

Real People. Real Possibilities.™

# Scioto Darby Road Improvements (CIP T-21) Leppert Road Improvements (CIP T-129)

January 14, 2014

Presentations at 5:30 pm, 6:40 pm

**BURGESS & NIPLE**  
Engineers ■ Architects ■ Planners

# Project Introduction



# Project Introduction

- City's goals for project
  - Improve pedestrian/bicycle mobility and safety
  - Increase vehicular capacity while reducing speed

# Today's Agenda

- Issues in Corridor
- Development of Alternatives
- Next Steps
- Questions & Answers
- Open House / Discussions
- Get Public Feedback
  - Paper
  - Email
  - On-line

# What Are The Issues?

- Pedestrian issues
- Traffic issues
- Other Related issues

# Determining The Issues

- Steering group meetings
- Public survey and results

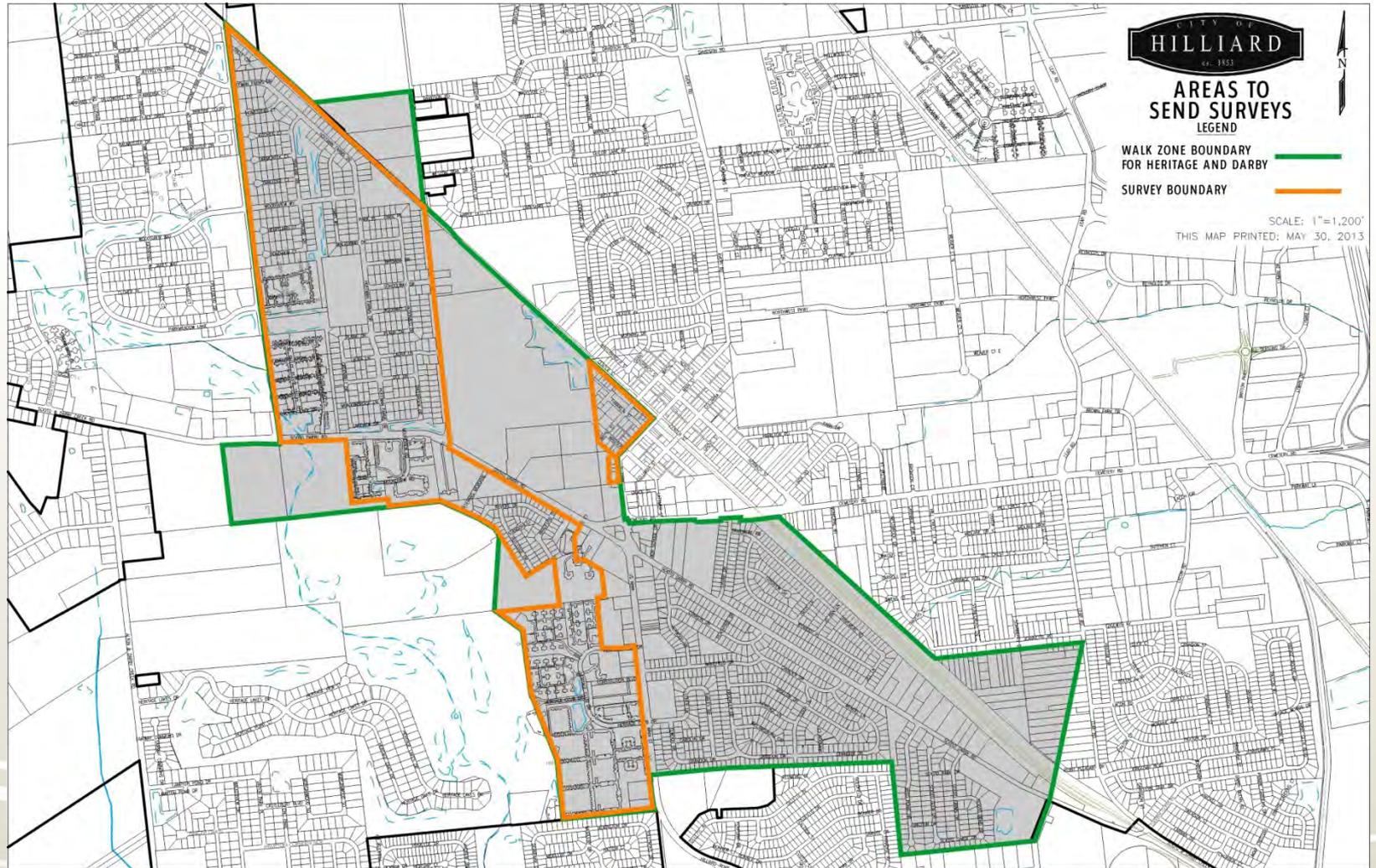
# Steering Group Meetings (3)

- Hilliard Engineering staff
- Engineering Consultants (B&N)
- Hilliard City Schools
- Hilliard Division of Police
- Hilliard Recreation and Parks
- Norwich Township Fire Department

# Determining The Issues

- Steering group meetings
- Public survey and results

# Map of Survey Area



# Walk / Bike Survey

- Sent to geographical area including school district areas
- 1,830 Postcards mailed, directed to website
- Additional postcards distributed to various locations
- Paper copies of survey available by request
- 290 responses

# Map of Respondents



# Walk / Bike Survey – Statistical Results

- 60% always or frequently walk or bike to Old Hilliard or to parks
- 78% would walk or bike more frequently if improvements are made
- 40% have one or more students attending school in the area
  - 1/3 of those households: Their students never walk or bike to school
  - If improvements are made, 70% said their students would or might walk or bike to school

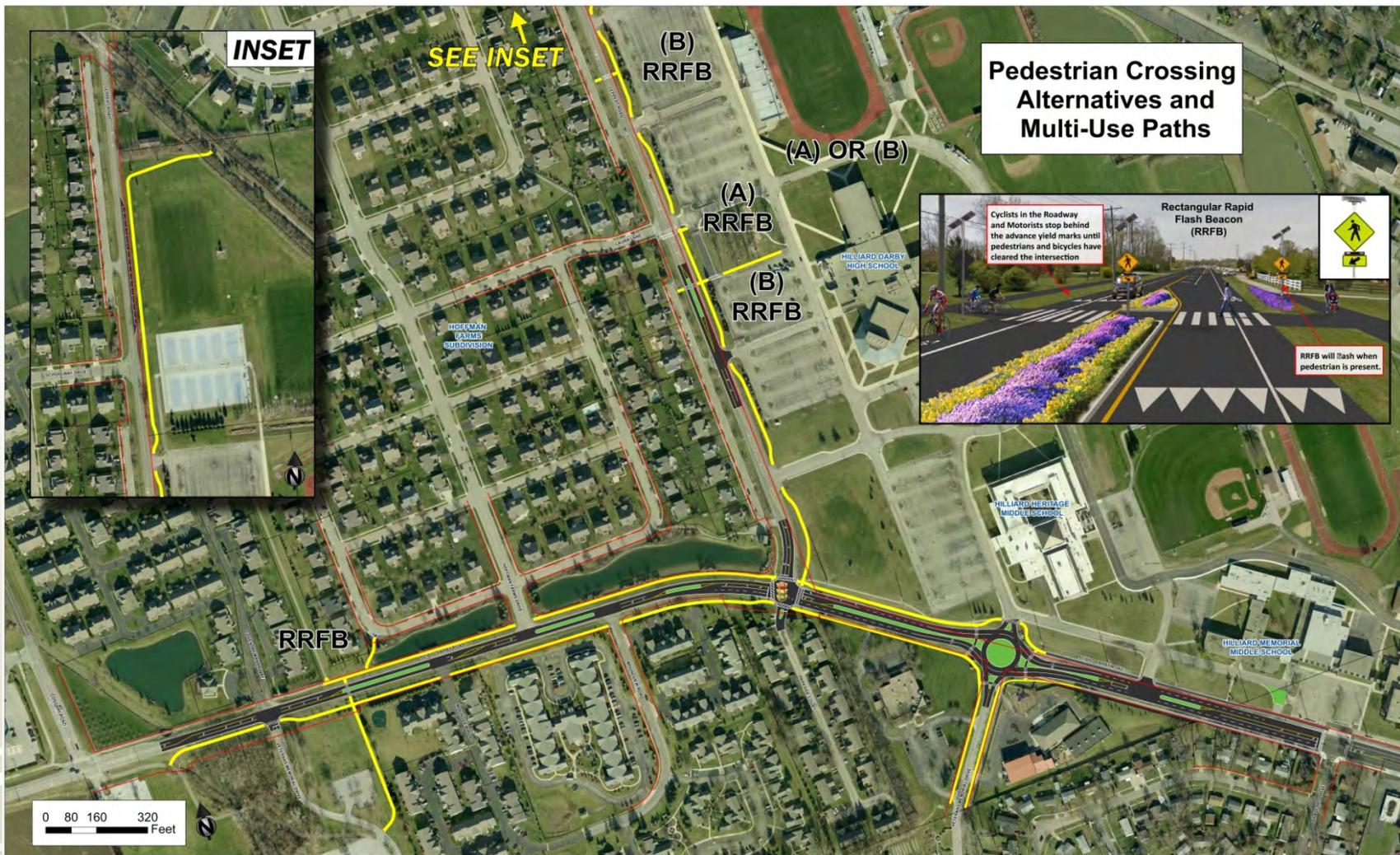
# Walk / Bike Survey – Written Responses

- Danger for students walking along SD
- Danger for students crossing Leppert from Hoffman Farms
- Need better connectivity of bike paths
- Difficulty crossing SD at Veterans Memorial
- Excessive speed in school zones
- Leppert Road too narrow for vehicles and bicyclists
- Traffic on SD backs up into Triangle roundabouts
- Poor lighting

# Pedestrian Issues

- Need safe crossing on Scioto Darby Road (SD) at Veterans Memorial Dr/Heritage MS
- Need safe crossing of SD for Hoffman Farms multi-use path to Municipal Park
- Need multi-use paths along both sides of SD
- Need multi-use path along east side of Leppert and connection to Heritage Rail Trail
- Need safe crossing on Leppert from Hoffman Farms to Hilliard Darby HS

# Off-Street Pedestrian Facilities



# Midblock Pedestrian Crossing



# Coordination with Municipal Park Pedestrian Facilities



**Roger A. Reynolds Municipal Park  
North Connector Path**

*Municipal Park with Proposed Improvements*



# Traffic Issues

- Need extra W/B lane from Bradford Dr to Leppert Rd
- Excessive speed on SD in (long) school zone
- Difficult left turn from Veterans Memorial Dr and Heritage Middle School onto SD
- Leppert Road pavement substandard width/condition
- Manage peaks of school traffic (including special events) and growth without overbuilding or encouraging higher speeds

# Other Related Issues

- Need provisions for on-street bicyclists
- Need adequate street lighting
- Need adequate storm drainage

# Development of Alternatives

- Development of four alternatives
- Screening of alternatives
- Selection of two alternatives for further evaluation

# Development of Alternatives



## Similarities

- On-street and off-street bicycle and pedestrian facilities
- 3 lanes on SD west of Leppert Road
- 2 westbound lanes on SD east of Leppert

## Differences

- Intersection configurations
- Vehicle lane assignments
- Pedestrian crossings

# Scioto Darby Road west of Leppert



- 3 lanes on Scioto Darby west of Leppert
- Use of center islands
- Protected mid-block pedestrian crossing
- Multi-use paths on both sides of the street

# Development of Alternatives



## Similarities

- On-street and off-street bicycle and pedestrian facilities
- 3 lanes on SD west of Leppert Road
- 2 westbound lanes on SD east of Leppert

## Differences

- Intersection configurations
- Vehicle lane assignments
- Pedestrian crossings

# Leppert Road



- Multi-use path on the east side of Leppert Road connecting to the Heritage Trail.
- One or more protected mid-block pedestrian crossings.
- Improved shoulders on roadway.

# Development of Alternatives



## Similarities

- On-street and off-street bicycle and pedestrian facilities
- 3 lanes on SD west of Leppert Road
- 2 westbound lanes on SD east of Leppert

## Differences

- Intersection configurations
- Vehicle lane assignments
- Pedestrian crossings



1. Signal at Leppert/SD
2. Stop control at Veterans Memorial/SD (does not meet criteria for a traffic signal)
  - a. Does not address difficulty of left turns
  - b. Pedestrian signal (RRFB) could be installed but not ideal safety improvement for peds
3. Single southbound left turn on Leppert
  - a. Long vehicle back-ups require right in/right out entrance/exit at school driveway on Leppert north of SD
4. Does not address excessive speed on SD east of Leppert

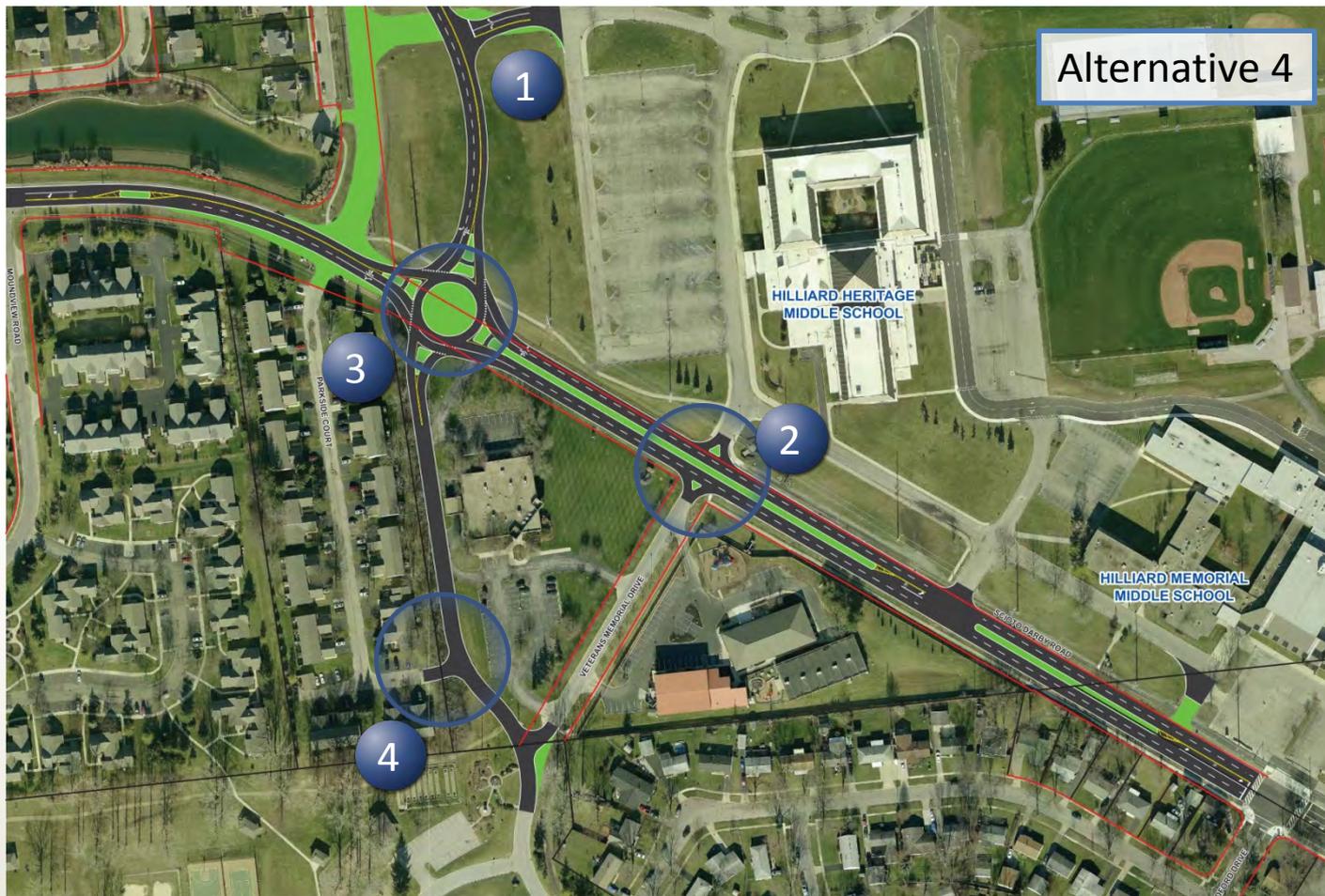


Alternative 2

- 1. Signal at Leppert/SD
- 2. Dual southbound left turn lanes on Leppert
  - a. Reduces vehicle back-up and allows for full access at school driveway
- 3. Roundabout at Veterans Memorial/SD
  - a. Provides speed control (traffic calming)
  - b. Better pedestrian crossing
  - c. Easier left turns
  - d. Requires additional right of way



1. Single southbound left turn lane on Leppert
2. Roundabout at Leppert/SD
  - a. Provides speed control
  - b. Provides shorter pedestrian crossing
  - c. Requires additional right-of-way
3. Roundabout at Veterans Memorial/SD
  - a. Provides speed control (traffic calming)
  - b. Better pedestrian crossing
  - c. Easier left turns
  - d. Requires additional right of way



Alternative 4

1. Relocation of Leppert Road onto high school property – Major impact to High School
2. Relocation of Veterans Memorial Drive entrance to park – Major impact to Mount Carmel
3. Roundabout at Relocated Leppert Road/SD/Veterans Memorial Drive
  - a. Provides speed control (traffic calming)
  - b. Better pedestrian crossing
  - c. Easier left turns
4. Directional shift of Parkside Court – Major impact to Parkside Court properties

# Screening of Alternatives – Relative Scores

-  1. Excellent
-  2. Good
-  3. Average
-  4. Fair
-  5. Poor

	No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4
<b>SCIOTO DARBY ROAD AND LEPPERT ROAD IMPROVEMENTS</b>					
<b>Pedestrian</b>					
<b>Bicycle</b>					
<b>Traffic (Vehicular)</b>					
<b>Cost (Project)</b>					
<b>Land Impacts</b>					
<b>Community Enhancement</b>					

# Screening of Alternatives – Alternative 1

- Simplest alternative to implement and lowest cost
- Did not address two key issues:
  - Difficult left turns from Veterans Memorial / Heritage Middle School onto SD
  - Excessive speed on SD in School Zone
- Requires right in/right out at entrance/exit at high school drive north of Leppert
- RRFB marginally improves pedestrian safety at Scioto Darby/Veterans Memorial intersection

➤ **Rejected from further consideration**

# Screening of Alternatives – Relative Scores

-  1. Excellent
-  2. Good
-  3. Average
-  4. Fair
-  5. Poor

	No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4
<b>SCIOTO DARBY ROAD AND LEPPERT ROAD IMPROVEMENTS</b>					
<b>Pedestrian</b>					
<b>Bicycle</b>					
<b>Traffic (Vehicular)</b>					
<b>Cost (Project)</b>					
<b>Land Impacts</b>					
<b>Community Enhancement</b>					

# Screening of Alternatives – Alternative 4

- Requires significant right of way acquisition
- Major impact to schools
- Major impact to Mount Carmel and Parkside Court properties
- Less effective speed reduction
- Highest cost

➤ **Rejected from further consideration**

# Alternatives Selected for Further Consideration

- Alternative 2 – One roundabout, one signal
- Alternative 3 – Two roundabouts
- Next steps – Public input
  - Open house/display areas
  - Comment sheets

# Open House Display Areas

- Station 1 – Existing conditions and issues
- Station 2 – Public Survey results
- Station 3 – Alternative 2
- Station 4 – Alternative 3

# Open House Display Areas

- Ask one-on-one or small group questions
- View exhibits and mark on maps on tables
- Provide feedback on your corridor issues
- Provide your ideas for solutions
- Use comment forms or email
- Deadline for comments: **January 31, 2014**

# Tentative Project Timeline

- 2014 Detailed design of selected alternative
- 2015 Utility relocation
- 2016 Construction

# Questions and Comments?

- Questions and Answers
- Comments