Transportation Commission
7th Street Evaluation Committee Recommendations

Executive Summary

With a history of speeding and crashes as well as multiple iterations of remediation over the last decade, 7th Street provides an example of the challenges present in calming traffic along a neighborhood street that is classified as an arterial road. The 7th Street Committee was charged with evaluating what worked and what did not work in trying to improve the environment along 7th St. Recommendations are listed below with corridor background, remediation shortcomings, and recommendation details and explanations in the appendix following.

The Transportation Commission recommends that Council provide direction and budget for staff to implement the following recommendations:

Future work on 7th Street and other Arterial Streets

1. Collect systematic data for arterial streets, make data-driven recommendations, and pursue street improvements in locations that are likely to have a large impact.
2. Broaden the application of existing quick build/paint-and-post tools to mediate speed on arterial streets.
3. Develop a Major Street Calming initiative.
4. Explore means of local driver education.
5. Explore conceptual level design for All Ages and Abilities bike facility along 7th St. Present design to the community and develop further if there is public support.

Process Improvements learned from the 7th Street Speed Calming Effort

1. Limit ad hoc responses to resident complaints
2. Establish formal projects with dedicated budget and resources.
3. Develop clear goals that can be evaluated, and schedule the evaluation timeline at the beginning of the project: “beginning with the end in mind.”
4. Empower and retain city staff so that there is continuity of planning and engagement.
5. Develop community engagement/public education strategies to promote education and awareness

Alignments:

Pedestrian Safety and Access Task Force Recommendations to Council, September 2015

A2 Moving Together Toward Vision Zero Transportation Plan DRAFT 2020

Appendix A: Reflections and Recommednations for future work on 7th Street and other Arterial Streets

Goal: Investigate reasons for continued speeding issues on 7th despite remediation efforts. Provide recommendations which empower staff to find successful solutions for 7th as well as similar corridors.

Background: 7th Street between Stadium Blvd. and Miller Ave. is an entirely non-commercial corridor that, excepting one church, is entirely residential. The corridor also links along its length to 5 schools and 4 parks. The continuity of 7th makes it an important intracity connector, though the easement width is the same size as the other local streets of the Old West Side. With over 200 residences and 18 cross streets in 1.5 miles, there are many conflict points and some on-going resident complaints about motor vehicle speeds along the corridor. Several treatments have been implemented in order to reduce speeding and crashes. For example, bike lanes, pedestrian gateway treatments (i.e., yield signs at both ends of the crosswalk and a flexible delineator post or yield sign in between travel lanes), and two speed radar signs. The committee (Julie Boland, Linda Diane Feldt, Seth Peterson) convened with staff (Officer Jamie Adkins, Kayla Coleman, Eli Cooper, Raymond Hess, Nicholas Hutchinson, Cynthia Redinger) to evaluate whether the treatments had been successful, and if not, what else could be done. When examining the available data about motor vehicle speeds post-treatment (see Appendix D), the committee concluded that the problems remained unresolved, despite the remediation efforts. In the attached graphs, each data point summarizes a 2-week time period. The data are incomplete because data must be manually retrieved from the radar signs. Upward trends were noted, with high percentages of speeding cars.

Remediation Shortcomings: Solutions from the initial remediation process (circa 2013) were insufficient to solve the speeding problems on 7th Street because of circular logic related to the traffic volumes and possible treatments for the corridor:

- Installation of more robust traffic calming measures might lead to slower traffic flow and reduced traffic volume.
- Slower traffic flow and reduced traffic volume are the parameters to qualify for installation of many traffic calming measures.

Perhaps traffic engineering practices have evolved since 2013 to allow for more traffic calming measures to be considered on a street with traffic speed and volume comparable to 7th Street, but staff did the best they could at the time within their existing confines. Rules that are developed around state highways work less well in an urban context.

The initial improvements of the speed radar signage have done some good, but they have had limited impact in making lasting changes on 7th Street. Speed Radar signs serve a driver education and enforcement purpose, and have done as much as they can in that regard. The actual driving speed is displayed on the sign, but the notion of “speeding” is subjective. Enforcement has seemingly not been prioritized since the early days after installation and is at best a band-aid that can only be applied in limited locations at limited times (and it is definitely not a feasible solution during a pandemic).

There were issues during the new bike lane installation on 7th because the detailed engineering drawings did not specify the new motor vehicle lanes at a 10 foot width (to which they were being narrowed). The drawings showed bike lanes dimensioned at 5ft. (and the motor vehicle lanes were left undimensioned) with the assumption that the remaining road width would leave 10 foot auto lanes. This was accurate in some areas, but left other wider sections of 7th with auto lanes of 11+ft. Once staff

was alerted to this discrepancy, they resolved it, as well as adding the advisory lanes which now exist through the intersections areas of 7th. These have certainly been an improvement in the bikeability of 7th, though have not had a noticeable effect on speeds beyond the initial break-in period of unfamiliarity to drivers.

While 7th Street may be unique in the number of treatments that have been implemented, other arterial streets that are heavily residential (e.g., Miller, Dexter, Liberty) have similar problems.

The Committee proposes the following recommendations, which are in alignment with the objectives presented in the Pedestrian Safety and Access Task Force Recommendations to Council, September 2015.

> From Page 21, Objective #5, Primary Recommendation "C":
>
> **Implement Arterial and Collector Traffic Management to Encourage Driving Speeds of 30 mph or Less**. Measures should be routinely employed on arterial and collector roadways as necessary to minimize the likelihood of death or severe injury to pedestrians crossing the road. Towards that end, all arterial and collector roads that have a posted speed limit greater than 30 mph or where the 85 percentile speed is greater than 30 mph should be evaluated for geometric, signal timing and roadside improvements that have been shown to reduce the speed of motor vehicles. The desired state is to have the 85 percentile speeds and the road designed for travel at 30 mph or less.

Recommendations

The Transportation Commission recommends that Council provide direction and budget for staff to implement the following. Staff has prepared preliminary cost estimates for the implementation of these recommendations (provided below); a funding source must be determined for implementation to move forward.

1. **Collect systematic data for arterial streets, make data-driven recommendations, and pursue street improvements in locations that are likely to have a large impact.** A robust data collection program is needed to achieve a complete understanding of how the system is used, including but not limited to: crash data, speed data, volume data, active transportation data, turning movement data. Additional resources and equipment (e.g., permanent data collectors with remote communication ability) are necessary to make traffic data more abundant and accessible. Having such data will be essential for communicating safety needs to the public and for evaluating the success of remediation efforts.

   Historic budget allocation: $50,000

2. **Broaden the application of existing quick build/paint-and-post tools to mediate speed on arterial streets.** Evaluate the tools that have been implemented on 7th Street, determine what has been successful, and implement those tools on other arterials, system-wide. Extend the use of existing tools on 7th Street, and other arterials, from seasonal to year-round; specifically, pedestrian gateway treatments and flexible delineators used for buffering in bike lanes. Adjust Public Works operations for winter maintenance, and other city operations, as needed, to extend to year-round use. Seek new opportunities for “Quick Build” or “Paint and Post”

treatments that may become available, and consider implementation on 7th Street and other arterials. Consider new opportunities within industry best practices, as well as opportunities realized as a result of robust data collection and analysis. Review any new options in the Comprehensive Transportation Plan for possible implementation on 7th Street and other arterials. These might provide short term solutions or allow us to pilot-test longer-term solutions.

Preliminary Cost Estimate: $200,000

3. **Develop a Major Street Calming initiative**. The program should include an overall speed management toolbox, identifying the appropriate tools and physical street modifications for all road classifications. The speed management toolbox should be reviewed during each capital road improvement project and applied whenever feasible, as well as a citizen-request process for speed management review outside of capital improvement projects. The development of a Major Street Traffic Calming Program should build on the guidance and recommendations identified in the A2 Moving Together Toward Vision Zero Transportation Plan.
    a. This initiative will require funding in the Capital Improvements Plan (CIP) for both development and implementation.
    b. The existing Traffic Calming Program, for local streets, provides a possible model of citizen-initiated street calming that could be adapted for a Major Street Calming initiative. Additional considerations:
        i. Things go more smoothly with resident support; we want citizens to be happy with the outcome.
        ii. Feedback from residents increases awareness of local concerns that might otherwise not be considered.
        iii. The traffic problem might shift to other nearby streets (whose residents may then submit their own requests or suffer in silence).
        iv. This is the squeaky-wheel approach and may result in inequitable solutions.
        v. The existing local streets Traffic Calming public engagement specifically elevates the feedback from property owners and residents on the individual street. Public engagement for a major street program may require a more robust, community-wide, public engagement process to gather feedback from other road users, due to the higher traffic volumes for these road classifications.

    c. A more systematic approach, using data-driven decision making, is recommended by Vision Zero guidelines. Additional considerations:
        i. This approach has the potential to solve/minimize problems city-wide, rather than shifting problems from one street to another.
        ii. This approach is likely to be met with resistance from residents. Education (and leadership from City Council) would be necessary to justify this approach.
        iii. Funding is not available to implement changes on all relevant streets simultaneously, so the problem of shifting traffic problems from one major street to another would still be an issue.
        iv. Public Works maintenance needs. Need to plan for the maintenance needs.

Preliminary Cost Estimate: $200,000

4. **Explore means of local driver education**.
    a. If Ann Arbor is to lead with newer traffic engineering practices, but is limited by state driver education that was often taught decades ago, is there a means of educating at least locally? Mailers? Online course for local tax credit?

5. **Explore conceptual level design for All Ages and Abilities bike facility along 7th St. Present design to the community and develop further if there is public support.**
    a. 7th St. is shown as part of an All Ages and Abilities Bicycle Network on page 64 of the A2 Moving Together Toward Vision Zero Transportation Plan DRAFT 2020
    b. 7th St. is entirely non-commercial and links along its length to 5 schools and 4 parks. Bicycles are an excellent mode of transportation for school age kids as well as the rest of the community, but the existing bike lanes on 7th are not comfortable for all ages and abilities (especially with existing motor vehicle speeds).
    c. While many efforts have been made to slow traffic along 7th up to this point, the results have been limited because the nature of the corridor remains unchanged. In addition to increasing accessibility for active transportation users, a project that changes the nature of the corridor could bring down the 85th percentile speeds without punitive measures.
    d. The 2-way facility on William St., in addition to providing safe bicycle passage for all ages and abilities, has passively calmed the traffic to the extent that it is a much safer and more enjoyable corridor for bicyclists as well as pedestrians. It has accomplished this without extensive equipment purchases or speed studies. Street maintenance along William has also been successful.
    e. A successful project along 7th could provide a template for solutions on similar corridors such as Miller, Liberty, and Platt.

APPENDIX B: Reflections and Recommendations on Process Improvements learned from the 7th Street Speed Calming Effort

The 7th Street Committee spent considerable time reflecting on how the process through which changes were made on 7th St, with the hope of gleaning helpful insights that might guide future projects.

The concern: Over the course of many years, neighbors worked with the city to try to resolve problems with speeding and unsafe turns on 7th St.

Process: From the beginning, the city tried to be responsive to residents' concerns. However, potential solutions were implemented on an ad hoc basis rather than creating a formal, budgeted project. Thus, there was no formal 7th Street evaluation program or process. No comprehensive evaluation of these remedies (see Appendix) could be done, partly because "before" data is lacking or not comparable to data now available.

Timing: During the time of complaints and working towards solutions there was significant turnover of city staff. Additionally, there was focus on other aspects of transportation safety, including some safety focus areas being newly developed. Neighborhood turnover may also be a factor.

Communication and education: Ad hoc staff support for communications and engagement was provided (see Appendix), but to residents, if felt incomplete and/or inconsistent. Staff gave updates at public meetings, and to email distribution lists of identified stakeholders and public meeting participants. However, all of those affected were not present at meetings or subscribed to mailing lists. Updates were not provided regarding follow-up and implementation of items previously discussed at public meetings and through online surveys. The years-long lag between discussion and implementation contributed to this problem.

The Transportation Commission recommends that Council provide direction and budget for staff to implement the following:

1. **Limit ad hoc responses to resident complaints**
    a. While ad hoc responses can be implemented more quickly than budgeted programs, they are difficult to evaluate and follow-up may not be possible. In the 7th St example, it was never clear that residents and city staff shared the same well-defined goals.
    b. Ad hoc responses are most appropriate for small-scale projects that are limited in scope and time, and affect relatively few residents. The remaining recommendations apply to larger-scale projects.
2. **Establish formal projects with dedicated budget and resources.**
3. **Develop clear goals that can be evaluated, and schedule the evaluation timeline at the beginning of the project: "beginning with the end in mind."**
    a. Collect relevant data before, during and after.
    b. Communicate with residents on a regular basis about progress toward specified goals
    c. Celebrate successes and communicate improvements
4. **Empower and retain city staff so that there is continuity of planning and engagement.**

5. **Develop community engagement/public education strategies to promote education and awareness**

    a. Residents often fail to understand road classifications, how they are determined, and how classification impacts possible solutions, leading to confusion and frustration.

    b. Active projects should have annual postcard notification to neighborhood residents, to inform both new and old residents of activity on the project.

APPENDIX C: 7th Street Speed Calming History

Solutions put into place:

- Speed limit signage along Waterworks Park – 2011
- Rectangular Rapid Flashing Beacon (RRFB) at Seventh and Washington – 2014
- Radar speed signs - trailer mounted radar signs were replaced with permanent installation – after 2013
- Gateway treatments - various deployments starting in 2016
- High visibility markings (i.e., continental crosswalk striping) for the existing sidewalk ramps at the Willow crosswalk location - 2016
- Construction of the sidewalk ramps for pedestrian crossings at Lutz and north of W. Jefferson Street, including high visibility markings at these locations - 2016
- Vehicle lane narrowing and implementation of buffered bike lanes, and advisory bike lanes (enhanced lane share markings) on Seventh from Stadium to Huron- Spring -Summer 2018
- Enhanced crosswalk markings - Spring -Summer 2018Leading pedestrian intervals at traffic signals – spring 2020

Process Milestones:

- December 2013 – Public Meeting
- May-June 2014 – Online Survey: What feedback would you like to share related to transportation along Seventh Street (from Huron to Stadium)?
- June 2014 – Public Meeting
- September – November 2014 – Online Survey: Do you support the proposed design alternatives for Seventh Street?
- June 2017 – OHM Seventh Street Speed Management Study (Consultant Study)
- Summer-Fall 2018 – community engagement (public meetings, online survey, mailed postcards) regarding N. Seventh Street parking removal for bike lane (did not move forward, lack of support from adjacent neighbors).
- December 2019 Transportation Commission Seventh Street Committee Established

Communication Tools

- Email subscription topic through Gov Delivery (293 subscribers to date)
- Project webpage www.a2gov.org/Seventh

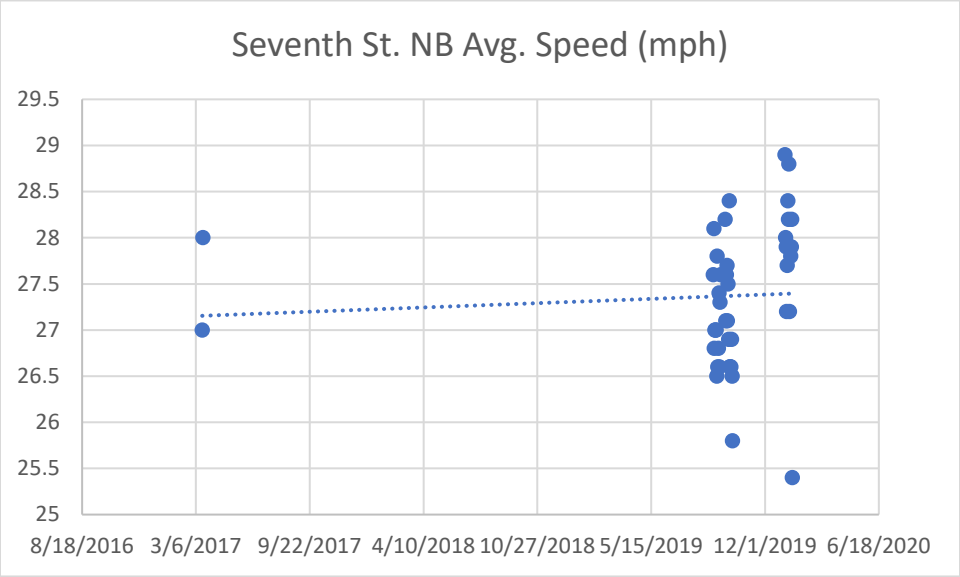
- Updates provided to and coordination meetings with the Safety on Seventh/Save our Streets group as a liaison to the community
- Updates provided to and coordination meetings with Councilmembers
- Publicity for December 2013 and June 2014 Public Meetings:
    - Postcard invitations were mailed to 1,956 addresses. The postcards included the following note: “This meeting notice has been mailed to residences within 1,000 feet of Seventh Street (from Huron St. to Stadium Blvd.). Please help us by spreading the word to other neighbors and users of this corridor.”
    - Email invitations via Ann Arbor Public Schools to all families of Pioneer; Slauson; Bach; Eberwhite; and Ann Arbor Open Schools
    - Email invitations to neighborhood association contacts
    - Social Media: Facebook event and reminder posts via Facebook and Twitter
    - Notification to Capital Improvements Program Gov Delivery (341 subscribers) in advance of the December 2013 public meeting
    - Clerk’s Office Notification
    - Update via “Tree Town Log” resident Newsletter

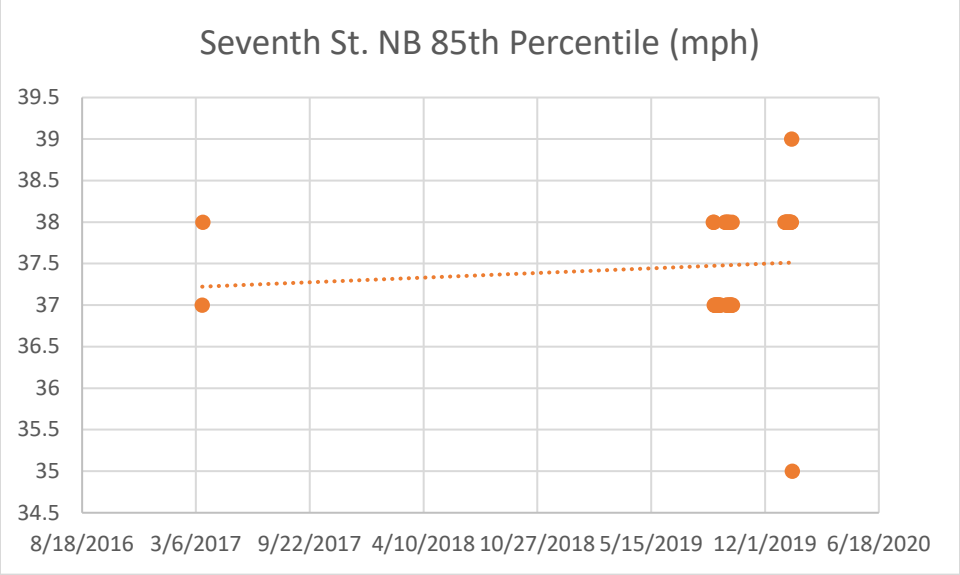
Data Sources:

2017 Counts obtained by A2 staff using traditional pneumatic tube counters.

2019 and 2020 data were obtained from the speed feedback signs.

Data for average speed, 85th percentile speed, and percent speeding are provided in the following charts for the Committee's Use.





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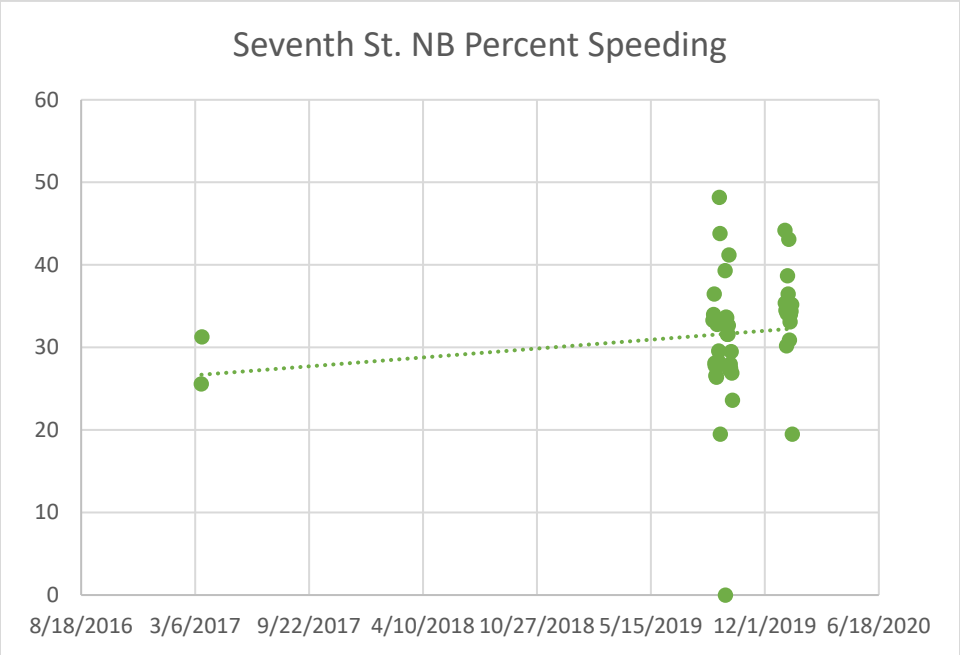

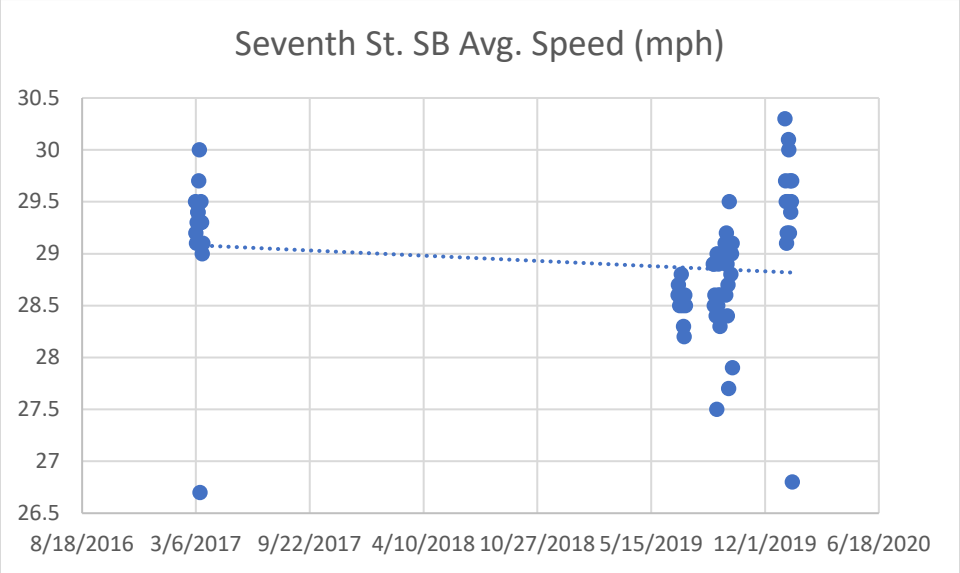

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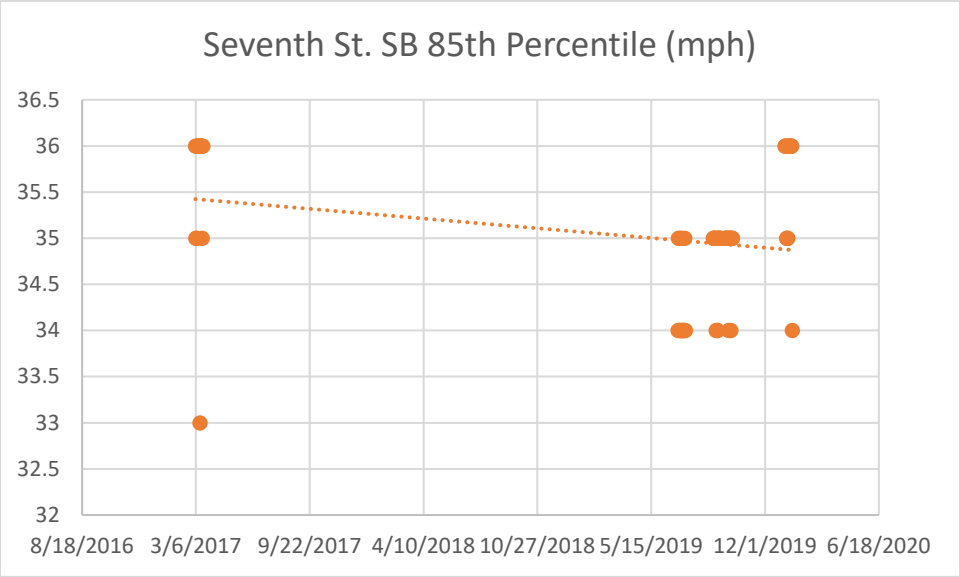
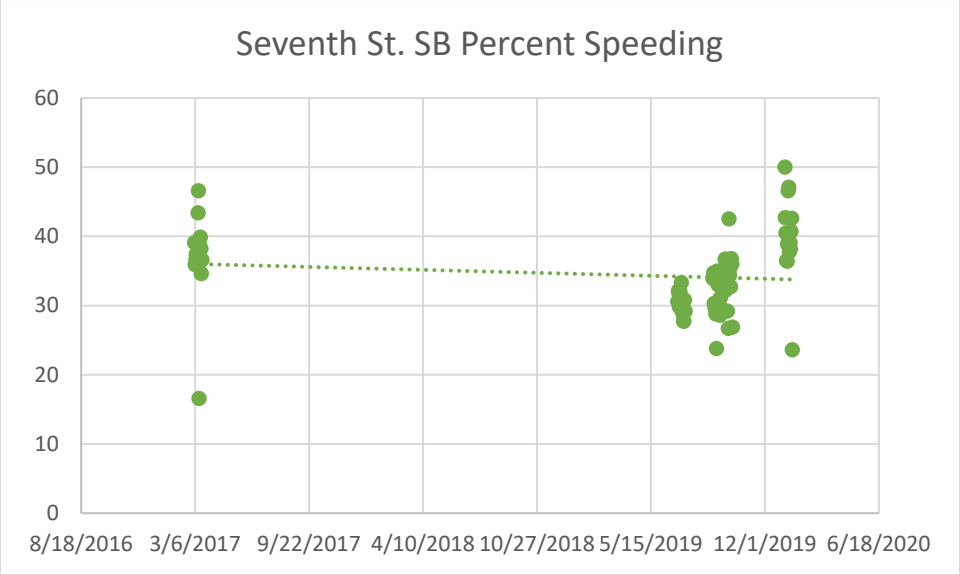

Seventh St. SB 85th Percentile (mph)
36.5
36
35.5
35
34.5
34
33.5
33
32.5
32
8/18/2016
3/6/2017
9/22/2017
4/10/2018
10/27/2018
5/15/2019
12/1/2019
6/18/2020


Seventh St. SB Percent Speeding
60
50
40
30
20
10
0
8/18/2016
3/6/2017
9/22/2017
4/10/2018
10/27/2018
5/15/2019
12/1/2019
6/18/2020