Queuing Challenges at Charter Schools

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“Ah-Ha’s” for Cities to Understand

→ ITE Trip Generation Rates for Charter Schools not published.

→ Charter Schools typically draw student population from a larger geographical area than “public neighborhood schools”.

→ Results of a Traffic Impact Study (“LOS C”) do not necessarily address the Queuing conditions that may occur during pick-up operations for a school (Charter, Public or Private).

→ Traffic Management Plan and Review are recommended.

→ Peak Queuing Conditions (Linear length) for Initial year(s) with “X” # Students do not necessarily correlate to 2 times Peak Queuing Length with 2X # students.

→ Characteristics for each school are unique.
Elementary School Vehicle Accumulation
Opening Year: Grades K, 1 and 2 - 280 Students

![Graph showing vehicle accumulation over time for different lines and outside gate.](image-url)
OBSERVED QUEUING CONDITIONS - ELEMENTARY

Day 1
1900 Linear Feet

Day 2
2570 Linear Feet
OBSERVED QUEUING CONDITIONS - SECONDARY SCHOOL

2560 Linear Feet
815 Students
+ “Renegade” parking
Queueing Profile: K-12 School with 2 Dismissals

- Total Queued and Parked Vehicles
- Time of Day

Elementary
Secondary

Graph showing the number of vehicles queued and parked at different times of day for elementary and secondary schools.
CONTRIBUTING FACTORS TO LENGTHIER QUEUES

→ Students drawn from larger geographical area
  • Limits walking and biking to school
  • Typically less opportunity for school bussing
  • Less Carpooling

→ Initial Years of Operation
  • Fewer grade levels = greater # of one student per family
  • Staff, parents and students are ALL learning a system
  • Families don’t know each other to form carpools

→ After School Sports Programs and Activities?
  • Yes……Yields distribution of pick-ups, reduction in peak period
  • Yes……Families meet, form friendships, form carpools

→ Parents arriving EARLY to campus
Plan not always followed
  • Fewer pick-up areas than planned
  • Not enough staff members

Slow Loading/Unloading
  • Staff not trained/instructed on best practices for efficient/safe/quick loading/unloading
  • Younger students do not know their “Carpool Number”
  • Staff/Administration on Duty not always assisting
→ Delay in Dismissal: Couple of minutes yields additional vehicles arriving joining queue
→ Staggered Dismissal Times?
→ Renegade Pick ups (Students walk out of campus and meet parents down the block)
  • Pedestrian activity slows down “organized operations”
  • Parents parked within neighborhood – issues with neighbors
→ Fewer High School students driving vehicle to school
LESSONS LEARNED

- School must have a Traffic Management Plan (Carpool Circulation Route, Access Points, Designated Pick-Up Areas and Procedures) and **COMMUNICATE** it to:
  - Parents
  - Students
  - Staff
  - Administration
  - Volunteers
  - Security
LESSONS LEARNED

→ Peak queueing ratio (length per student) during opening years is higher than at established schools

→ You can double stack through a parking lot!

→ Neighbors who do not have children in the school are very vocal (even if they are creating similar situations in another neighborhood area…!)
RECOMMENDATIONS FOR CITIES

» Require Schools to prepare and submit TMP
» Realize that no 2 schools will operate the same
» Provide Resources and Potentially Training for Loading/Unloading Best Practices
» Be patient at the start of the school year – allow the school to work out any kinks in the system and react with modifications
» Realize (quoting from yesterday’s presentation by Lloyd Neal)
  • “The Best Ideas Require Trade Offs”
» Remember - you can’t please EVERYONE!!
QUESTIONS?
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