

REPORT OF THE EDUCATE 200 FOUNDATION  
TO THE WHEATON-WARRENVILLE DISTRICT 200 COMMUNITY

**Three Minute Makeover**

*Analysis of Average Student Travel Times by Bus in District 200*

October 2006

**Executive Summary**

*District 200 transportation data show that overall, Hubble students' bus rides aren't significantly longer than bus trips for students at schools such as Bower, Monroe or Washington. For Warrenville students who have longer trips, moving Hubble may not solve the problem, but splitting long bus routes could provide immediate relief. Specifically:*

- (1) Some students traveling to school within Warrenville – including kindergarteners – travel as long as 55 minutes; moving Hubble won't shorten these travel times.*
- (2) Hubble students don't have significantly longer travel times when compared with other schools; the average maximum travel time by bus to Hubble Middle School is just three minutes longer than travel time to Monroe Middle School, and only three minutes longer than the average travel time for elementary students who travel by bus within Warrenville to Bower Elementary. In other words, if every Hubble student boarded at the first stop and rode the entire length of the route, his or her bus ride to school would average just under 30 minutes (compared with just over 27 minutes for Monroe students and just under 27 minutes for Bower Elementary students). In reality, all students don't ride the entire route, so their actual travel times are shorter than the times shown.*
- (3) "Long" bus routes (over 35 minutes) average many more stops than other routes. Splitting long routes can help save time for students today, whether or not a new school is built in the future.*
- (4) Passenger counts do not place any Hubble route among the District's 20 "most crowded" routes.*

<b>School</b>	<b>Average Maximum Travel Time (Morning) In Minutes</b>
HUBBLE	29.98
Washington Elementary	28.72
Monroe	27.14
Bower Elementary	26.83
Franklin	25.68
Edison	24.76
Johnson Elementary	23.77

**We found a strong correlation between long travel times and number of stops, indicating that splitting longer routes could achieve immediate time savings for students today, whether or not a new school is built.** We also found that average maximum travel times to Bower Elementary School are almost 27 minutes, indicating that distances within Warrenville may contribute to total travel times.

We believe these results, compiled from official District 200 records by the EDUCATE 200 Foundation as part of our recent study described in this report, show that (i) average bus travel times for Hubble students are not significantly longer than for students who travel by bus to the District's other middle schools or, for that matter, students who bus to elementary schools within Warrenville, (ii) no Hubble routes are among the most crowded, and (iii) the District can take immediate action to shorten travel times whether or not it builds a new school. While a three-minute difference does not, in our view, justify relocating an entire school, we believe that changes can be made to reduce the travel times for students at the higher end of the average. We encourage those who have expressed concern about travel times to take a look at these numbers, and to join us in urging District 200 to take immediate action to rationalize its bus routes to reduce travel times for the most distantly located students. This is the only option that can provide immediate time savings today, not years down the road.

### **Hubble Facade, Summer 2006**

*Source: Educate 200 Foundation*



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## I. INTRODUCTION – Why We Conducted Our Study

District 200 School Board members, some administrators, and some Warrenville residents have publicly criticized the location of Hubble Middle School. They have claimed, among other things, that students attending Hubble must endure overly-long, overcrowded bus rides in comparison with students at other District 200 middle schools. These claims are frequently repeated in support of building a new middle school in Warrenville, which would allegedly reduce travel times. **We believe that parents (including those who support building a new middle school) will agree with us that District 200 must take immediate action to address travel times. There is no reason to wait for a new building.** We hope that our study will assist all parents in pushing for resolution of this problem now.

District 200 has already conducted its own study, which the District contends shows that there would be travel time savings if new middle school is built at the Board's proposed site. However, the District study considers only two hypothetical students: one who lives at the far west end of the current Hubble boundaries, and one who lives at the far east end. It does not take into account where average students live, and does not provide data that would be useful when possible **boundary changes** are implemented by the Board. It is important to remember that about half of current Hubble students live in Wheaton.

In light of these criticisms, and because the District's study is insufficiently detailed, we decided to study the actual travel times, by bus, to all four District 200 middle schools and to elementary schools, to determine, using objective data, how they actually compare. We used the official bus routes and student counts obtained from District 200 through the Illinois Freedom of Information Act to tabulate travel times. We reviewed 98 pages of bus routing data, and considered all 100 of the District's morning middle school and elementary bus routes, to provide a detailed assessment. We also analyzed afternoon bus routes when considering route length.

Considering total average travel times, we were not surprised to find that Hubble has the highest average travel time among the 16 schools we studied. However, we were surprised to find that Hubble travel time is less than 3 minutes greater than average travel time for students traveling by bus to Monroe Middle School, and only about 3 minutes longer than for students traveling within Warrenville to Bower. Hubble travel time is also barely 1 minute longer than travel time for elementary students traveling by bus to Washington Elementary School. **In other words, Hubble is not unusual or "unfair" among District schools in terms of average travel time by bus.** The District's boundary map, which can be found on the District's web site at [www.cusd200.org/visitor/attendance.htm](http://www.cusd200.org/visitor/attendance.htm), shows that there are a number of attendance areas, in Wheaton and Warrenville, including Hubble, that are not contiguous to their schools. Thus, the District's choices, as well as school locations, make a major contribution to travel times.

Still, looking at average data alone can be misleading, because Hubble does have 7 of the District's 17 "long" bus routes (35 minutes or more), and 4 of the 7 "longest" (40 minutes or more). To address this issue, we examined in detail the number of stops among all District routes, the 35+ minute routes, and the 40+ minute routes, and found a strong correlation between number of stops and route length.

Finally, we reviewed bus route population data to determine whether Hubble routes were among the most crowded compared with routes at other schools, based on total number of passengers as reported by the District.

## **II. METHODOLOGY – How We Conducted Our Study**

### ***a. Data Sources***

We used only information provided directly by District 200 in response to a Freedom Information Act request we submitted to the District. In response to our request, District 200 provided 98 pages of route information for elementary and middle schools (morning, mid-day and afternoon), along with a three page listing of the number of students riding each morning route. We also obtained route information for both high schools. The information we obtained is posted on our web site, [www.educate200.com](http://www.educate200.com) (Download Files page), because it is too lengthy to duplicate within this report. The information was printed out by the District in May 2006, and we have been advised by District staff that there have been no significant routing changes.

We focused the travel time and crowding components of our study on morning bus routes to middle and elementary schools. Because rush hour traffic may lengthen student travel times, we reviewed the morning routes, which largely overlap rush hour. Afternoon routes generally leave before peak rush hour, and because some students stay after school or are picked up for other activities, we determined that the morning routes provide the most representative samples of student travel patterns, and the routes where crowding is most likely to occur. Additionally, we were not provided with afternoon passenger counts, so we could not produce weighted or crowding figures for the afternoon routes.

When considering the number of “long” routes and the number of stops, we considered all routes, including “activity” buses.

We chose not to study high school bus routes because high school transportation patterns are much more varied and difficult to compare with elementary and middle schools. We have made the high school route data available on our web site in case anyone wishes to study it.

### ***b. Average Maximum Travel Time Measurement***

Throughout this report, we refer to “Average Maximum Travel Time.” This is a metric we developed to compare travel times among District 200 schools. Simply put, Average Maximum Travel Time is the amount of time the average student at a school would spend on a morning bus, if every student bused to that school boarded at the first stop on his or her route and rode all the way to school. If ten students ride a bus route that is 30 minutes from the first stop to school (300 minutes total travel time), and ten students ride a bus route that is 10 minutes from the first stop to school (100 minutes total travel time), we add the total times together ( $300 + 100 = 400$  minutes) and divide by the total number of students ( $10 + 10$ ) to get an Average Maximum Travel Time of 20 minutes (400 minutes divided by 20 students).

