Global Capstone Class

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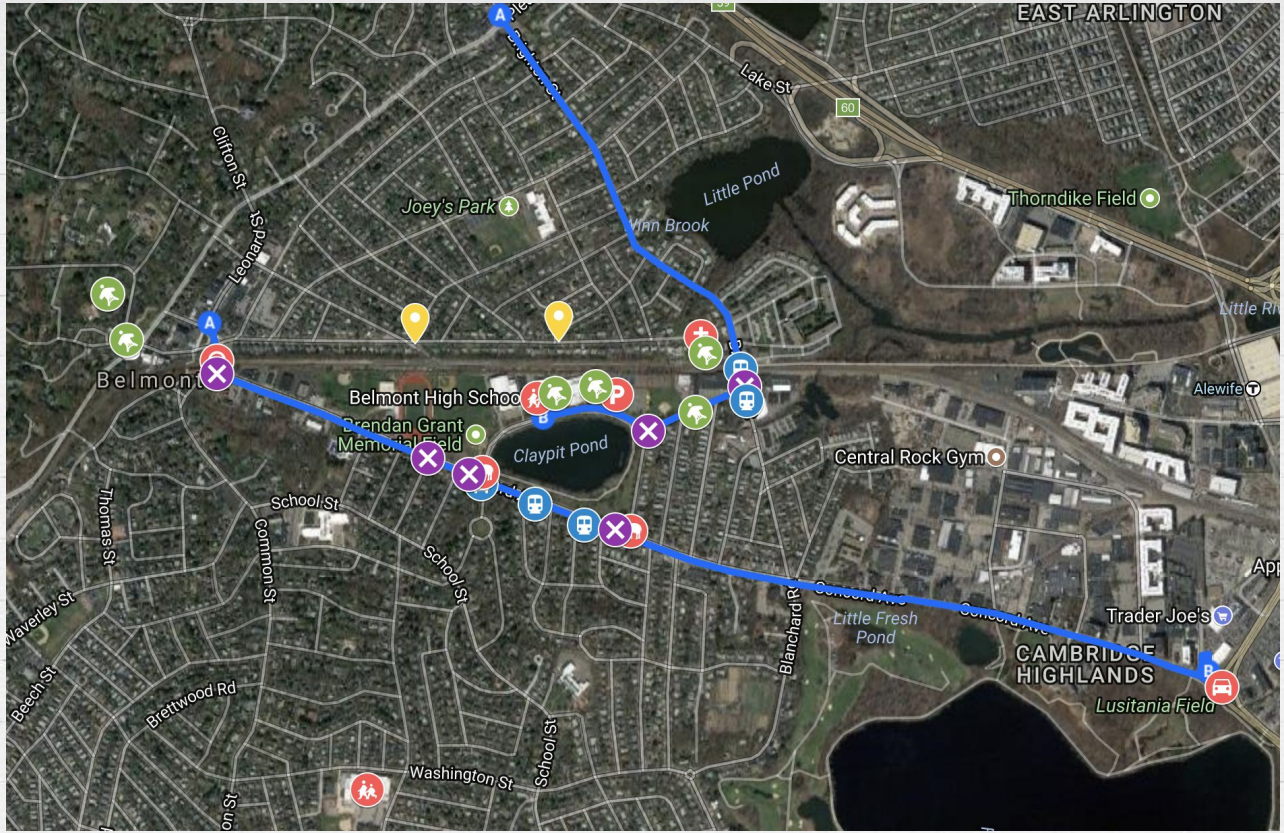

EAST ARLINGTON
Lake St
60
Clifton St
Leonard St
Joey's Park
Little Pond
Vinn Brook
Thorndike Field
Belmont
Belmont High School
Brendan Grant Memorial Field
Claypit Pond
Alewife
Central Rock Gym
School St
Thomas St
Common St
Waverley St
Beech St
Brettwood Rd
Washington St
Blanchard Rd
Little Fresh Pond
Trader Joe's
CAMBRIDGE HIGHLANDS
Lusitania Field

Parts and People In System

PARTS OF SYSTEM

- -Cars
- -Roads
- -Stop-lights
- -Stop-signs
- -Crosswalks
- -Commuter Rail
- -MBTA Buses
- -Time
- -Weather

PEOPLE IN SYSTEM

- -Outside Commuters
- -Parents
- -Students
- -Pedestrians
- -Faculty
- -Crossing Guard/ Police

Stakeholder Perspectives

Anyone who can influence or is affected by a change

Work Commuters (Arlington)

Not fair because with a larger population, we should be able to have more access to transportational means, whether that means being able to cut through parts of Belmont

Students/Faculty

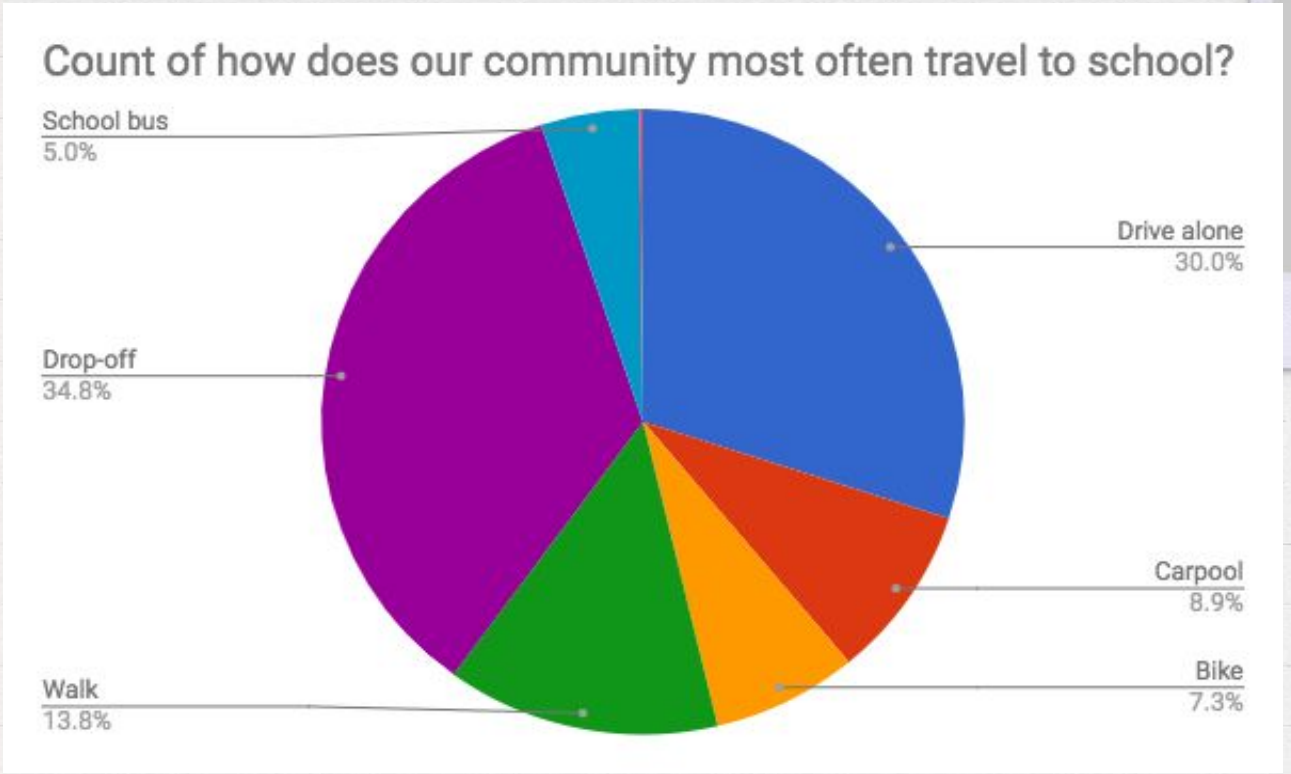
Education is important and should not be compromised on the basis of morning traffic; we should get first priority because school starts earlier than regular 9-5 jobs; school is in Belmont and jobs are usually not

Other

MBTA and Commuter Rail is public transportation and we can't restrict that

Crossing guards/police can help regulate traffic

How the whole community commutes to school:



Drop off: 238

Drive alone: 205

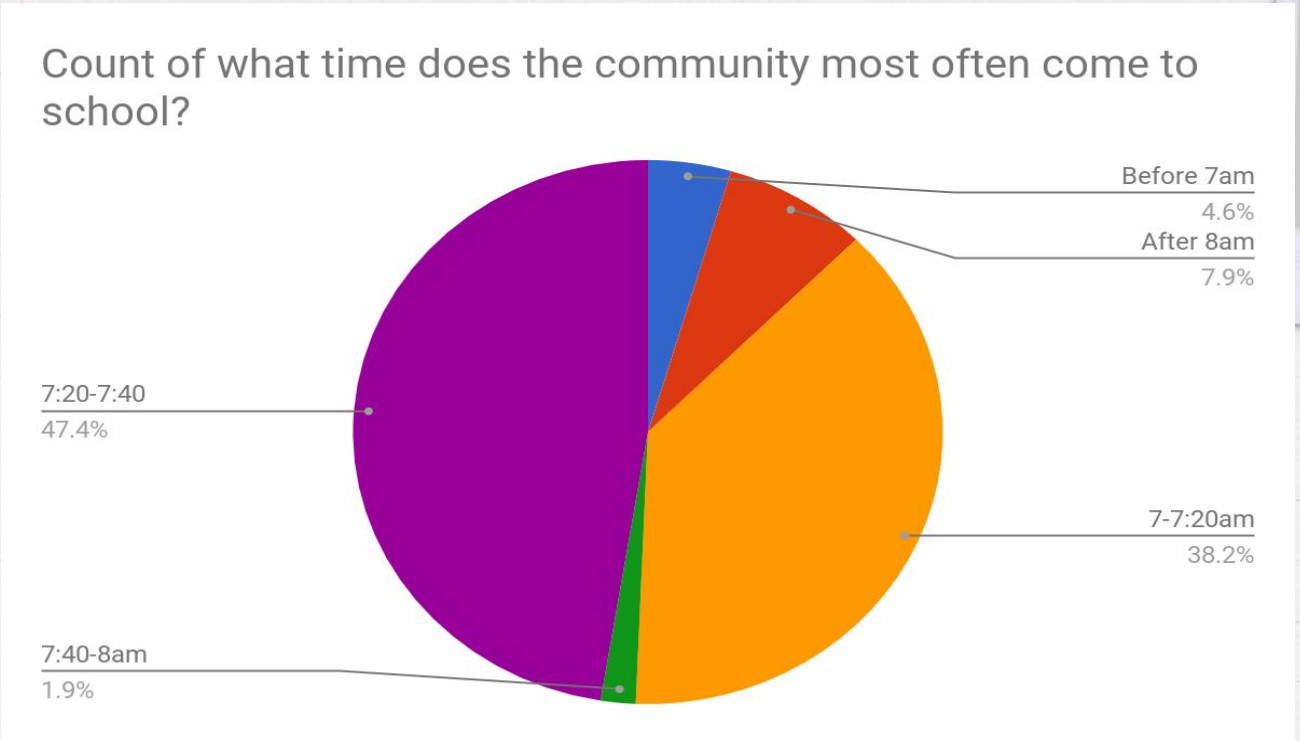
Walk: 94

Carpool: 61

Bike: 50

School bus: 34

What time does our community get to school?:



7:20-7:40: 323

7:00-7:20: 260

After 8:00: 54

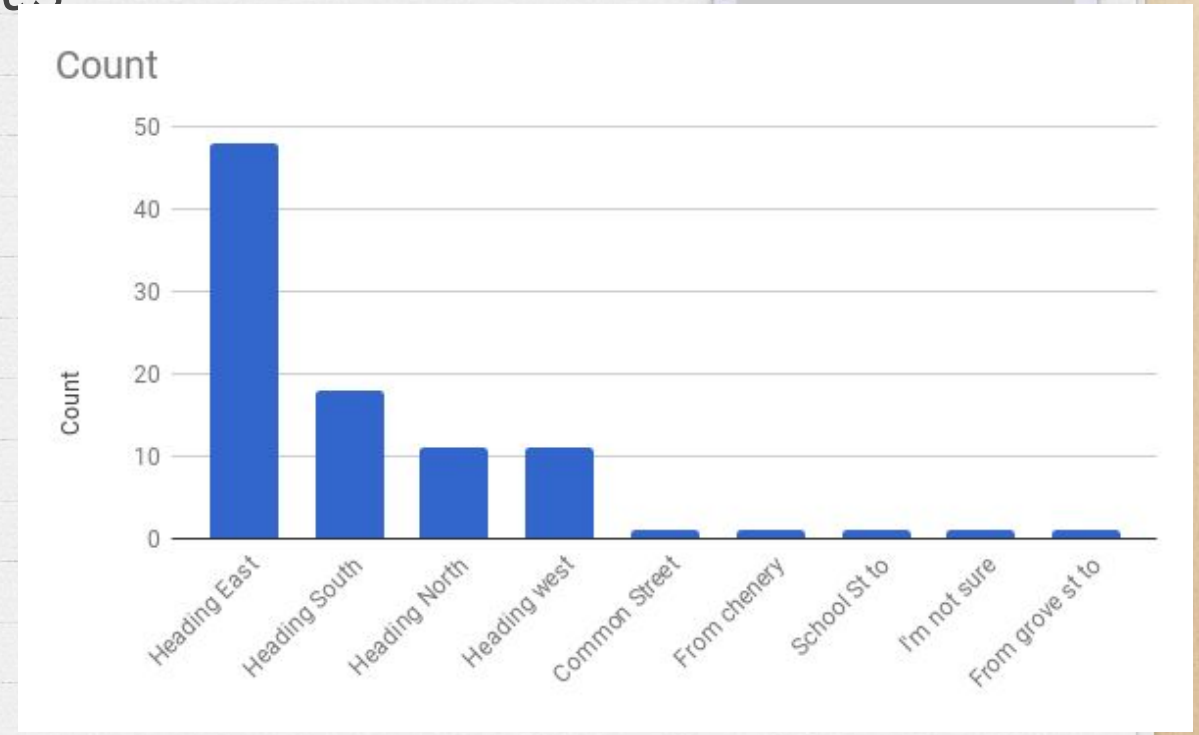
Before 7:00: 31

7:40-8:00: 13

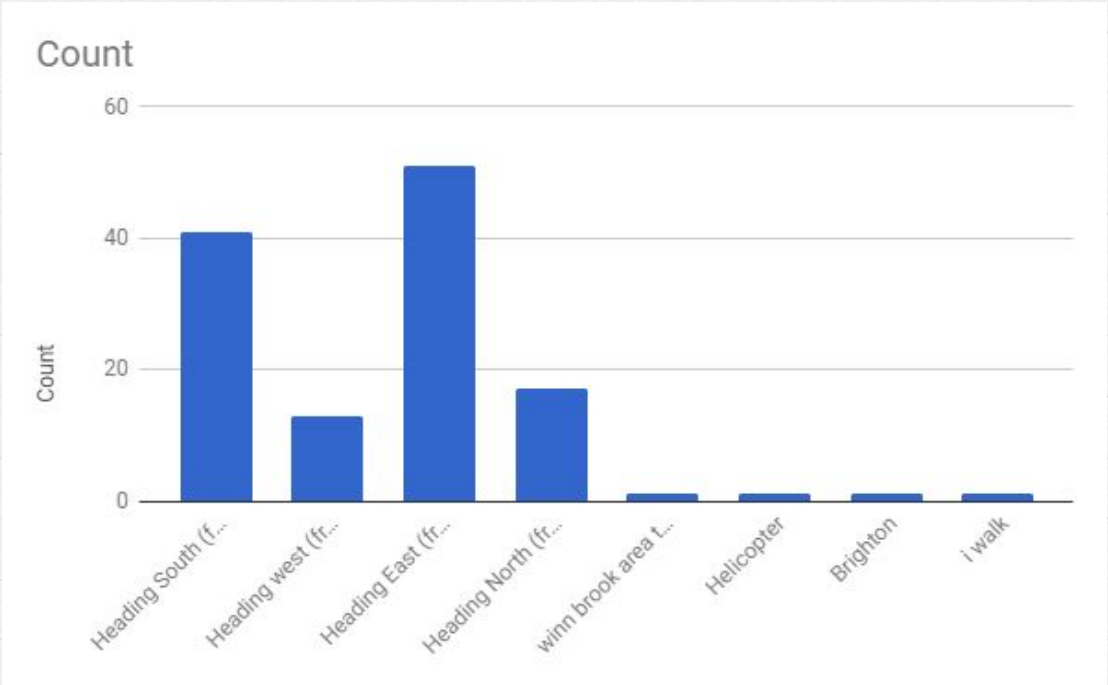
Traffic Survey Analysis - Student

7-7:20 Students

Biked: 20
Carpool: 17
Drive alone: 37
Drop-off: 38
School bus: 26
Walk: 13



7:20-7:40


Count
60
40
20
0
Count
Heading South (f...
Heading west (fr...
Heading East (fr...
Heading North (fr...
winn brook area t...
Helicopter
Brighton
i walk

Findings

From 7-7:20, the greatest amount of students were dropped off with driving alone as a close second. The least amount of students walked. From 7:20-7:40, the most students were dropped off (even more than earlier) and the least amount of students biked, while more students walked.

Thoughts Based On Student Data

Questions to address/Information needed:

- ✗ Find out the grade levels of the students who responded
- ✗ Did providing students with answers to the "improvements" hinder they way they would have otherwise approached it?
- ✗ Weeded out the "traffic does not affect me" students through ending quiz once answered

Potential Ideas:

- ✗ Incentivization- create a contract like for sports and independent studies (seasonal, yearly, etc.)
- ✗ Designated parking areas for after-school students and immediately leaving (or by grade)
- ✗ More bike racks

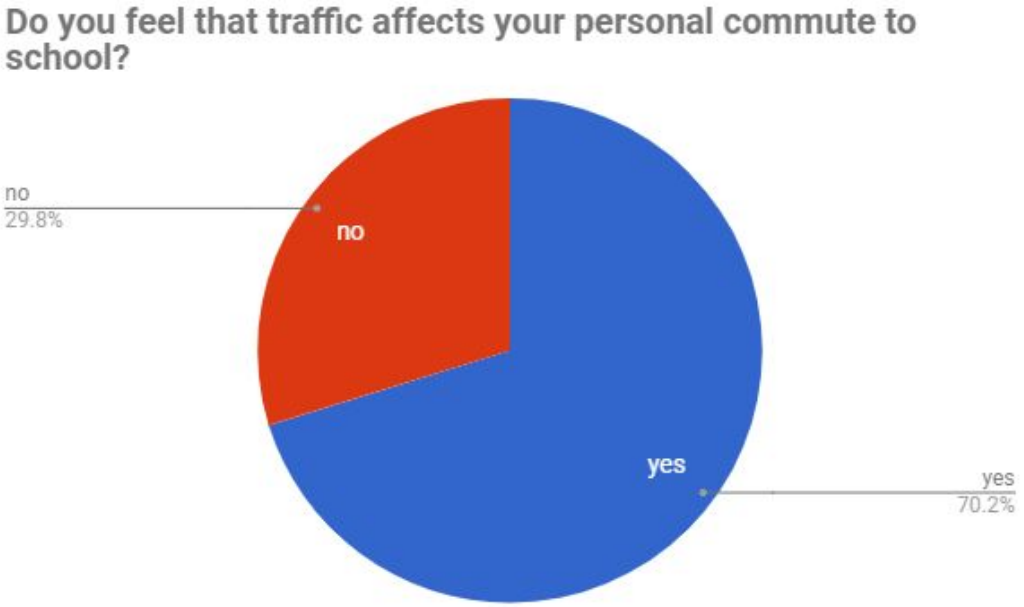
Teachers

Traffic Survey

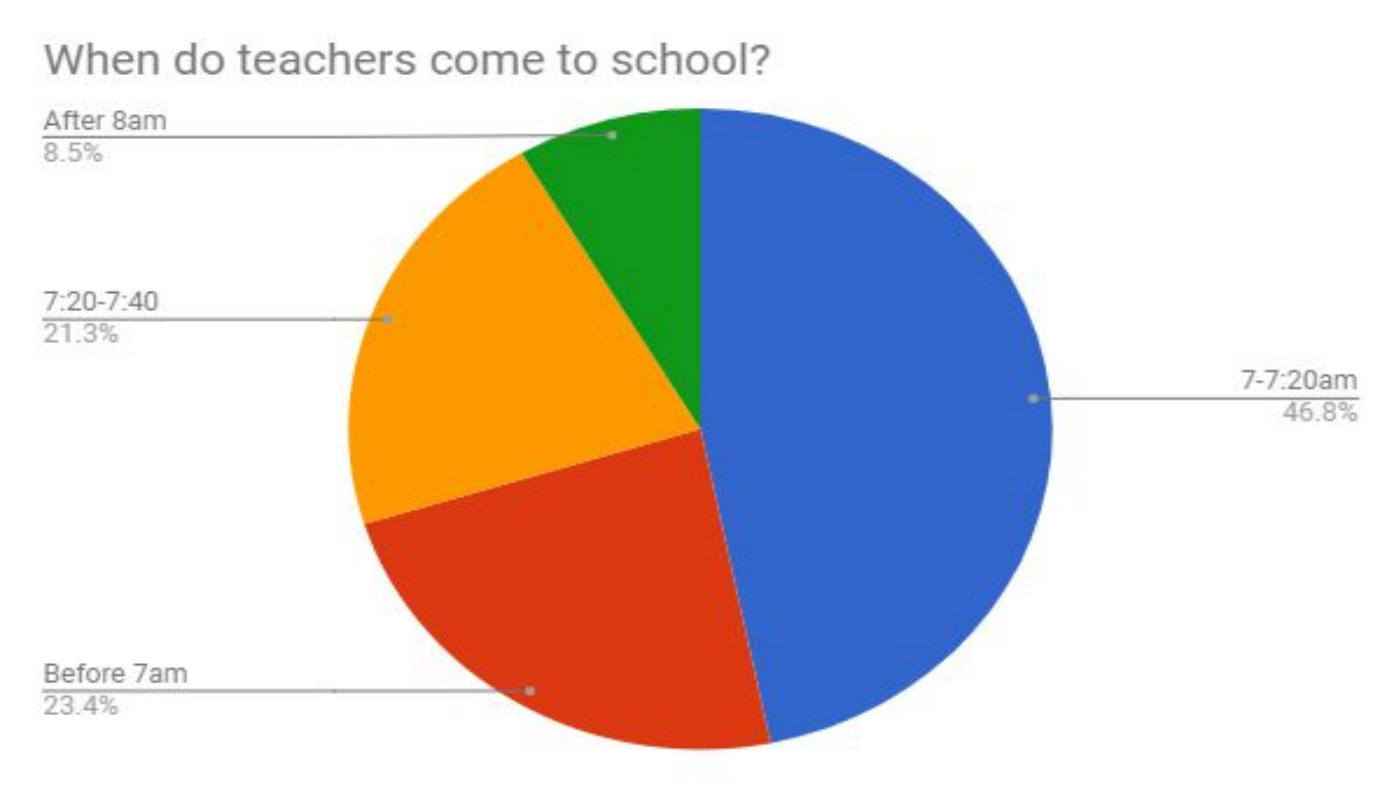
Faculty and staff refers to non-classroom teachers

No- 29.8%

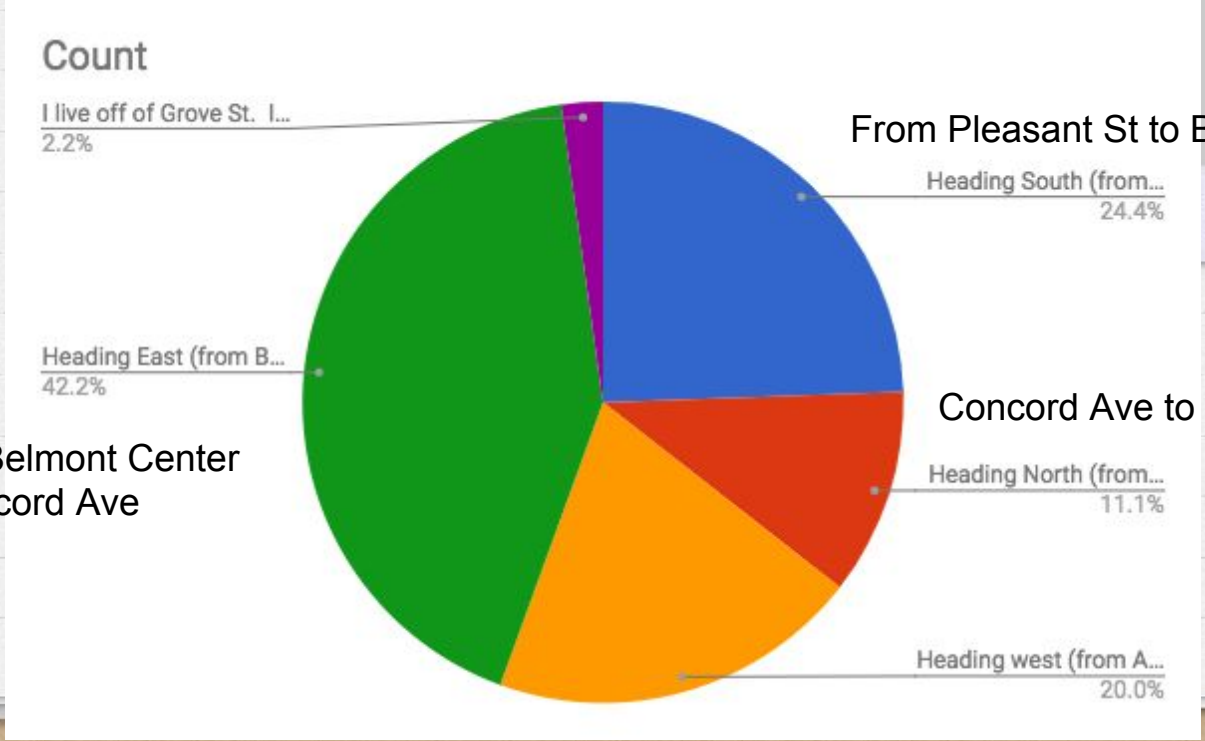
Yes- 70.2%



When do Teachers come to school?



From what direction do teachers come?



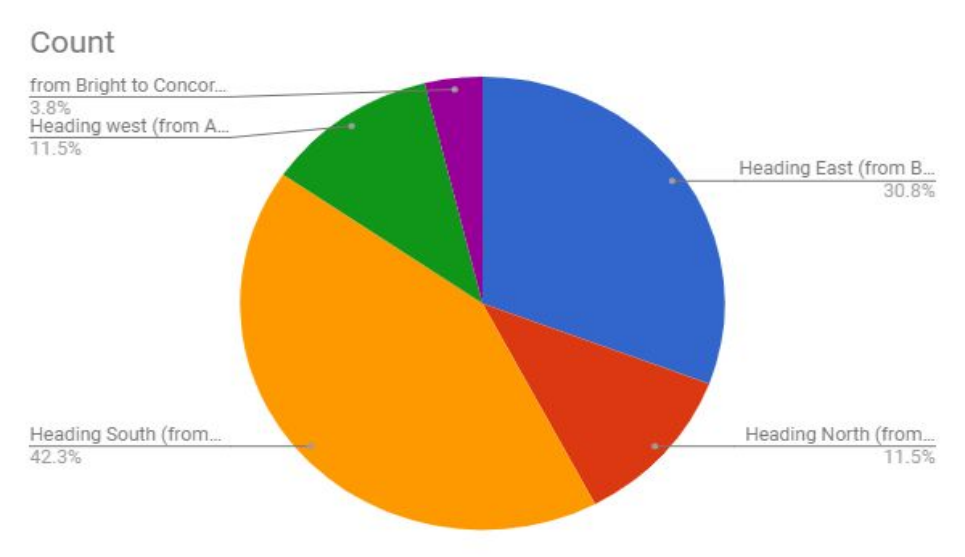
From Belmont Center to Concord Ave

From Pleasant St to Brighton St

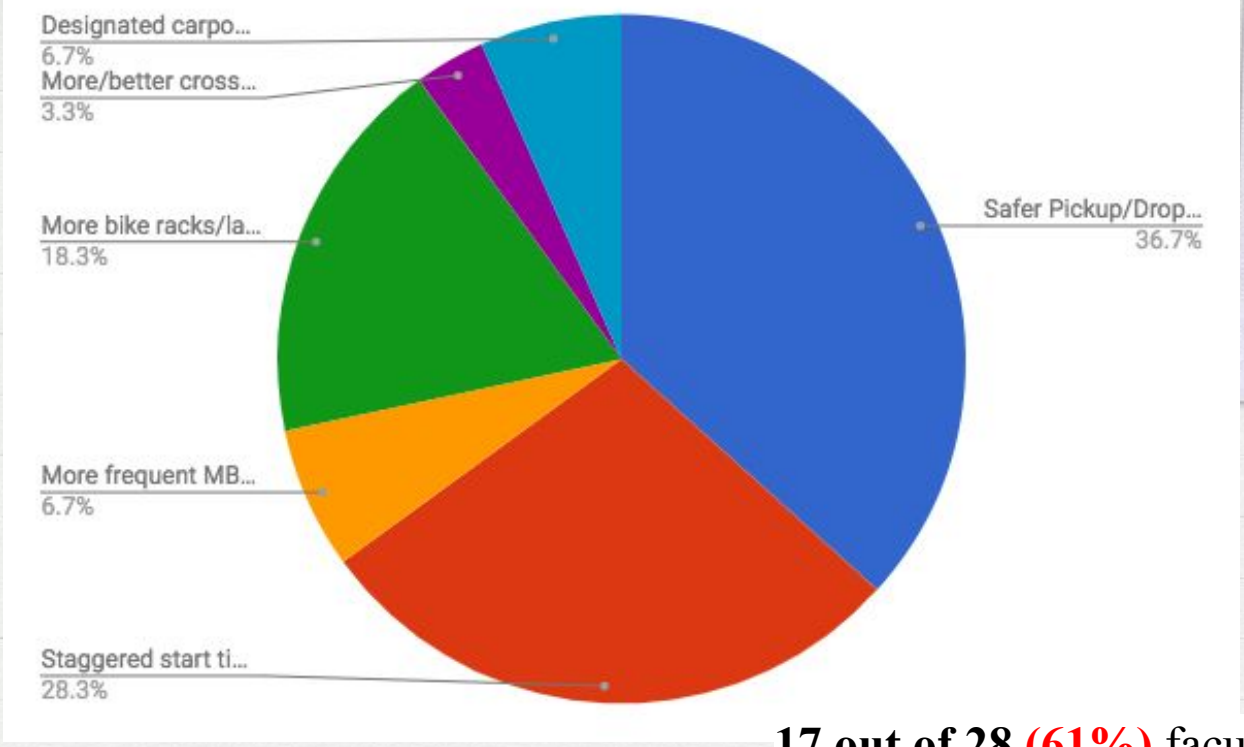
Concord Ave to Brighton St

Alewife to Concord Ave

Where are Faculty and Staff coming from?

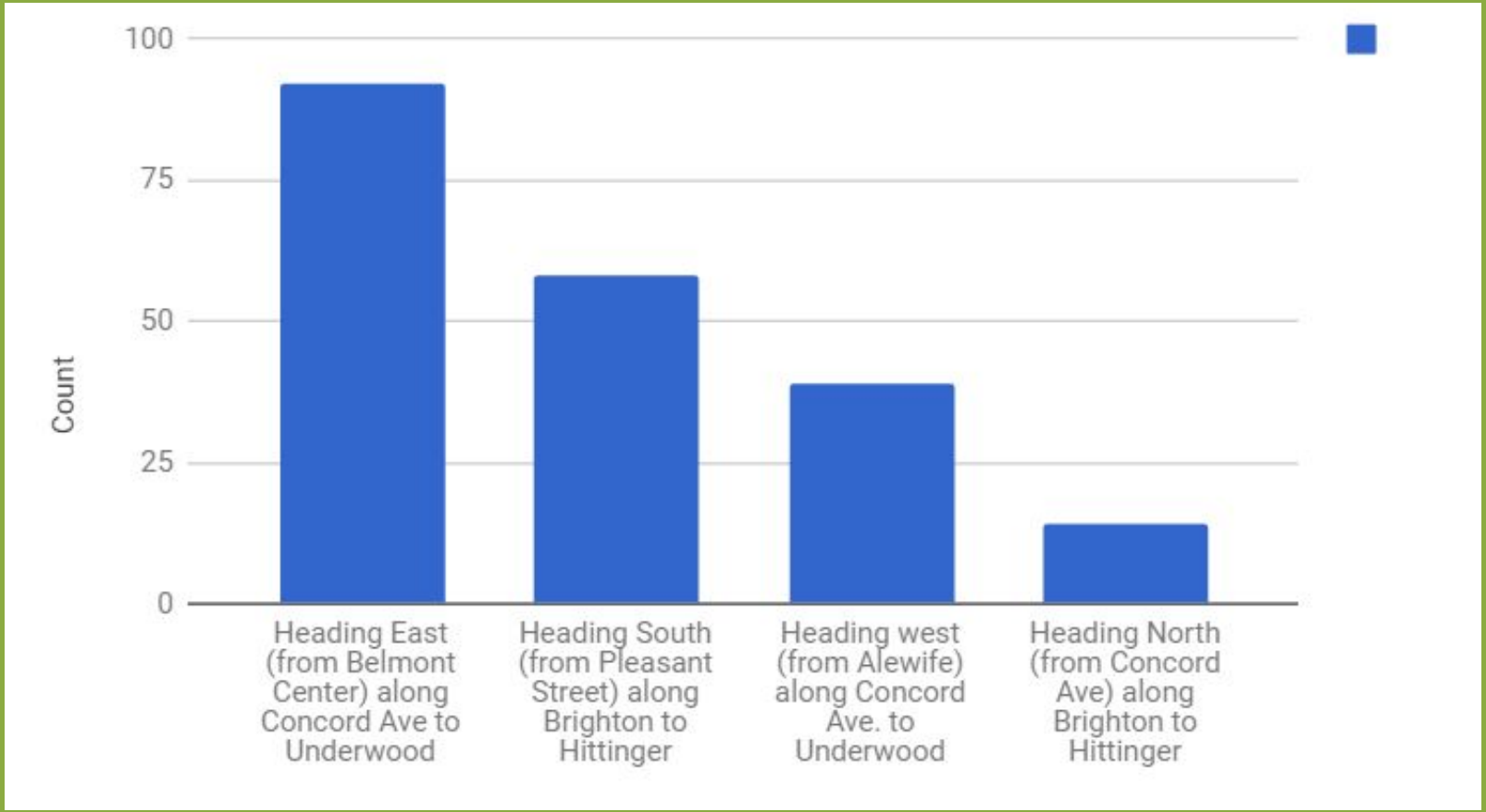


What improvements do teachers want?

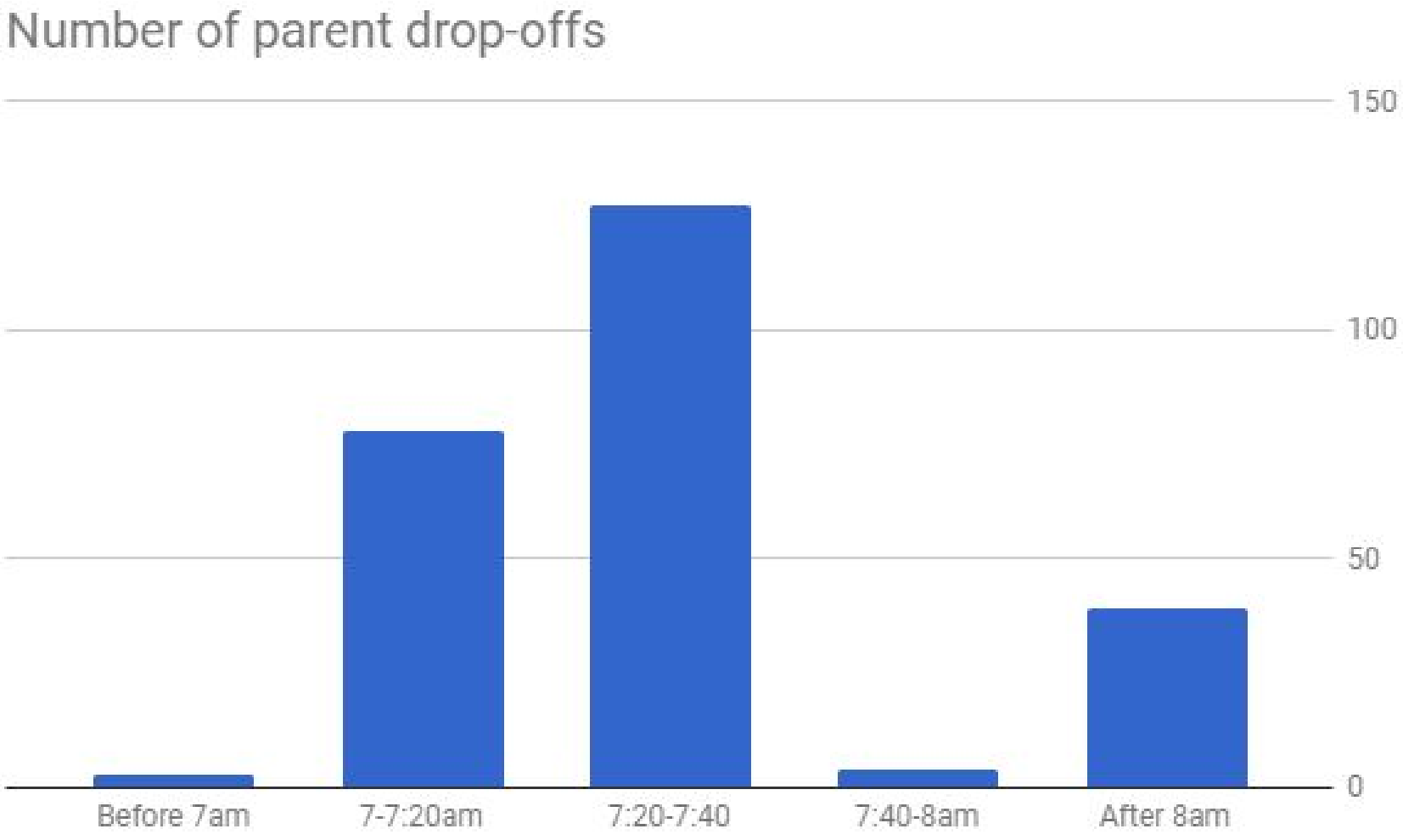


17 out of 28 (61%) faculty and staff members would think traffic would be eased by increased parking and safer pick up/drop off points

Overview of Parents' Data



# of Responses: 251


Number of parent drop-offs
150
100
50
0
Before 7am
7-7:20am
7:20-7:40
7:40-8am
After 8am

Suggestions from Parents

1. Biking Culture
2. Better Bike Facilities
    a. Lanes, racks, incentives
3. Staggered start times
4. Satellite drop-off areas

Errors

- Some answered for their student, so we have responses like "walk" and "bike" to school from parents,
- "Carpool" → who many?

→ so not all counts are accurate

Suggestions

Most popular:

-Staggered start times -374

-Safer pickup/drop-off zone-215

-More parking-191

-More/better crosswalks/sidewalks-186

How We Intend To Solve This

Incentivize

Needs to be ***REWARD*** bases

- **Sports credits**
- Gift Cards
- Homework Passes

Studies show that incentive-based school programs have a ***16% increase of activity***

Involve The Community

Communities and Perspectives

83% of Belmont residents (~25,000 total) and 80% of Arlington residents (~43,000 total) drive cars as a means of transportation

Just over 75% of Arlington commuters drive 30 minutes or under

- The places that are 30 minutes and under to travel to are usually more easily accessible through Belmont

School community (faculty/staff, students, etc.)