

Lake County Schools



Will Davis, GISP
Lake County Schools

Tampa Bay GIS Group
Monday, November 9th, 2015



The Big Yellow Bus





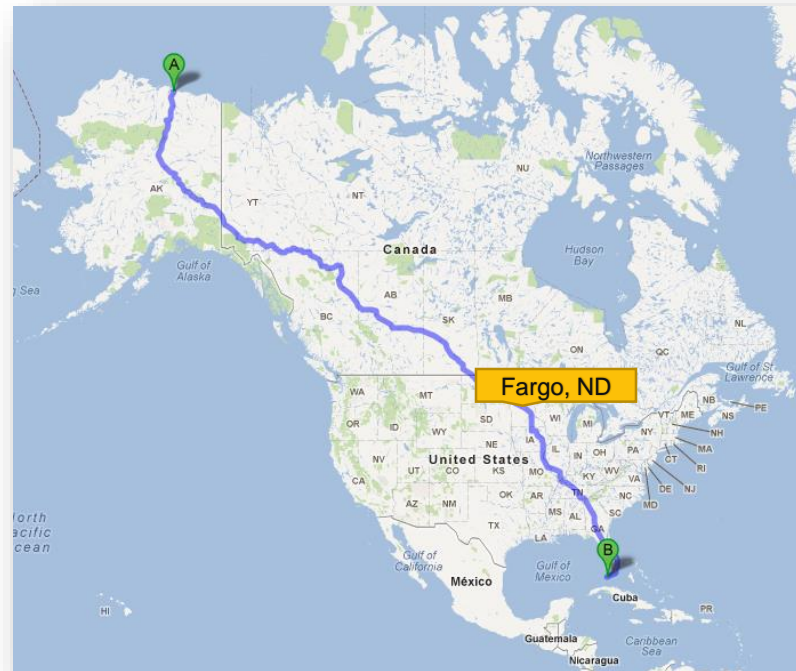
Background

±250 Buses in Regular Service
Transporting 20,762 Students
Twice Daily
30,658 Miles



Background

Key West, FL to Deadhorse, AK
Distance of 5,489 -- 3 Days 23 Hours (w.o.t.)
30,658 Miles = 2.6 Round Trips
6.2 mpg = 4,950 gallons/day

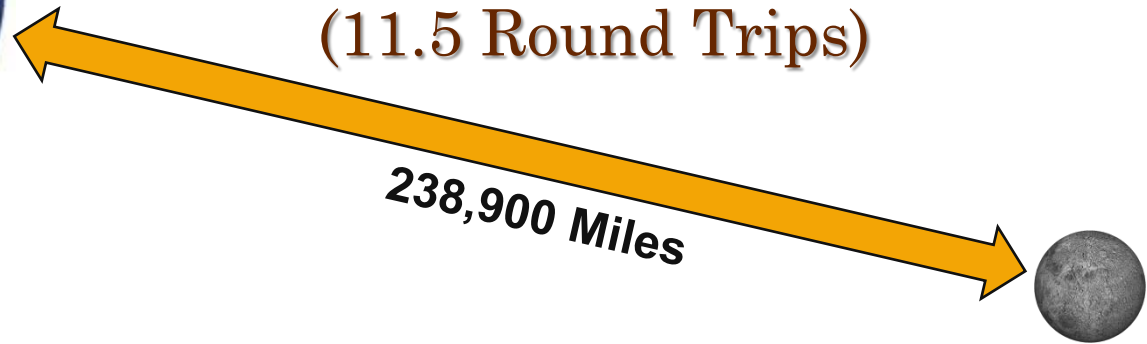




Background



Annual Distance Traveled
5,518,481 Miles
(11.5 Round Trips)





Background

- Revenue/Expenditure Shortfall
 - Expenditures = \$16 million
 - Cost to district = \$8.2 million
 - State reimbursement = \$7.8 million
- State vs. local = 51% vs. 49%
- \$1.26 million for 11 buses



Background

- Statutory obligation to transport students
 - 6A-3 F.A.C.
 - 1006.21 F.S. to 1006.27 F.S.
- 8.30 to 8.39 School Board Policy
- Historical transportation of all students
- Started detailed 2-mile assessments (May 2008)
- Board Workshops (March 2009)
- Creation of PRZ for High Schools (July 2009)
- Submitted hazardous conditions (September 2009)



Background

- Completed 2-mile walk analysis (April 2009)
- Walkable infrastructure assessment (August 2011)
- PRZ's for Elementary & Middle Schools (June 2013)
- Locally hazardous conditions (October 2013)
- Adopt 1-mile PRZ's for Elementary (July 2015)
- Community partners
 - MPO
 - LCBCC
 - Cities
 - Safety Committees -- BPAC & CTST



Routes Designations

- Easily Walkable Zones (EWZ)
 - Areas depicted in **GREEN**
- Hazardous Walking Routes (HWR)
 - Areas depicted in **RED**
- Special Exception Areas (SEA/ST)
 - Areas depicted in **GOLD (Short-Term)**
- Special Exception Areas (SEA/LT)
 - Areas depicted in **PURPLE (Long-Term)**



Phase 1 Review

Web Hazardous Mapping Application - Windows Internet Explorer

http://www.lgmapserver.com/hazardous/

File Edit View Favorites Tools Help

ESRI Training >>> Speakeasy Speed Test RushLimbaugh.com Home Suggested Sites Get More Add-ons

ArcGIS Desktop Help 9.3... mass transit - Google Se... Web Hazardous Map... Process Synonyms | Syn...

Web Hazardous Mapping Application

Help

Results

Map Contents

- Hazardous
 - Hazardous Walking Areas
 - Crosswalks
 - Total Crash Data
 - Total Bicycle Related
 - Total Pedestrian Related
 - Total Number of Crashes
 - FDOT Traffic Count Station
 - Lake County Traffic Count
 - Elementary School Location
 - Lidar - Topo Data
 - FDOT Road Segments
 - Lake County Boundary
 - Corporate Boundary
 - Streets
 - Parcels
 - Lakes
 - Lake County Boundary
 - Corporate Boundary (Shaded)
 - Elementary Schools 2 Miles

JOHNS LAKE RD

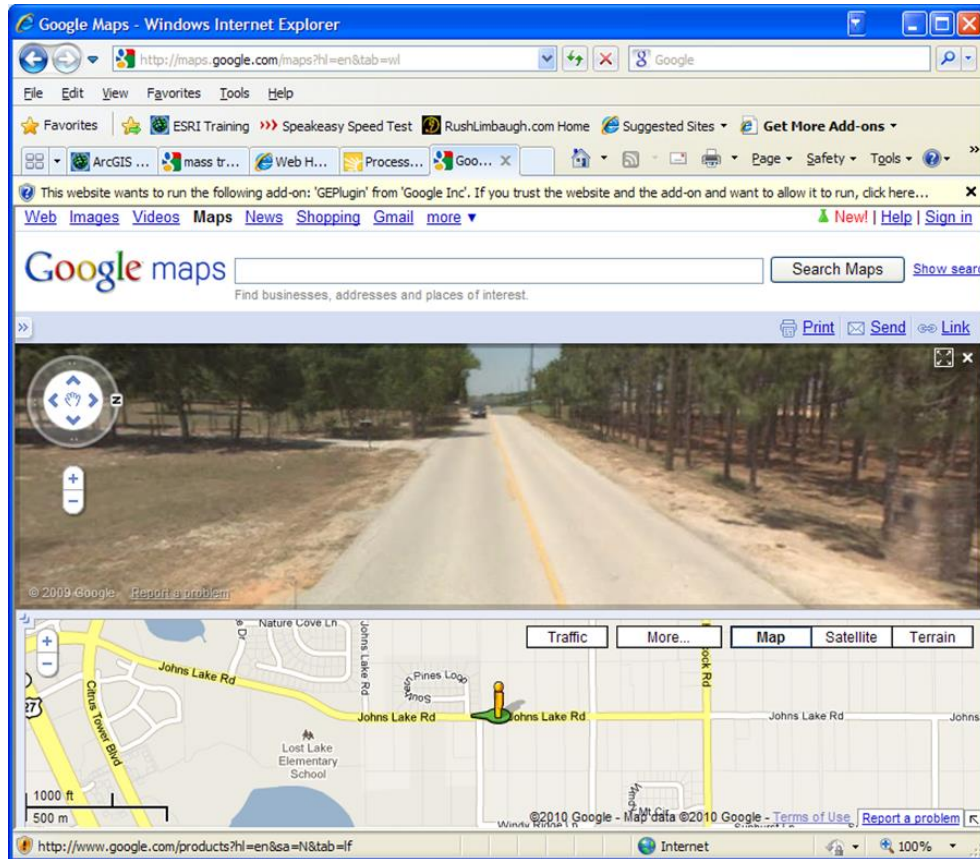
Hazardous Area ID = 7

HANCOCK RD

Internet 100%



Phase 2 Review



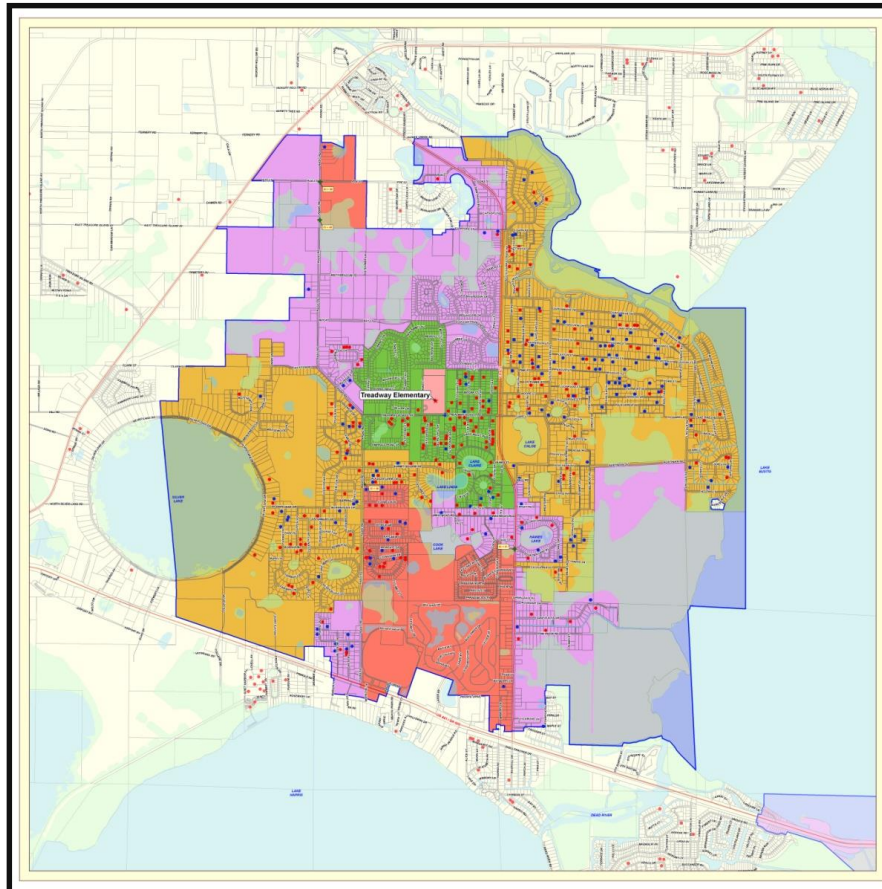


Phase 3 Review



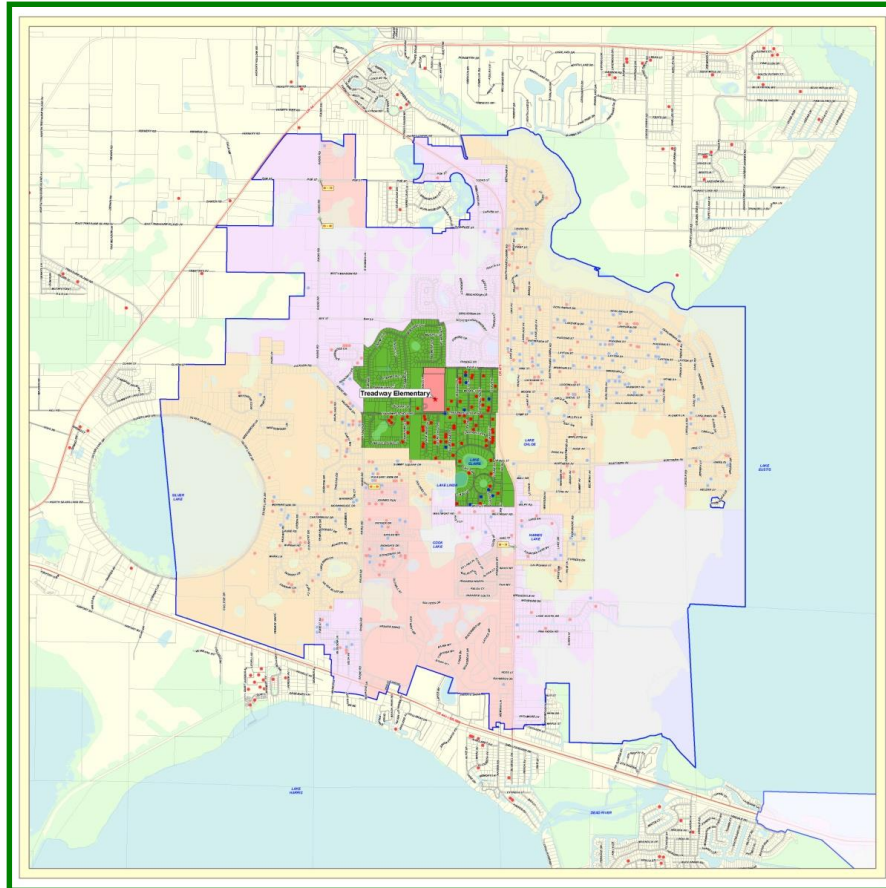


2-Mile Designations



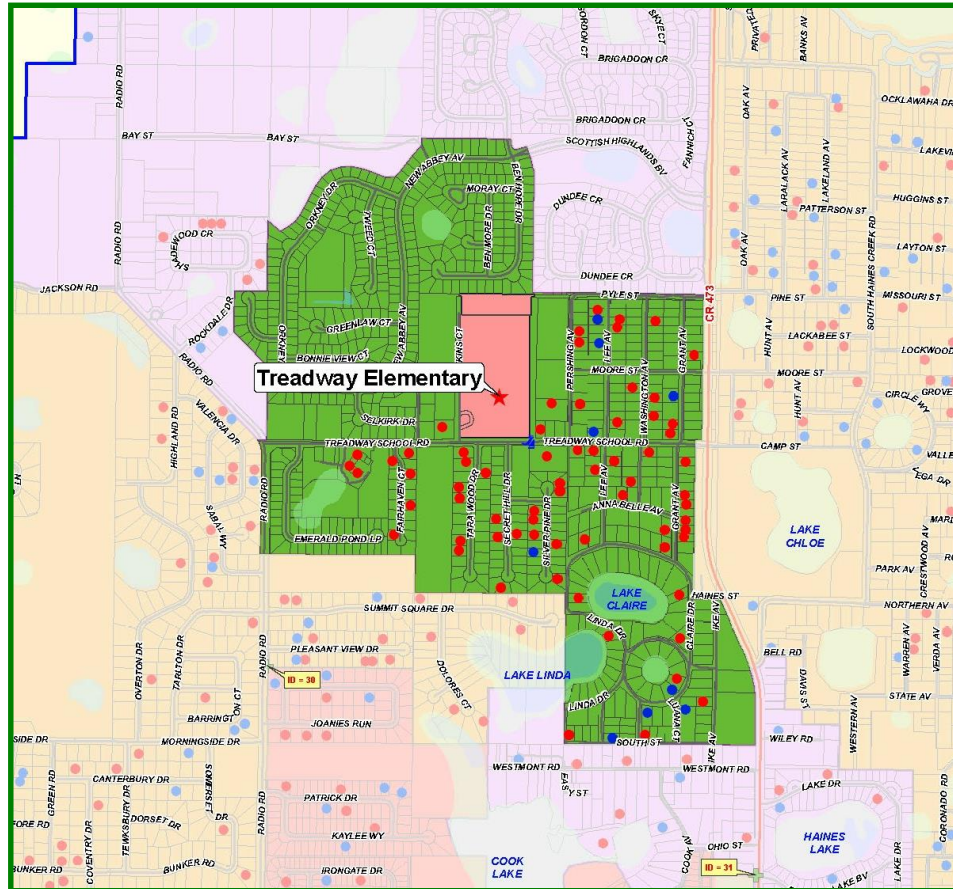


Walkable Zones



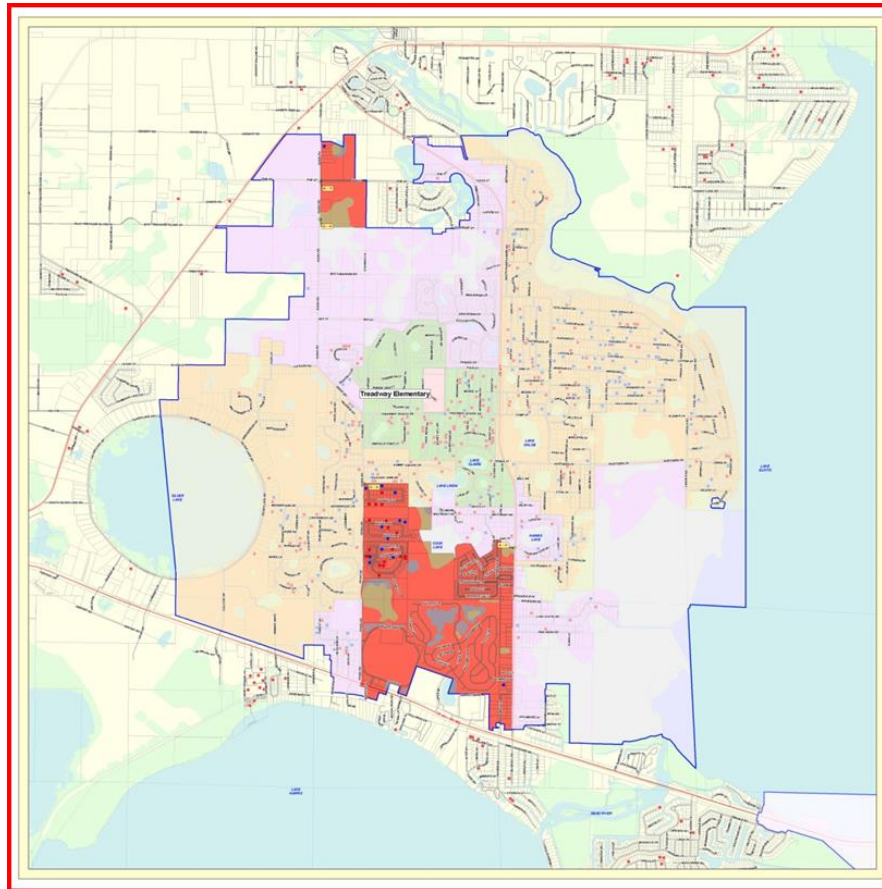


Walkable Zones



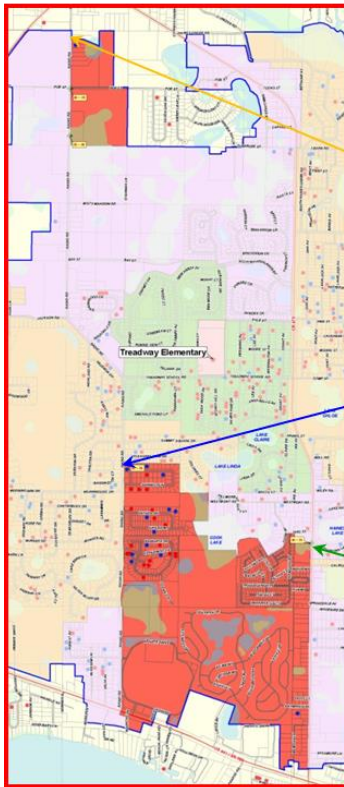


Hazardous Zones



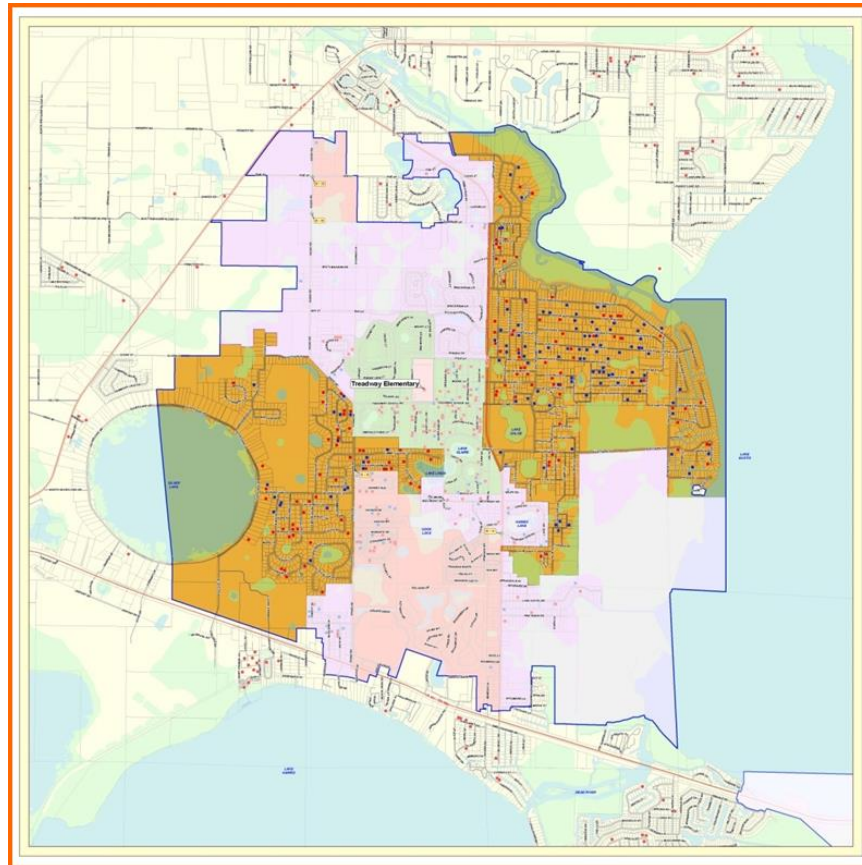


Hazardous Zones



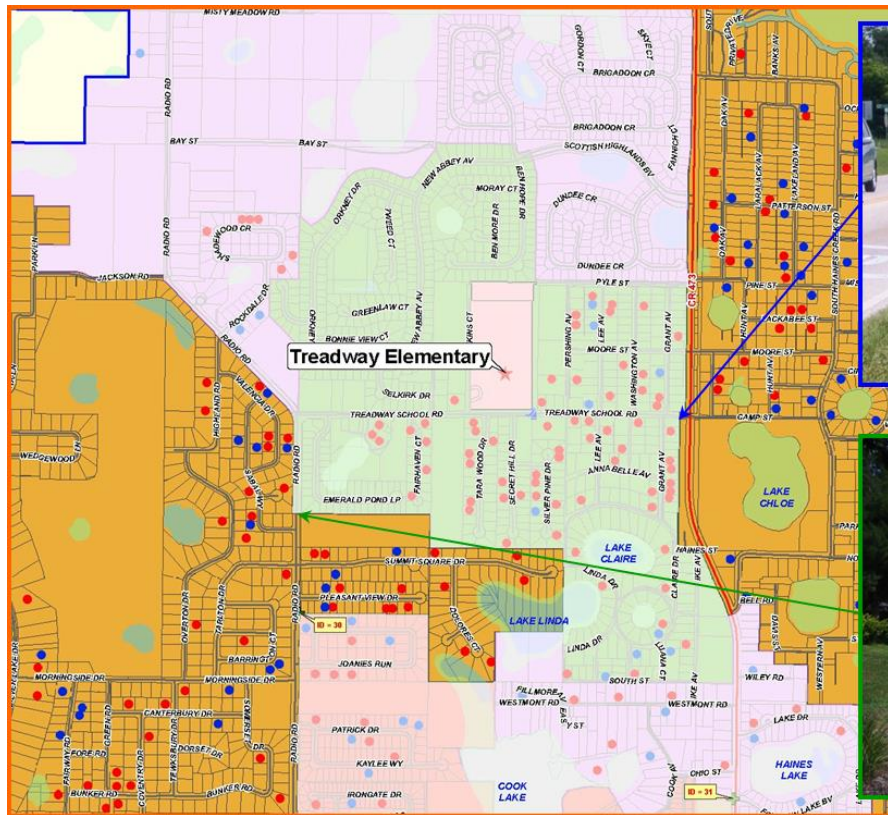


Special Exception (ST)



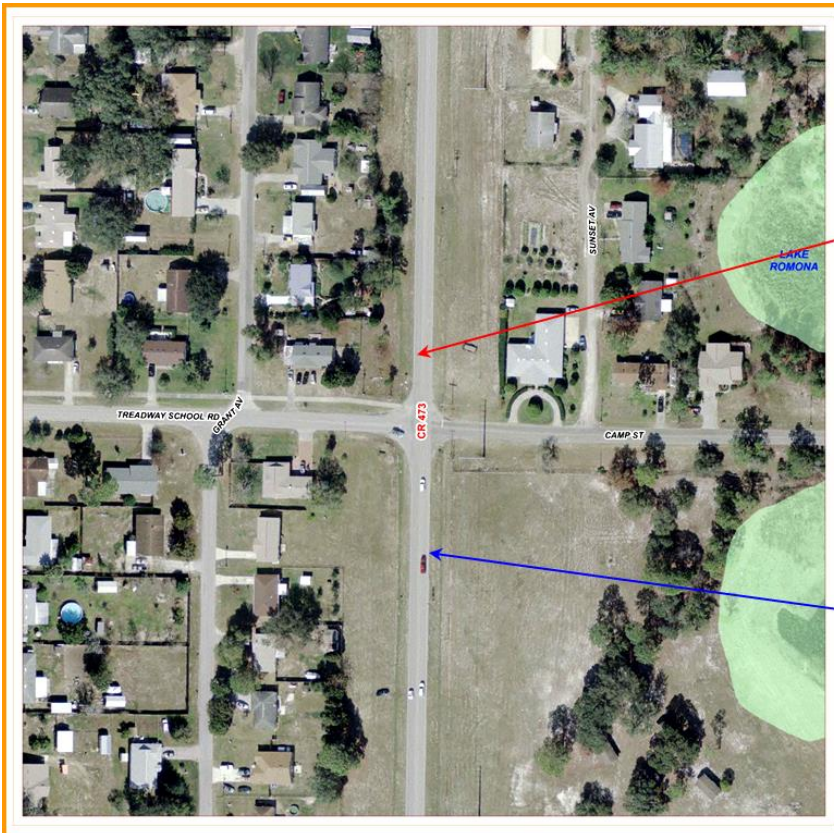


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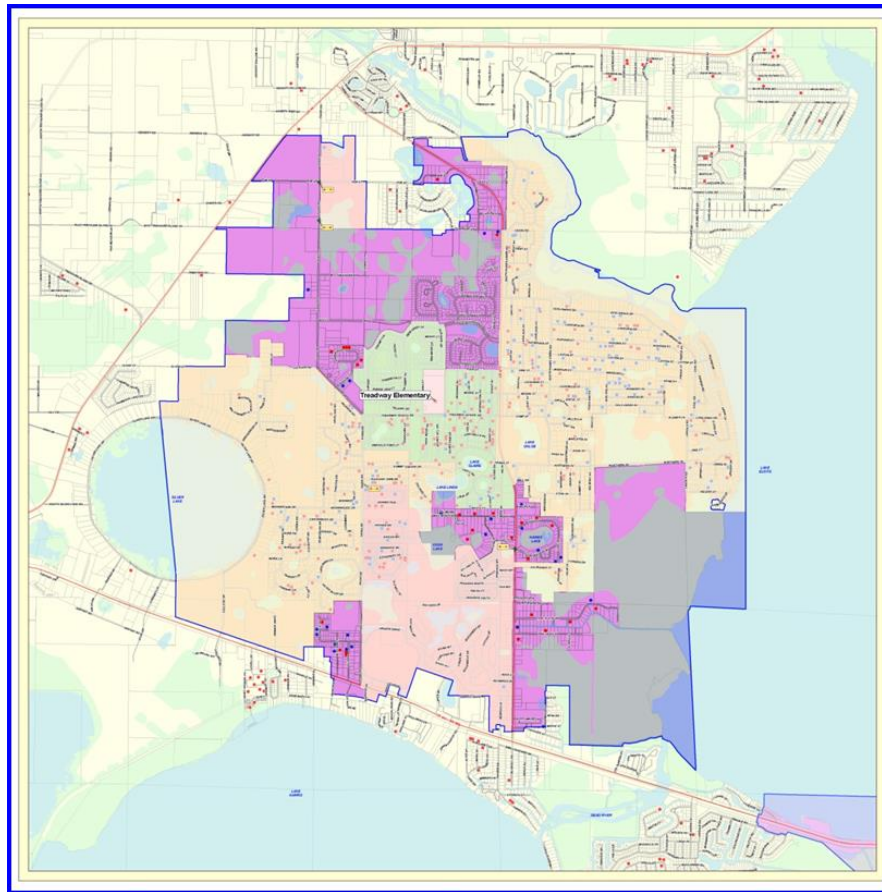


Special Exception (ST)



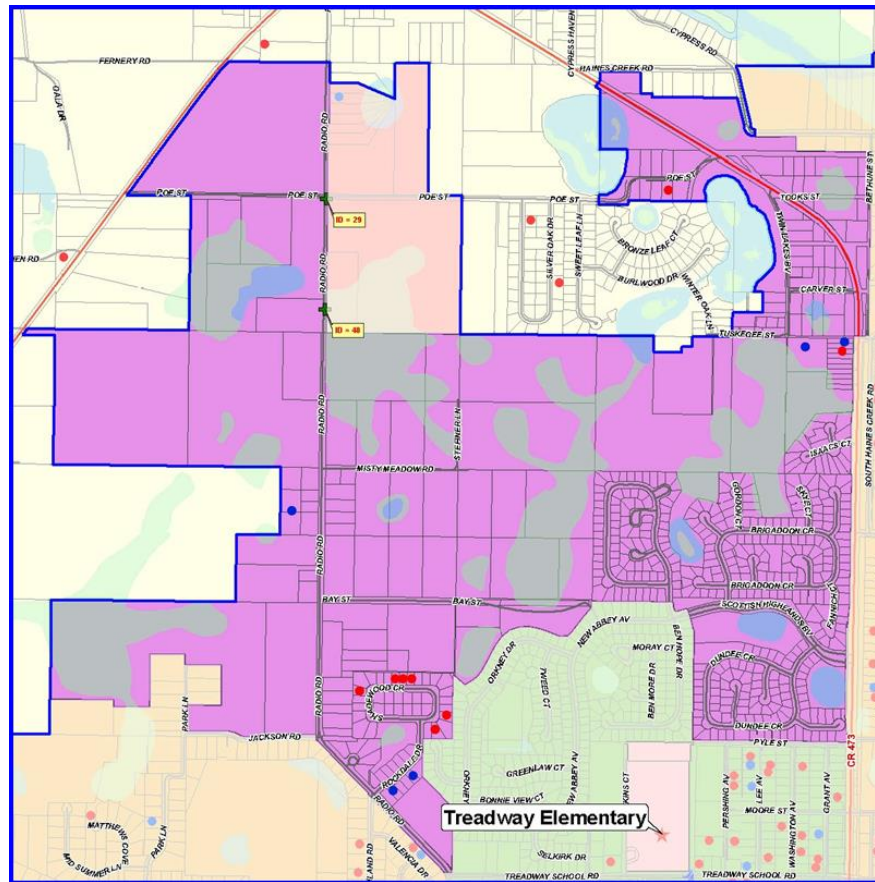


Special Exception (LT)





Special Exception (LT)





Walking Improvements

- Identified 105 key areas
- Improvement type (6)
 - Sidewalk install (65 or 62%)
 - Crossing guard or signalization (36 or 34%)
 - Routine maintenance (4 or 4%)
- Condition type
 - Intersection (1 or 1%)
 - Right-of-Way (35 or 33%)
 - Crosswalk (69 or 65%)



Walking Improvements

- Identified 105 key areas (cont.)
 - Impacted student riders (2,858)
 - Responsible agency
 - Maintenance
 - Law enforcement
 - Improvement cost (10-yr return)
 - \$21.4 million
 - Improvement savings (10-yr return)
 - \$20.3 million



Walking Improvements

- Performed an ROI Analysis
 - Savings vs. cost
 - 41 projects – negative return
 - 64 projects – positive return
 - Top 24 ranked projects
 - +\$250,000 positive return
- MPO gap analysis



Sidewalk Improvement



Ranked 49th with ROI = \$46,000





Crossing Guard



Ranked 2nd with ROI = \$788,000





Questions



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