

# **Background**

The Miami-Dade Metropolitan Planning Organization (MPO) commissioned a study of Miami-Dade public schools, since numerous schools throughout the county are experiencing substantial to heavy congestion during student arrival and departure periods.

Vehicles with students often encroach upon the travel lanes on streets surrounding the schools. While high schools are particularly prone to these problems because many students drive to school in their own single occupant vehicles (SOVs), middle and elementary schools exhibit similar problems due to significant numbers of drivers arriving for drop-offs/pick-ups of non-driving students.

Many of Miami-Dade schools access/egress roadways are major arterials, and rush hour traffic; already constrained by normal congestion; is further delayed as vehicles slow and/or queue to enter/exit school campuses. Many of these sites are

characterized not only by deficiencies in transportation access and egress conditions, but by safety deficiencies and concerns as well. These safety concerns stem from highly localized levels of congestion, drivers' reactions to the congestion, and the inherently high exposure of student pedestrians and bicycle riders to roadway traffic in school vicinities

Changes in access routes, modifying ways of accessing the facilities, reconsidering parking provisions, assessing locations of standing and drop-off queues, and considering alternatives to SOVs can provide avenues of congestion relief and improved safety.

# **Objective**

Identify alternatives for improving transportation operations and design, accessibility, and traffic flow in areas at and around local public schools.

### **Test Schools**

A Study Advisory Committee (SAC) was established at the beginning of the study to establish the overall efforts of this study, review work products and discuss findings The SAC was and recommendations. comprised of representatives from the agencies: Miami-Dade following Metropolitan Planning Organization (MPO), Miami-Dade County Public Schools (MDCPS), and Miami-Dade Public Works Department (MDPWD).

A list of nine focus schools was compiled where school-related congestion presents a significant problem. In developing this list, consideration was given to various types of grade level schools throughout diverse geographical areas of the county. All nine focus school were observed during the morning arrival and afternoon departure times to identify existing problems with traffic circulation.

While all advisory committee members suggested sites and contributed to arriving

schools, the School Board representatives led the way in recommending appropriate sites for in-depth consideration called "test schools." In developing this revised list, consideration was given to various types of schools serving different grade levels as well as the geographical distribution of the candidates throughout the county. schools were selected for review in this study: G. Holmes Braddock High School (located in the southwest portion of the county), Lawton Chiles Middle School (located in the northwest portion of the county), and W. J. Bryan Elementary School (near the central-eastern portion of the county).

Field observations were completed for each test school during the morning arrival and afternoon dismissal hours. This observations were used to determine were further in-depth data collections were to take place. Data collection at all three test schools included turning movement counts, pedestrian counts, and queue length studies.

Exhibit 1 depicts the existing conditions for all three schools.

Exhibit 1
Existing Conditions

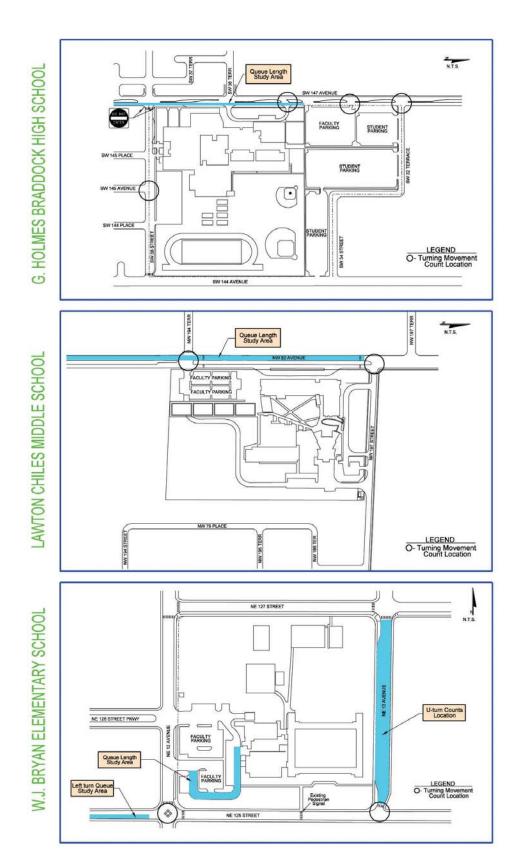
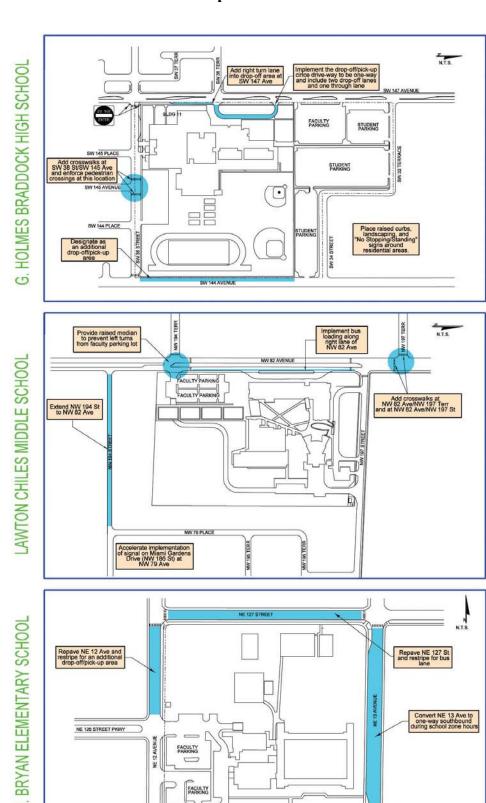


Exhibit 2
Proposed Conditions



Existing Pedestrian Signal

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## Recommendations

After completing observations and with the help and input from the SAC, solutions were developed for each test school. The following recommended improvements should help to alleviate the congestion and circulation problems within the adjacent areas. Exhibit 2 shows these improvements.

### G. Holmes Braddock High School

- Redesign the drop-off/pick-up circle along SW 147 Avenue to make it one-way and include two drop-off lanes and one through lane (three dropoff/pick-up one-way lanes total)
- Implement a controlled left-turn median opening at the exit of the drop-off/pick-up circle.
- Add right turn lane into the drop-off area at SW 147 Avenue.
- Have a safety officer or police officer control the left turns and U-turns along SW 147 Avenue near the drop-off/pick-up circle exit and faculty parking lot access.
- Add crosswalk at the intersection of SW 38 Street / SW 145 Avenue and enforce pedestrian crossings at this location.
- Place raised curbs, landscaping, and "No Stopping/Standing" signs around the residential areas.
- Enforce the "Do Not Enter" from SW 147 Avenue to eastbound SW 38 Street.
- Designate SW 144 Avenue as an additional drop-off/pick-up area.

• Enact a "Fleet Management System" for the buses to keep a constant flow with less congestion and prevent empty buses from sitting idle for longer than necessary.

#### **Lawton Chiles Middle School**

- Provide a raised median to prevent left turns from the faculty parking lot.
- Add crosswalks at the NW 82 Avenue/NW 197
  Terrace and NW 82 Avenue/NW 197 Street
  intersections.
- Extend NW 194 Street to NW 82 Avenue. Coordination with the Park Department will be required as the parcel on the south side of the school property is not yet developed.
- Accelerate implementation of the signal on Miami Gardens Drive (NW 186 Street) at NW 79 Avenue.
- Designate NW 197 Street and north circle driveway for bus loading. Have the right lane of NW 82 Avenue designated for student pick-up without queuing the left lane. This will leave the left lane as a through lane to NW 197 Street.
- Additional signage will be required in the area to inform drivers that the right lane will be a dropping-off/picking-up students during school hours.

### W. J. Bryan Elementary School

- Re-pave NE 12 Avenue and re-stripe for an additional drop-off/pick-up area
- Re-pave NE 127 Street and re-stripe for a bus lane.
- Convert NE 13 Avenue to one-way southbound during school hours.

## **Transferable Solutions**

General traffic control and congestion mitigation techniques applicable to a number of various school zones directly resulting from or suggested by work performed for the test schools aided in the development of transferable solutions. As a general rule, county-wide design criteria should be developed and consistently applied to all new schools. Areas to be analyzed for individual schools are bus drop-off/pick-up, parking, loading, flow These pedestrian general recommendations are as follows:

- Develop a set of guidelines, checklists and design concepts/details addressing school vehicular, pedestrian bicycle access and circulation.
- Always designate speed zones near all schools or all facilities except expressways.
- Install Flashing Beacons and signs at all speed zones.
- Avoid transit stops, newspaper vending boxes, mailboxes, or on-street parking between dropoff zone entrance and exit points along the school frontage.
- Pedestrian/Vehicles conflicts should be minimized.

- School buses and vehicles droppingoff/picking-up students should have separate, clearly designated drop-off aisles.
- School buses and vehicles droppingoff/picking-up students should use designated drop-off aisles that are adjacent to the school building and make minimal on-site turning movements.
- School buses and vehicles droppingoff/picking-up students should not be required to back a vehicle anywhere in school property.
- Drop-off areas on the school ground should be one-way in a counterclockwise direction.
- Restrict turning movements during school beginning/ending periods to reduce congestion/conflicts.
- Install truck exclusion signs around school area.
- Use Adult Crossing Guard/Safety Officer at intersections near school where there is sizable traffic volume.
- There should be standard and well-maintained sidewalks leading to school.
- Update "Safe Route to School" program for elementary schools.
- Monitor schools throughout the year to observe ongoing traffic and circulation problems.
- Recommend that schools provide traffic safety education to all students each year through their local police department.
- Support "Walk to School Day" and other events that encourage alternatives to auto use.

