

Addendum to  
“Analysis of Headway Data”  
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June 19, 2017

This memo is an addendum to the report “Analysis of Headway Data” dated April 21, 2017.

In this document we address the issue “Does the new schedule satisfy the City of Seattle requirement of headways not exceeding 15 minutes?”

In late May it was stated that the inclusion of additional buses satisfied the city’s requirement. The actual schedules, both for the pre and post addition of buses were analyzed in the same manner as the actual 2016 data had been analyzed. For the both the pre and post published schedules the 15 minute requirement was shown to be satisfied. In fact, there was little difference in how the headways based on the two schedules performed. At the time of the May 2 hearing I stated as much and also said that actual data, and not schedules, would be needed to verify whether the addition of buses did in fact cause the system to satisfy the City’s requirement.

In the original report we reported our results on the analysis of headway data for both southbound and northbound data respectively at bus stops 5875 and 6550, and from September 12 through November 30 2016. A summary of the results from that study were presented to Seattle City Hearing Examiner May 2, 2017. The main results for the 2016 stated the following percentages of cases were headways exceeded 15, 29 and 25 minutes.

For southbound traffic

- 38.5% of the Headways exceeded 15 minutes

- 10.9% of the Headways exceeded 20 minutes
- 2.9% of the Headways exceeded 25 minutes

For northbound traffic

- 38.7% of the Headways exceeded 15 minutes
- 16.4% of the Headways exceeded 20 minutes
- 6.2% of the Headways exceeded 25 minutes

Following the conclusion of the hearing on May 5th, I contacted Andrew Brick to request additional #5 bus performance data following the March 11th schedule change. I received that data on Thursday, June 15th. The same analysis was done on the 2017 data as for the 2016 data, for the same bus line, at the same southbound and northbound stops, specifically bus stops 5875 and 6550 from March 13 through April 28 2017.

The summary of the results follows:

For southbound traffic

- 37.5% of the Headways exceeded 15 minutes
- 10.5% of the Headways exceeded 20 minutes
- 4.1% of the Headways exceeded 25 minutes
- In addition I observed that
  - o There were 4 cases with headways above 40 minutes
  - o And 1 case of 60 minutes

For northbound traffic

- 36.8% of the Headways exceeded 15 minutes
- 18.6% of the Headways exceeded 20 minutes
- 7.6% of the Headways exceeded 25 minutes
- In addition I observed that
  - o There were 8 cases with headways above 40 minutes
  - o And 1 case of 58 minutes

Comparing the 2017 data with the 2016 data we notice that there is essentially no difference in the results. In conclusion, the addition of buses to the schedule did not affect the results, i.e., no improvement is observed.