Orange County Public Schools

WINNER

the broad prize for urban education

Traffic Considerations – COVE Committee
October 15, 2015

Typical Task Assignments (Starting 2014)

- **Evaluate Existing Schools**
  - Traffic Counts at Existing Driveways / Site Visual Reviews
  - Traffic Analysis / Comparison
  - Adjacent Street LOS (If required – may lead to off-site analysis)
  - Recommendations for Site Improvements
- **Capital Renewal/Comprehensive/Replacement Schools**
  - Traffic Counts at Existing Driveways / Site Visual Reviews
  - Traffic Analysis / Trip Generation / Comparison
  - Adjacent Street LOS (If required – may lead to off-site analysis)
  - Recommendations for Site Plan Development
- **New Schools**
  - Traffic Counts on Adjacent Streets
  - Trip Generation / Trip Assignment to Adjacent Streets
  - Adjacent Street LOS
  - Off-site Improvement Analysis

Schools Evaluated to Date

- Elementary Schools
  - Lake Weston (Comprehensive)
  - Audubon Park (Existing)
  - Avalon Park (Existing)
  - Lockhart (Comprehensive)
  - Millenia (New)
  - Tangelo Park (Comprehensive)
  - Dream Lake (Replacement)
  - Riverside (Replacement)
- Middle Schools
  - Liberty (Capital Renewal)
  - Avalon (New)
  - Carver (Comprehensive)
  - Maitland (Existing)

Trip Data Summary

- Trip Generation ES (AM School and Road Peak)
  - Range 36% - 104% of Student Population
  - Average = 65% of Student Population (55% enter, 45% exit)
  - ITE Code (national standard) = 45% of Student Population
- Trip Generation MS (PM School and Road Peak)
  - Range 17% - 45% of Student Population
  - Average = 29% of Student Population (45% enter, 55% exit)
  - ITE Code = 30% of Student Population
- Trip Generation MS (AM School Peak)
  - Range 21% - 58% of Student Population
  - Average = 43% of Student Population
  - ITE Code = 54% of Student Population

Stacking / Queue Analysis

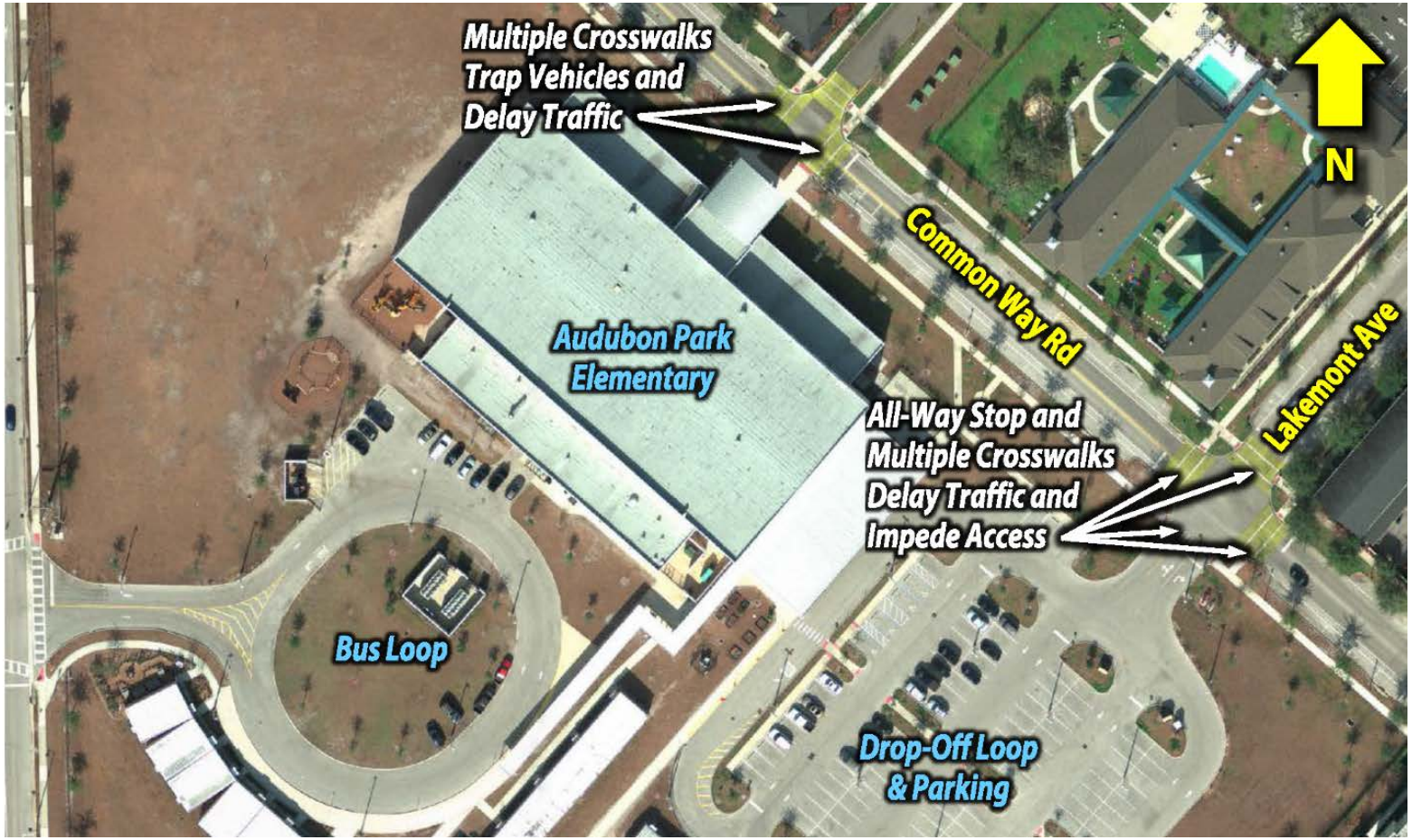
- Visual Estimates
  - AM Queue closely corresponds to 15 minute peak traffic counts
  - 15 minute Peak ranges 30-50% of Peak Entrance Hour Traffic
  - Based on Peak Hour Trips (previous slide)
    - ES Queue = 10 – 18% of Student Population
    - MS Queue = 7 – 12% of Student Population
- Range Demonstrates Varying Character of Schools
  - Queues on existing schools should be based on counts
  - Queues on new schools should be based on similar or close proximity schools.

Issues Observed

- Offsite
  - Roadways without adequate capacity
  - Intersections not adequate (turn lane lengths)
  - Pedestrian access conflicting with traffic
  - Drop-off in neighborhoods
- Onsite
  - Inadequate Stacking (not often)
  - Queue operations (double stacking?)
  - Pedestrian Crossing conflicting with traffic
  - Exit traffic stopped by entrance traffic

Sample – Avalon ES

Sample – Audubon ES



Sample – Dommerich ES