Creating safer streets with demonstration projects

The webinar will begin at 2:00PM ET
Safe Streets, Smart Cities Academy

- Technical assistance program funded by Safe System Innovation Grant from Road to Zero

- Competitive application process to choose three jurisdictions
  - City of Durham, NC
  - City of Huntsville, AL
  - City of Pittsburgh, PA
Safe Streets, Smart Cities Academy

• Series of three workshops and six distance learning modules
  – Proven safety countermeasures
  – Creative placemaking
  – Community engagement

• Peer-learning model with interactive exercises

• **Practical component:** plan and implement a safety demonstration project
Today’s webinar

Safety Demonstration Projects
Case studies from Durham, NC, Huntsville, AL, and Pittsburgh, PA

Anne Phillips
Leslie Tracey
Durham, NC

Paige Colburn
Clint Johns
Huntsville, AL

Kristin Saunders
Katy Sawyer
Pittsburgh, PA

Q&A
Type your questions in the chat box
Durham, NC demonstration project

West Club Boulevard
West Club Boulevard

Northgate Shopping Mall

W. Club Boulevard

City of Durham
Bicyclist and pedestrian crashes that between 2007 and 2015

**Bike/Ped Crash Data**

- Guess Road
- N. Buchanan Blvd
- W. Club Boulevard
- Watts Street
- Dollar Avenue

**Legend**
- Pink circle = Bicycle
- Green circle = Pedestrian
High Bus Stop Use

• Rated in the Top 20 used with 150 weekday boardings
• GoDurham Rider Demographics:
  • 68% African American
  • 63% have no car
  • 75% make less than $25,000
Engagement Activities

- Online Survey (4 weeks): 126
- Six intercept surveys, 46 conversations & 84 crossing observation
- Trinity Park Neighborhood Association Meeting: 32
- Northgate Children’s Festival: 76
- NIS sent emails to contacts in Walltown
  - Survey link
  - Asking if there were events that we should attend (no response)
- Second Online Survey: 241
- Second Round of Intercept Interviews: 46
- Artwork engagement (online and in-person): 348
## Online vs. Intercept Responses

### What is your annual household income?

<table>
<thead>
<tr>
<th>Income Range</th>
<th>ALWAYS</th>
<th>OFTEN</th>
<th>SOMETIMES</th>
<th>RARELY</th>
<th>NEVER</th>
<th>TOTAL RESPONDENTS</th>
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<td>Less than $24,999</td>
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<td>$165,000 to $265,999</td>
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<td>15</td>
<td>15</td>
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<td>22</td>
<td>27</td>
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<tr>
<td>$266,000 or more</td>
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<td>15</td>
<td>15</td>
<td>17</td>
<td>22</td>
<td>27</td>
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<td>15</td>
<td>17</td>
<td>22</td>
<td>27</td>
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### What is your race? Select any that may apply.

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<th>Race</th>
<th>ALWAYS</th>
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<th>SOMETIMES</th>
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<th>NEVER</th>
<th>TOTAL RESPONDENTS</th>
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<td>Asian or Pacific Islander</td>
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<td>35</td>
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<tr>
<td>Black or African</td>
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<td>3</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>28</td>
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<tr>
<td>Native Hawaiian or Other</td>
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<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>35</td>
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<tr>
<td>Prefer not to answer</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>35</td>
</tr>
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</table>

### What is the highest level of education you have completed?

<table>
<thead>
<tr>
<th>Education Level</th>
<th>ALWAYS</th>
<th>OFTEN</th>
<th>SOMETIMES</th>
<th>RARELY</th>
<th>NEVER</th>
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</thead>
<tbody>
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<td>4</td>
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<tr>
<td>Prefer not to answer</td>
<td>20</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>35</td>
</tr>
</tbody>
</table>

### Percentage of respondents who prefer to always, often, sometimes, rarely, or never do certain activities.

- **Always:** 1.98% (2), 3.33% (3), 5.88% (5), 44.07% (52)
- **Often:** 23.76% (24), 11.11% (10), 2.35% (2), 44.07% (52)
- **Sometimes:** 29.70% (30), 14.44% (13), 4.71% (4), 9.32% (11)
- **Rarely:** 25.74% (26), 18.89% (17), 9.41% (8), 1.69% (2)
- **Never:** 18.81% (19), 52.22% (47), 77.65% (66), 0.85% (1)
The least common crossing pattern reported in the survey is contradictory to the most commonly observed crossing patterns.
Online Survey Results

Most people recognized vulnerable user safety issues on this roadway section.

Design suggestion count:
- Crossing: 37
- Crossing with signal: 13
- Bike lane: 23
- Signal: 19
- Road diet: 16
- Speed management: 13
- Visibility/lighting: 4
Intercept Interviews

• Most people did not want to take the survey, but were willing to chat with us
• We developed a shorter comment form after realizing that most people did not want to take the survey
• Went out four times, spoke to 46 people, observed 84 crossings
• Questions asked:
  – How often do you come here?
  – What two things can we do to make this area safer for all roadway users?
  – Where do you normally cross?
  – Do cars yield for you when crossing?
Intercept Takeaways

• The most common suggestion was to add a way for people to cross safely mid-block
• Many people expressed concern that a crosswalk might not be sufficient enough to encourage drivers to yield to pedestrians, and several suggested that a signal (referred to as a traffic light or some kind of light that pedestrians could push to cross)
• The second most common concern was speeding

D crossing: most frequent (26)
C crossing: second most observed (13)
A crossing: third most observed (8)
Art Concept by Madiha Malik
Project Improvements

Temporary Road Diet (3 weeks)  
Mid-block Crossing  
Rectangular Rapid Flashing Beacon
Project Results and Lessons Learned

- 73% of people surveyed near the project site said the project increased their feeling of safety.
- 4mph reduction in the 85th percentile speed (EB).
- 0 - 24% increase in drivers yielding to pedestrians in the crosswalk.
- 4 second reduction in pedestrian delay to cross the street.
Huntsville, AL demonstration project

4 Mile Post
Complete Streets in Huntsville, AL
Challenges and A Demonstration Project
Population: 13,050
1950

Population: 16,437
1960

Population: 72,365
Population: 139,282
1980
Population: 142,513
Population: 159,880
Population: 158,635
City of Huntsville Land Area (2018):

218.2 Square Miles

Rank: 28th in US (Cities >100,000)
Philadelphia
134.2 Square Miles
Population: 1,567,872

Denver
153.3 Square Miles
Population: 693,060

Atlanta
133.5 Square Miles
Population: 472,522

Las Vegas
134.4 Square Miles
Population: 632,912

Philadelphia
134.2 Square Miles
Population: 1,567,872
Enhance Mobility - The ‘Bikeable’ City Center
Enter Safe Streets, Smart Cities
We take Complete Streets out of downtown
Jones Farm Park to Aldridge Creek Greenway

- Creating safe bicycle and pedestrian connection between two recreational resources.
The Park and the Greenway
Four Mile Post: Before and After
Four Mile Post: Before and After
Four Mile Post: Before and After
Four Mile Post: Before and After
Thank You!

Paige Colburn
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Clint Johns
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Pittsburgh, PA demonstration project

Lincoln and Frankstown Avenues
Lincoln and Frankstown
Intersection Selection

- High crash corridor / intersection
- Few 311 requests
- City-owned
- High potential for intervention
- In need of investment
SITE

BUSWAY

East Liberty

Negley

Homewood

0.6 mile walk
Lincoln Ave and Frankstown Ave
Lincoln Ave and Frankstown Ave

Looking north
Lincoln K-5 feeder pattern

Student Transportation:

106 bus riders
81 walkers (43%)
Surveys and School Outreach

- **Seat Belt Safety**
  How should we buckle up?
  Are you in the right seat?

- **Safe Walking**
  Safety rules of walking

- **School bus safety**
  The danger zones of a school bus
  The “school bus seat belt”

- **Bikes**
  What do you need to ride?
  Protecting your head
Surveys and School Outreach

14 presentations
250 students
Surveys and School Outreach

- X Where you cross the street
- ❤ Where you want to see artwork
- Where you want a new cross walk
- O Where you want to see plants
- Your path to school
How do you feel when you cross the intersection?

“I feel a little bit scared because the cars go too fast but I feel dangerous “

“I feel safe when I cross the street “

“I feel brave “

“Nervous”
Surveys and School Outreach

Would you like to add anything the open space in the intersection to make it feel more fun? If so, what?

“A light to tell cars ‘here comes the kids’”

“Sidewalks and more crossing guards “

“Trees and flowers”
Neighborhood Outreach – Deliberative Democracy

The Capital Budget Deliberative Forum

- community gathers
- receive background info
- small group discussion
- expert Q&A
- survey

Pittsburgh Mobility & Infrastructure
@PMDdotPgh

Great community input and ideas about how to improve the Lincoln Frankstown intersection at our community forum last night. Check back here for more information about our next event and changes to the intersection coming soon.
How easy is it for the following groups to use this intersection?
When crossing this intersection, is it easy, do you feel safe, is it pleasant?

“scary at night”

“barren and exposed to sun and cold”

“depressing”
Project Implementation & Celebration

- New left turn lane
- Shorter crosswalk
- New pedestrian island
- Planters
- New pedestrian island
Project Implementation
Opening Party

New crossing island
1. Slows traffic
2. Makes an easier crossing
Opening Party
Opening Party
Thanks for listening and thanks to our project team!

Oliver Beasley, Policy Analyst, Office of the Mayor
Sergey Brodskiy, Staff Engineer, City of Pittsburgh
Leann Chaney, Transportation Planner, Southwestern Pennsylvania Commission
Sarah Khalil, Service Leader, Pittsburgh Bike Share
Anna Kudrav, Assistant Chief, Pittsburgh Bureau of Police
Breen Masciotra, TOD Project Manager, Port Authority of Allegheny County
Bryanna McDaniel, Public Health Educator, Allegheny County Health Department
Shauna McMillan, Director of School Initiatives, United Way
Megan Patton, Transportation Project Manager, Pittsburgh Public Schools
Lindsay Powell, Assistant Chief of Staff, Office of the Mayor
Kristin Saunders, Principal Transportation Planner, City of Pittsburgh
Katy Sawyer, Traffic Project Manager, City of Pittsburgh
Craig Toocheck, Staff Engineer, City of Pittsburgh
Type your questions for our presenters in the chat box

Questions?

National Complete Streets Coalition

Safe Streets, Smart Cities Academy