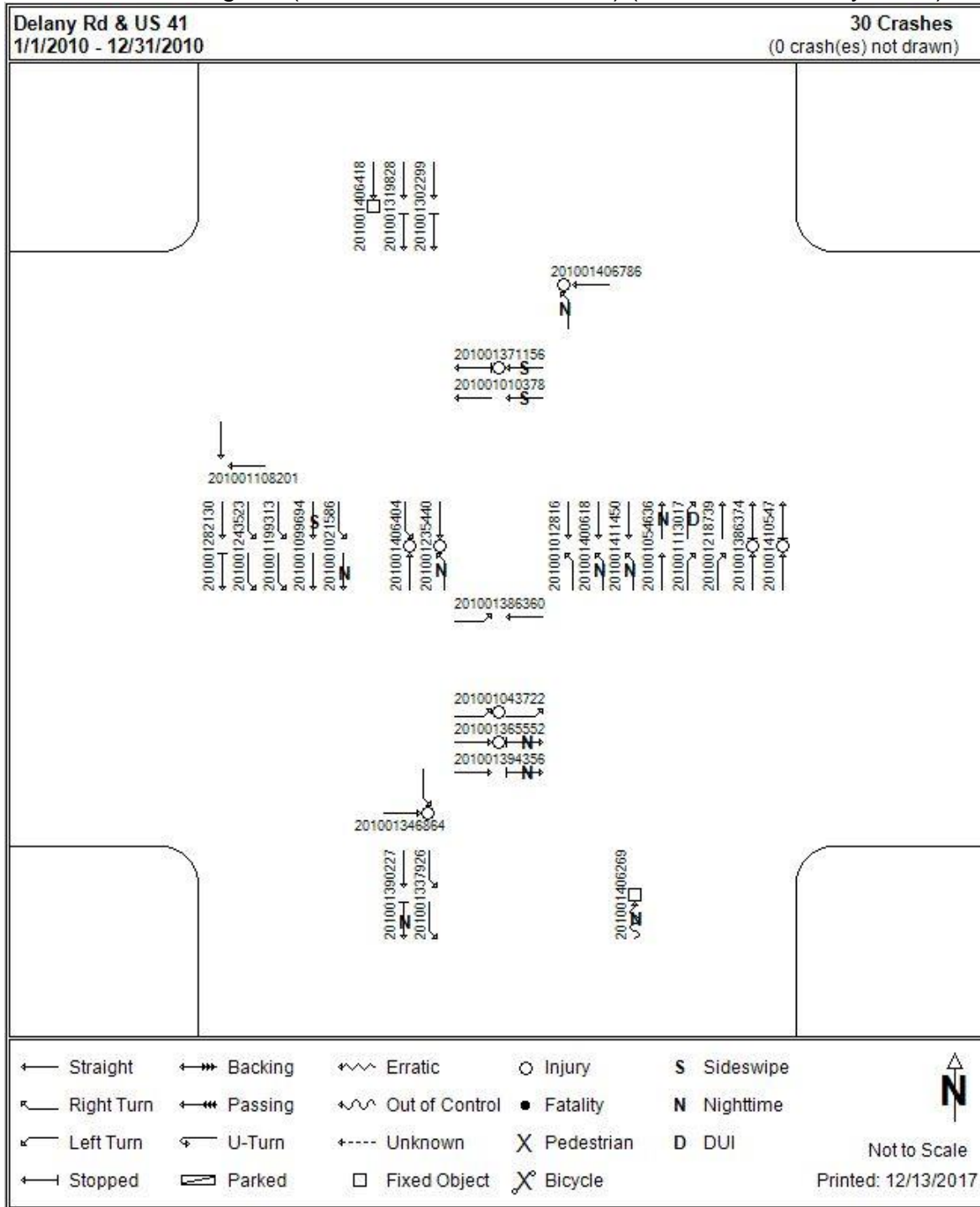
Exhibit #5



2010 Traffic Crash Map (Data located on Exhibit #5) (Route 41 & Delany Road)



# 2010 Collision Diagram (Data located on Exhibit #5) (Route 41 & Delany Road)





### Crash Data Analysis

The post camera system crash data (Exhibits #2-5) show an increase in crashes at two intersections as compared to Exhibit #1, Route 132 & Route 21 and Route 41 & Delany Road.

The data shows post one year RLR installation at Route 132 & Route 21 that traffic crashes increased by (4) from the previous three year average of (38), while injuries decreased by (1) from the previous three year average (11). Turning crashes have increased by (5) post camera installation from the previous three year average of (14).

The data from Route 41 & Delany Road has seen an increase in traffic crashes (19) from the previous three year average of (11). The crash data suggests that the two hazardous actions are contributing to the increase; failure to yield while turning and following too closely. The three year total for failure to yield was (8), while for calendar year 2010 there were (11). There were (2) following too closely for the three years prior and (7) for calendar year 2010.

The short-term conclusion at these two intersections is that traffic crashes increased and more long-term data will be required to fully evaluate the crash data at these intersections.

### Signal Timings

Signal timings and other settings before and after RLR camera installation. The traffic signal timings are not under control of the Village of Gurnee. As such, we do not possess this information.

### Traffic Volumes

Traffic volumes before and after RLR Camera System installation. The traffic volumes shall include both Average Daily and Peak Period traffic.

The average daily traffic counts are supplied by the Illinois Department of Transportation at: <https://www.gettingaroundillinois.com>.

The average daily traffic volume for the Intersection(s) for the 3-years prior to photo enforcement is:

Route 132 & Route 21	19,850
Route 132 & Hunt Club Road	41,300
Route 132 & Dilleys Road	30,850
Route 41 & Delany Road	43,450

The average daily traffic volume post camera installation:

Route 132 & Route 21	19,200
Route 132 & Hunt Club Road	43,400
Route 132 & Dilleys Road	28,700
Route 41 & Delany Road	36,800

### Recommendations

There are two recommendations. First, continue to analyze the intersection(s) crash data over the next three years to get a better sampling of post photo enforcement data. Second; protect the left turn lanes for east and westbound traffic at Route 41 & Delany Road to reduce the traffic crashes that are a result of failure to yield while turning left.

### Adjudication Process

During the examined time period (2009 & 2010) we conducted 1,648 administrative hearings related to photo enforcement citations issued. Of those hearings, 1,301 of those were found to be liable including those who failed to appear at their scheduled hearing.

### Financial Report

The total number of citations issued at all intersection(s) from June 6, 2009 through December 31, 2010 was 23,569. When you subtract the lease payments, bank and various fees for the system during the same time period. The net revenue collected was approximately \$1,152,128.