

Pick-up, Drop-off

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Abstract

Schools have a designated area for students to be dropped off and picked up at a scheduled time. These pick-up lines sometimes do not operate smoothly and can cause the line to back up, slow down, or even block traffic. Most of these pick-up lines rely on the outdated walkie-talkie and an intercom system to communicate to the students when they get picked up. With the use of new technology, the old walkie-talkie and intercom system can be replaced. Administration can utilize an online check-in system to know when a car has arrived, which student needs to be picked up, and where in line their ride is. This would allow for a more efficient system that could help with traffic issues.

Objectives

- Determine the root cause of the slow down
- Evaluate the current system
 - Process map to illustrate the current system
 - 5 Why's to determine the root cause
- Determine possible solutions to reduce slowdowns

Procedure

- Collect data on the pick-up and drop-off line
 - Determine if there is a slowdown in both processes or just one
- Use Lean tools to find the root cause
 - Process maps to understand the process and 5 Why's to determine the root cause
- Analyze the current line
 - Look to see if there can be improvements

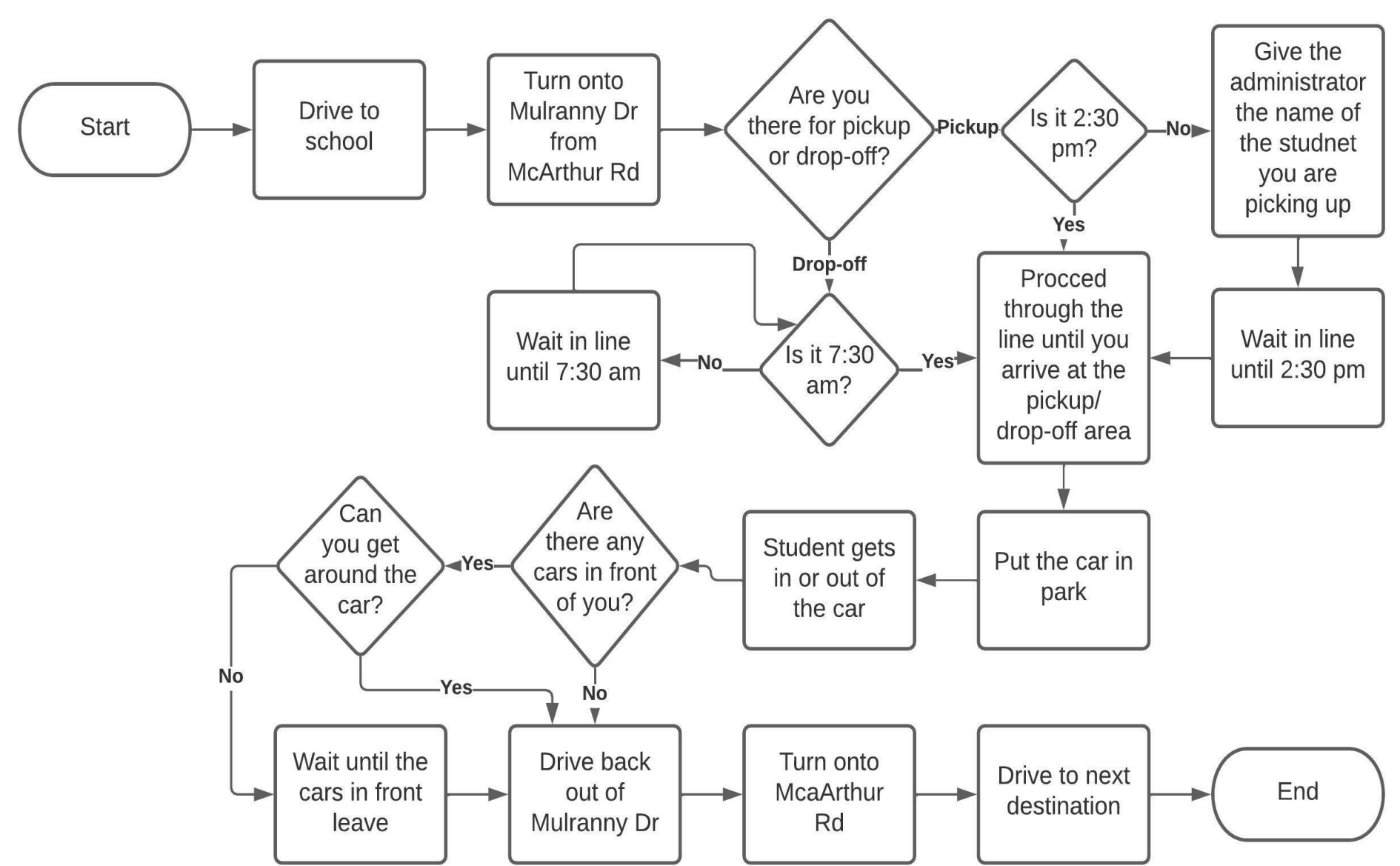
Constraints

- Release times
- Waiting times
- Space for multiple lanes

Intended Changes

- Curb Smart
- Utilize a crossing guard
- Add a second exit

Process Map



Results/Data

	Cars sent by 2:35 pm	Cars sent by 2:40 pm	Cars sent by 2:45 pm	Cars sent by 2:50 pm	# of slow downs
Avg.	11	25.75	45	55.25	2
5 min. splits	11	14	19.25	10.25	

Conclusions

Using new technology like curb smart and better routing systems will allow a faster and more efficient pick-up and drop-off system. Utilizing a crossing guard can help maintain the flow of traffic and solving any issues the drivers have. These few additions for the pick-up and drop-off system will provide a safer and faster process for the school.