



Cold Weather Survey Feedback

Key Findings

1. Fifty-three percent (53%) of parents surveyed prefer MMSD use the Wind Chill Advisory (minus 20 to 34 F) as its standard for school closings.
2. Overall, sixty-three percent (63%) of parents want earlier notice of school closings, with the most commonly requested notice time being 9 pm the night before extreme cold is predicted (32%).
3. Elementary parents reported the greatest difficulty in arranging childcare when schools close.

Background

In January 2015, the Research and Program Evaluation Office reported on Cold Weather, Attendance and Equity in MMSD. The report examined the effect of cold weather on student attendance among various groups. The data indicated that during extreme cold, African-American, Hispanic, and low income students were less likely to attend school than their counterparts who were white and/or not low income.

To gain insight from parents on MMSD's current policy for closing schools due to extreme cold, in September 2015, parents were asked to complete a brief online survey and give input on closings due to weather.

Online Survey

The online survey included 10 questions. Seven questions focused on the current school closure policy, notification of closures and student transportation. Three questions asked about family and household demographics. The survey was distributed in English and Spanish through MMSD's family newsletter and posted on the MMSD website. Responses were collected from September 9 -30, 2015.

Respondents

MMSD received a total of 7,400 responses to the online survey. Though the survey was intended to be directed at families only, its distribution through the MMSD webpage made it available to a wider audience, including students and staff. Approximately 10% of responses were attributable to the website link. Obvious student responses, where the individual identified his/her status in the comments, were removed from the results. The final number of valid survey responses was 7,382. Due to the distribution methods, there is no way to ascertain an accurate response rate for the final survey total. However, when the web-based survey responses are removed from the denominator, we can estimate that approximately 31% of MMSD households participated in the cold weather survey.

Respondents were asked to identify their children's level in school as well as their children's and their own race/ethnicities. Respondents most commonly had children in elementary (38%), followed by those who had children in more than one level, i.e., elementary & middle or middle & high (25%). Parents of high school students accounted for 17% of respondents, 11% chose not to specify and 8% had children enrolled in middle school.

Race/Ethnicity	Parent	Household
African American	4%	4%
American Indian	0.4%	0.2%
Asian	5%	4%
Hispanic	3%	2%
Multiracial	7%	18%
White	67%	59%
Unspecified	14%	14%

Two-thirds of participants identified themselves as white, 14% chose not to specify their race/ethnicity and 7% identified as multi-racial. Respondents were asked to identify the race/ethnicity of their children and were able to check all choices that applied to their children. Because it was impossible to know if a respondent had one child with multiple ethnicities or children with differing ethnicities, the responses were recoded into a household ethnicity. If the parent and child's ethnicities differed, for counting purposes, the household was recoded as multiracial.

The recoding of household ethnicity primarily affects the participation figures for white and multiracial parents. White parents represented 67% of respondents, but 59% of households, while multiracial parents represented 7% of respondents, but 18% of households. While there is over-representation from white respondents, more African

American, Native American and Asian parents responded to the cold weather survey, compared to other MMSD parent surveys.

Methods

Response distributions were calculated for each closed-ended question as a whole as well as by race/ethnic group and children’s enrollment level. Responses to open-ended questions were analyzed using descriptive coding (summarizing in a word the basic topic of a passage of data) to categorize the topic(s) of each.

Results

Results from the survey are below, organized by question.

Standard for Closing

Fifty-three percent (53%) of parents surveyed prefer MMSD use the Wind Chill Advisory (minus 20 to 34 F) as its standard for school closings, compared to 38% of parents who prefer MMSD retain the Wind Chill Warning (minus 35F or colder) as its standard while just 9% prefer that MMSD use a different standard.

1. What is your preference about MMSD's standard for closing schools during cold weather?

Close school when there is a Wind Chill Advisory (minus 20 to 34 degrees F)	53%
Close school when there is a Wind Chill Warning (minus 35 degrees F or colder)	38%
Use a different standard for closing schools due to cold weather	9%

The preference for closing at a Wind Chill Advisory was consistent across all parent race/ethnic groups and students’ enrollment levels.

Respondents who preferred MMSD use a different standard for closing schools, were asked a follow up question **2) What standard should MMSD use to decide when to close school due to cold weather?** Of the 688 who preferred a different standard, one-third did not offer a description of what that different standard should be. Among those who did cite a different standard, the most common description was negative temperatures (14%).

The next most common preference was that MMSD not close due to cold (9%). The third most common preference found in 7% of comments was that MMSD use a combination of factors to determine when to close. There was much variability in the factors cited in the comments. One respondent suggested a combination of “*Weather, building facility capacity, road conditions, walking conditions,*” while another preferred, “*Combination of conditions - sun, existing snow and ice, gusting wind and worsening conditions during the day.*”

Effects of School Closings

Eighty-one percent (81%) of respondents indicated that school closings do not create difficulty for their families while 18% reported that it is difficult to make arrangements for their children’s care. Among the 18% of parents who reported difficulties arranging childcare when schools are closed, most (27%) had children in elementary school. Differences did appear among various racial/ethnic groups, with a greater proportion of Asian parents reporting difficulty arranging childcare (22%), followed by Multi-racial parents and white parents (19%).

3. When schools close due to weather, which of the following best describes your family's experience?

I can easily make other arrangements for my children's care.	38%
It is difficult to make arrangements for my children's care.	18%
School closings don't affect my family very much.	43%



Getting to School

When schools remain open in potentially hazardous weather, half of parents reported they drive their children to school, while 25% report their children take the bus. Thirteen percent walk to school and the remaining 12% of children are kept home on those days. A higher proportion of African American households (33%) and Hispanic households (25%) keep their children home when schools remain open during potentially hazardous weather, compared to white households (7%). There was little variation in responses based on children's enrollment levels.

4. When schools remain open in potentially hazardous weather (minus 20 to 34 degrees with wind speed of 4 mph or stronger for at least 3 hours) how do your children get to school?

I drive my children to school.	50%
I keep my children at home.	12%
My children take the bus to school.	25%
My children walk to school.	13%

Impact of Remaining Open

Sixty-four percent (64%) of parents indicated there is some or significant negative impact on their children when schools remain open in potentially hazardous weather. Of those, most (80%) chose not to give an open-ended comment. For the remaining parents who did comment, their remarks tended to pertain to 3 topics: Notice (4%), Safety (3%), and Transportation (2%). Comments about Notice focused on primarily on making arrangements for childcare. Most asked that the decision to close be announced earlier than it currently is. Comments on Safety referenced concerns such as asthma, frostbite and danger due to cold. Transportation comments focused on waiting for buses in the cold and late buses.

A higher proportion of parents of high school students (21%) reported significant negative impact to their children when schools remain open in potentially hazardous weather, compared to parents of elementary (11%) or middle school students (17%). Similarly, all non-white, racial/ethnic households reported disproportionate significant negative impact to their children, ranging from 20% to 39%, compared to white households (12%).

5. When schools remain open in potentially hazardous weather how does it impact your children?

There is no impact.	37%
There is significant negative impact.	16%
There is some negative impact.	47%

Notification of School Closings

Overall, sixty-three percent (63%) of respondents want earlier notification of school closings, with the most commonly requested notice time being 9 pm the night before extreme cold is predicted (32%).

Among the range of notification options presented, nearly half (49%) indicated a preference for notice the day of the closing, by either 6:00 am or 6:30 am, while 40% indicated a preference for notice the night before the closing by either 6 pm or 9 pm.

A significantly higher proportion of African American (73%), American Indian (72%), and Hispanic (78%) households prefer earlier notice of school closings compared to white households (61%).



Similarly, a higher proportion of parents of middle school students (69%) and those with students enrolled across levels (68%) also preferred earlier notice of school closings, compared to other parent groups.

6. Which is your preferred option for MMSD notifying parents about school closings?

Close school by 6 am on the day extreme cold is predicted.	23%
Close school by 6 pm the night before extreme cold is predicted.	8%
Close school by 9 pm the night before extreme cold is predicted.	32%
I have no preference on when school closings are announced.	10%
Keep the current procedures for notifying parents of closings (by 6:30 am).	26%

Comments on Closing Due to Cold Weather

There were a total of 1,315 responses to question 7) **Please share any additional thoughts on closing school due to cold weather.** Responses covered a range of weather and school-related topics, but the five most common themes in order were *Notice, Safety, Transportation, Clothing* and *Walking*.

The table below shows the frequency of the most common themes by count and by percent of total coded themes:

Notice	Safety	Transportation	Clothing	Walking
260 (20%)	161 (12%)	122 (9%)	74 (6%)	69 (5%)

- Comments about *Notice* were consistent with responses to *Question 6 on Notification of Closings* on the previous page. Comments focused primarily on the timing of notice of school closings and the method of notice. Many stated “Earlier notice is better” while referencing childcare arrangements: “Announcing the evening before provides time to find child care options.” Different methods of *Notice* were also requested. Preferences were expressed for text messages and email notifications of closings.
- *Safety* comments focused primarily on concerns about illness or injury due to cold. Responses in this section included “Extremely cold wind chills present a dangerous situation for kids waiting at bus stops,” and “It’s unsafe to have children out in such extreme cold.” Some expressed concerns about medical conditions, “Kids with asthma can’t breathe when it is that cold,” and “Cold Weather injuries like frost bite never goes away.☹️”
- Comments regarding *Transportation* generally focused on waiting for buses or late buses. One commented, “I do not want my children to freeze while waiting for the bus.” Comments such as “... buses are usually late in inclement weather, lengthening the time that my kids are standing at the bus stop” and “Risk of standing outside too long waiting for a bus. Risk of the bus not arriving on time,” are representative.
- *Clothing* comments referred mostly to lack of winter gear for children. Comments addressed “concern for kids without proper winter clothing” or “students [who] don’t have gloves/hat/warm jacket and get frostbite.” Some respondents suggested things like “Offer a drop off for scarves, gloves, hats, etc for those that need.”
- Lastly, *Walking*-related comments ranged from concerns about the distance children walk to school or the bus stop or how many minutes they are outside. “A lot of kids have to walk or wait for a bus in bad weather. It’s not safe!” and “It’s not OK for kids to walk 1.5 miles in freezing weather!” are representative comments.