



SNAP DECISIONS

Management Lessons Learned from Legos

Steven J. Miller (sjm1@williams.edu), Williams College
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Math 12: The Mathematics of LEGO Bricks



http://web.williams.edu/Mathematics/sjmiller/public_html/legos/

JOBBS for The Superstar Build

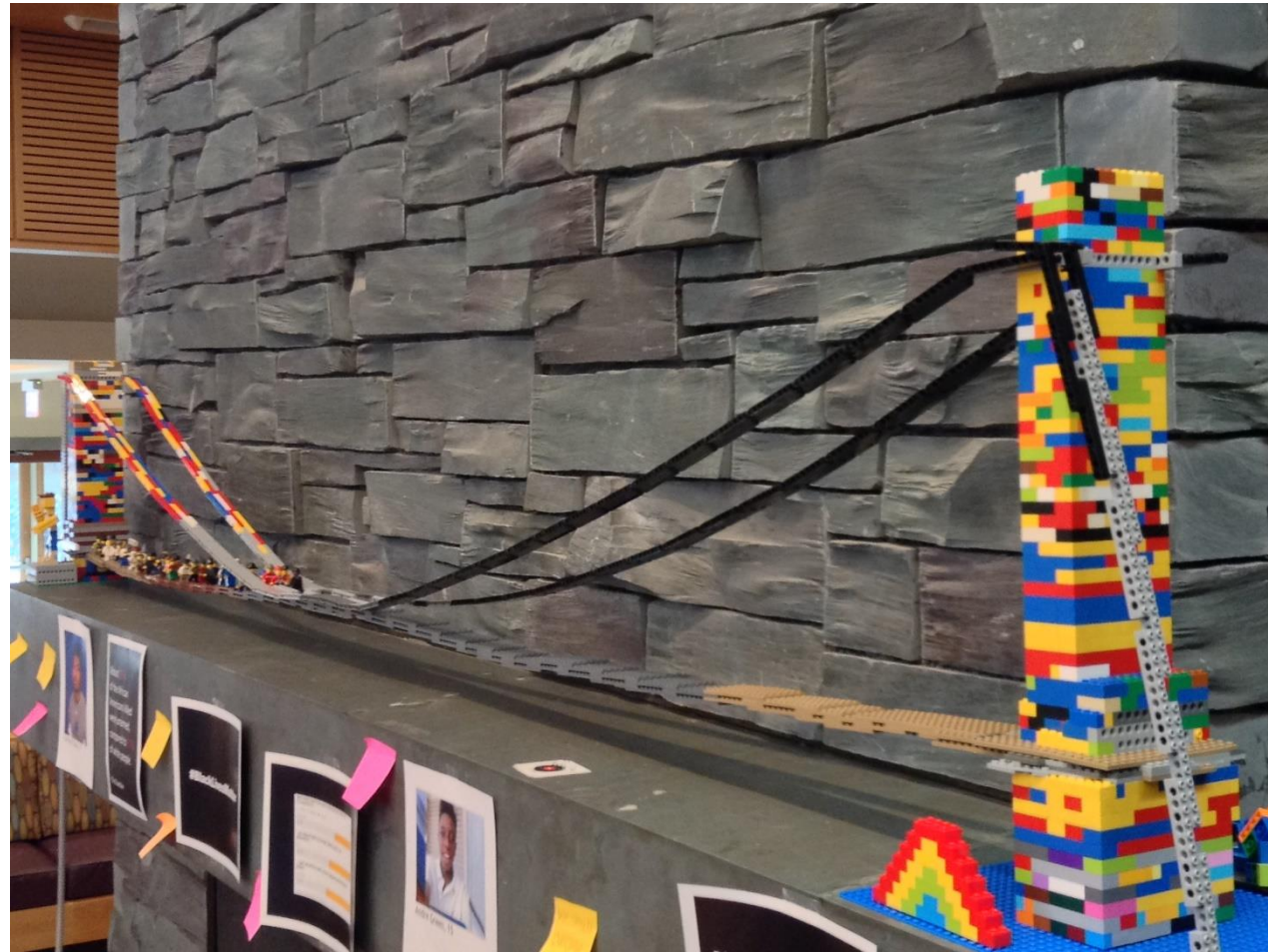
- 1 second in command (then next year 4)
- 7 Bag Captains
- 7 Assistant Bag Captains
- 7 Sorters
- 7 Strategists
- 1 Publicist
- N-30 or N-32 Builders
- Motivation for jobs:
 - <https://www.youtube.com/watch?v=O1E6To440TA>
 - <https://www.youtube.com/watch?v=s9t0AHNofgk>
 - **Instructions:**
http://web.williams.edu/Mathematics/sjmillier/public_html/legos/6005794.pdf





Time lapse video: <https://www.youtube.com/watch?v=lpSjAYVZFBs&feature=youtu.be>

First Bridge: 2016



First Bridge: 2016



Second Bridge: 2017



Third Bridge: 2018



Third Bridge: 2018



From LEGO Bricks to Math



From LEGO Bricks to Math



560 pieces for \$120, or 21 cents per piece (cpp).

From LEGO Bricks to Math



292 pieces for \$65, or 22 cents per piece (cpp).

Cost per piece



2015 class: Superstar Destroyer:
Initially \$400 for 3152 pieces (now about \$1000).
Cost per piece of 13cpp to 32cents.



London Bridge: \$240 for 4295 pieces
Cost per piece of **5.6** cents!