

**MBTA TRANSIT POLICE
CHIEF PAUL S. MACMILLAN**

STOPWATCH – FINAL WEEK 42

June 22, 2009 – June 26, 2009



Ms. Sharon Hessney's Statistics Class at the O'Bryant School of Math and Science

The Truancy data from Truancy Watch 2008/2009 was analyzed by students from the O'Bryant School of Math and Science in conjunction with our partners at the Boston Private Industry Council. The results were informative based on their statistical approach to some of the obvious and not so obvious deductions made by our partners. Some of the observations made during the Truancy Watches were confirmed using the student's statistical evidence and conclusions, other weren't.

The questions examined by the O'Bryant students and the conclusions reached were based only on those students who were surveyed as well as the schools in which the truant students were enrolled. Further, please know the entire statistical analysis is available through e-mail;

- *Which Boston public high schools have a statistically significant higher proportion of truancy? (Conclusion) The Engineering school, West Roxbury High School, Excel High School, Odyssey High School and Charlestown High School seemed to have an unusual proportion of chronic truants based on the data collected from only the schools involved in the truancy surveys*

- *Is there an association between grade level and days truant? (Conclusion) There is no association between grade level and days truant*
- *Are the truancy proportions evenly distributed among public and charter schools? (Conclusion) The truancy proportion is not evenly distributed among public and charter schools. Truancy is higher in public schools*
- *Is there a difference in number of days truant among grade levels? (Conclusion) The distribution of truant students is not consistent with the distribution of the Boston Public School students. The information indicates the number of truant students in the eleventh grade are much greater than the expected number of students committing truancy*
- *Is there a difference in student's self-rating on the value of education and the student's gender? (Conclusion) Surveyed females seem to rate the importance of school higher than males*
- *Is there an association between gender and attitude? (Conclusion) There is no association between gender and attitude based on the specific questions answered on the 2008/2009 Truancy Survey*
- *Is there a difference between a student's attitude and days truant? (Conclusion) According to the data, the number of days truant has no association with the student's attitude*
- *Is the number of students who are truant because of suspension, expulsion, or not being allowed in school evenly distributed among males and females? (Conclusion) The number of students truant for these reasons is not evenly distributed among males and females*
- *Is there an association between the frequency of truancy and what school the student attends? (Conclusion) There is no association between a student's school and the frequency they are truant. The high schools that the surveyed students attend and the frequency of truancy are independent*
- *Does the proportion of students truant by school differ between small high schools and large high schools? (Conclusion) The proportion of students truant between large high schools and small high schools are independent, therefore the truancy proportion is the same*
- *Is there a relationship between the number of days truant and how the truant student rates the importance of education? (Conclusion) There is a moderate association between the rating of education and days truant by the test results*
- *Is there a difference between the number of days a lower classmen is truant to the number of days an upper classman is truant? There is a difference between the number of days lower classmen and upper classmen are truant – upper classmen were truant more often than lower classmen*
- *Is there an association between the frequency of truancy and what school you attend? (Conclusion) The high school a student attends and the frequency of truancy are independent*

After listening to the elaborate presentations by the O'Bryant High School students, the opinions formed by the partners through the interviews they had performed were confirmed using the statistical analysis. The presentations were informative, providing much needed insight into some of the questions surrounding the truancy problems throughout the City of Boston. It is anticipated the partners will be meeting with the O'Bryant statistics students prior to the start of Truancy Watch commencing September 2009 in order to learn better ways of collecting the necessary information and developing a more reliable instrument to survey truant students. This will allow the data collected in the 2009-2010 school year to be better analyzed and broken down; thus, providing more answers and better solutions regarding truancy in the Greater Boston area.

In the final month of Truancy Watch this 2008/2009 school year it became obvious to partners there were less truant students in the areas targeted throughout the year. The variables of both good and bad weather may have played a role in the visual reduction of truants. There were times when small groups of students that were truant observed partners conducting Truancy Surveys. Some of these students were observed quickly turning away from the partners in order not to get caught up in a truancy encounter. These types of situations made us aware the word has permeated through the informal grapevine notifying high school students to be aware of the Truancy Watches.

In the latter part of this school year the number of surveys completed was reduced due to fewer students encountered. We could conclude there were less truant students in the Forest Hills and Downtown Crossing areas based on general observations and the number of students surveyed. Other questions for follow-up to our Truancy Watches are centered around what steps need to be taken that will prove to be effective in resolving the truancy rate. Certainly, tardiness needs to be reviewed and assessed. Tardiness needs to be evaluated as to how daily on time attendance leads to a reduction in overall truancy leading to a lower drop-out rate and a higher graduation rate. More importantly however, is how to put a plan for tardiness in place. This is the crucial component to the solution. As we have seen, all the facets of on-time attendance are connected and could lead toward lowering the drop out rate and affecting a higher graduation rate.

Next year 2009/2010 there will be new avenues in place to gather process and analyze data collected from Truancy Watches. The recently established re-engagement center at the Shelburne Center in Roxbury will be a resource for referrals and effective resolutions to truancy. The re-engagement center will be a direct link to facilitating the efforts of our Truancy Watches and taking expedient steps to recognizing and addressing the problems connected with tardiness, truancy and a low graduation rate.

STOPWATCH Final Week 42

June 22, 2009 – June 26, 2009



Have a great summer!!!

Monday

Forest Hills	1:30pm - 3:00pm
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Tuesday

Roxbury Crossing	1:30pm - 2:30pm
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Wednesday

Downtown Crossing	1:30pm - 3:00pm
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Thursday

Roxbury Crossing - DTC (Half Day)	
Train Riding	11:30am - 2:00pm

Friday

Roxbury Crossing - DTC (Half Day)	
Train Riding / Last Day of School	10:30am – 1:00pm

Coordinators:

Chief Eric Weston	617 635-8000
Boston School Police	
Captain Steve Bell	617 635-8000
Boston School Police	
Lieutenant Detective Mark Gillespie	617 222-1062
MBTA Transit Police	
Sergeant Detective Kelly Nee	617 343-5528