# Geography As A Risk Factor: Use of GIS to Reduce Teen Pregnancy

Adolescent Pregnancy Prevention Campaign of North Carolina

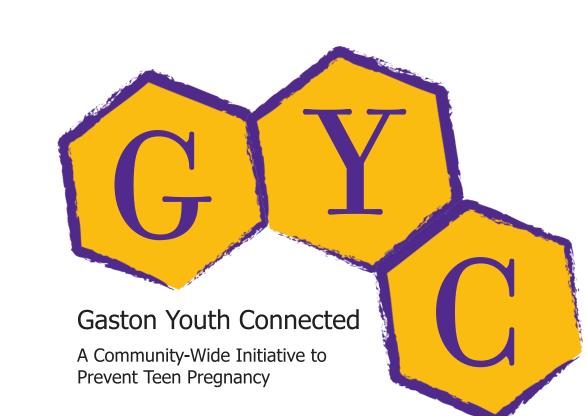
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Challenge Solution Results

Gaston Youth Connected (GYC) is a 5-year, multicomponent, community-wide initiative to lower teen pregnancy rates in Gaston County, North Carolina.

GYC Project Components:

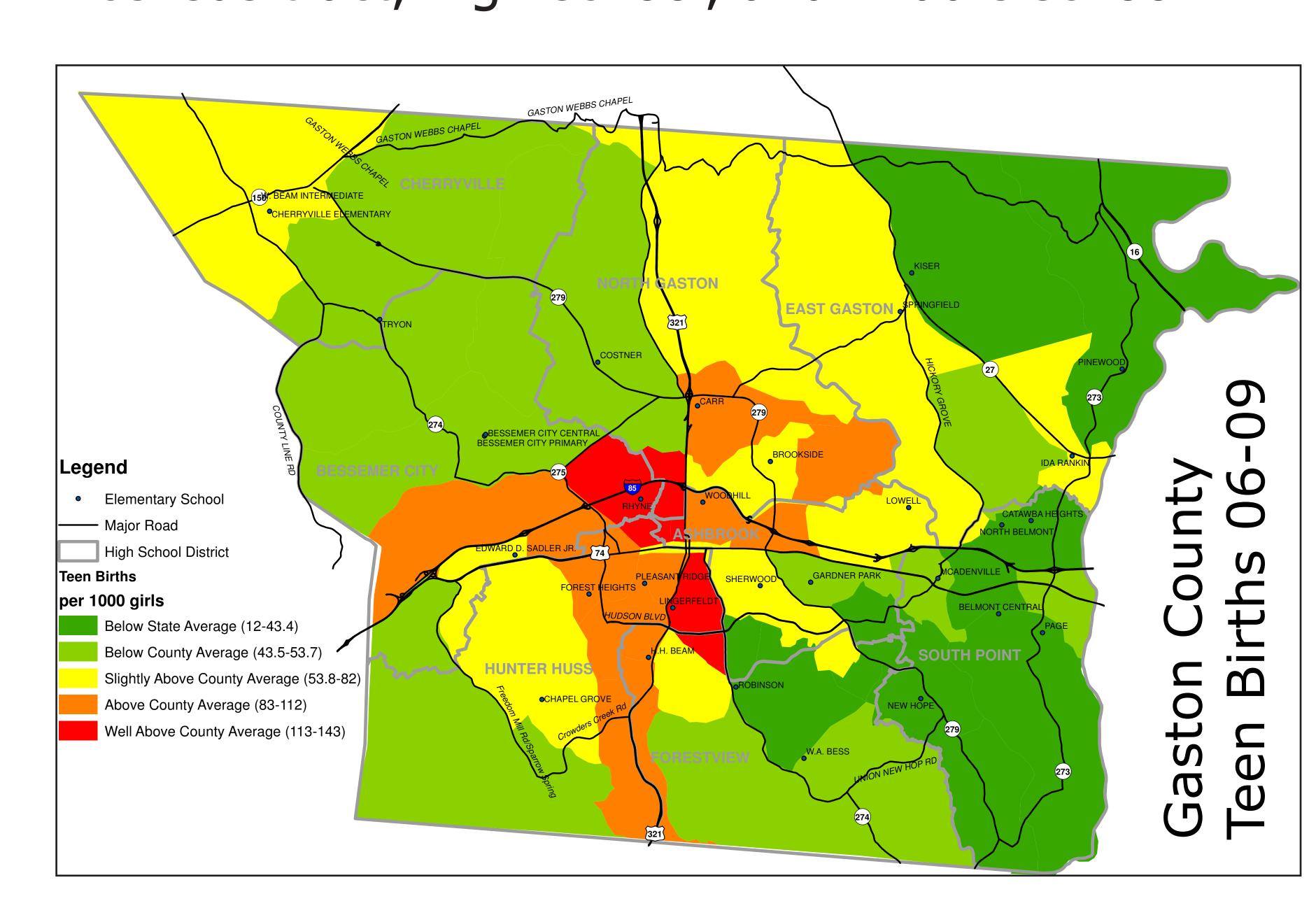
- 1. Evidence-Based Programs
- 2. Adolescent-Friendly Health Care
- 3. Linking Youth to Programs and Health Care
- 4. Community Buy-In and Mobilization



## Planning Barrier

Project partners and staff needed information to target outreach in areas of the county with the highest teen birth rates.

**Pre-Mapping Phase:** Project staff worked with the health department's data analyst to create maps showing high teen birth rates by census tract, high school, and middle school.



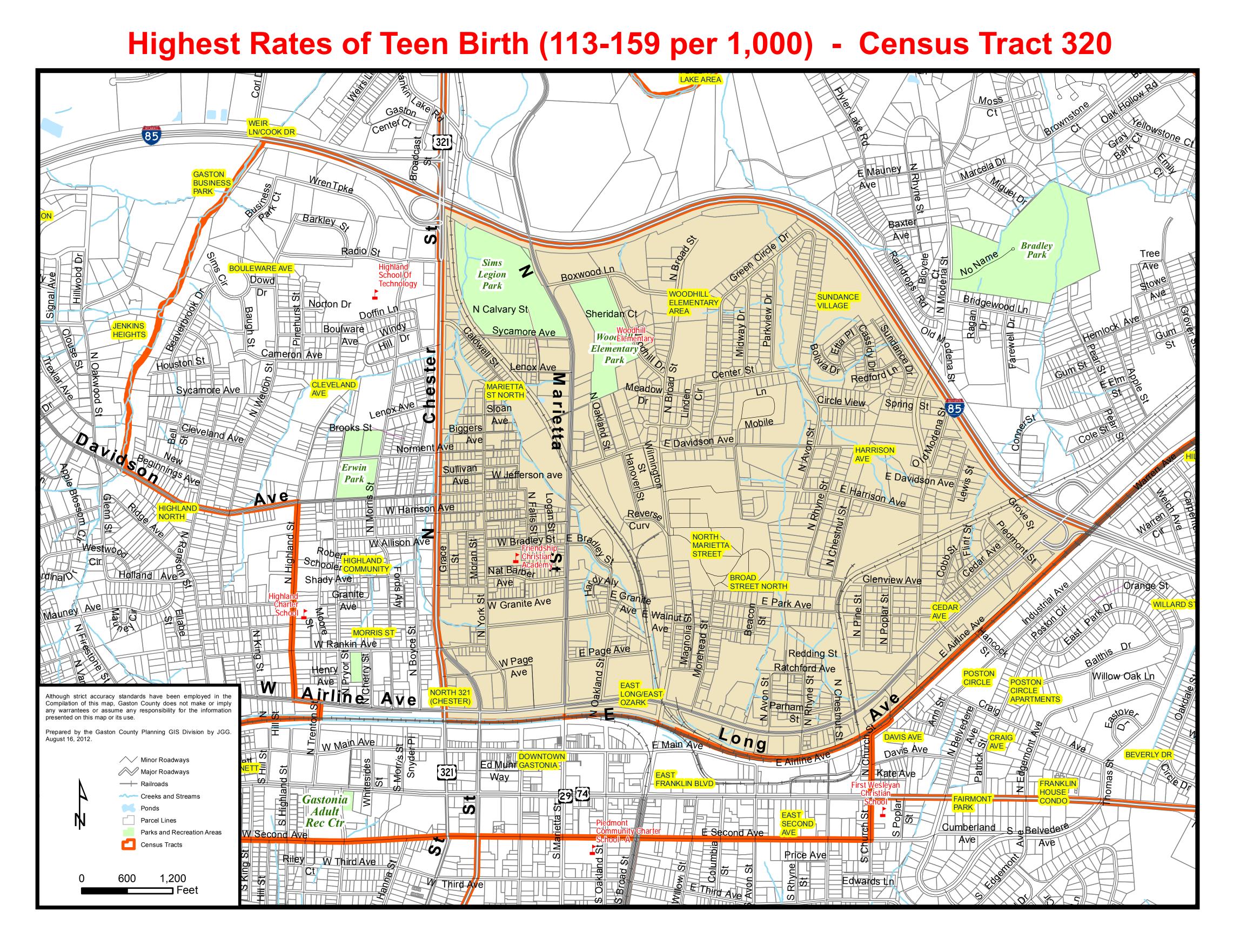
"...but we can't tell which neighborhoods are really in the hot spots." Community stakeholder

Mapping Strategy: Project staff engaged the county planning department to create detailed census tract maps that included places where youth might congregate. Maps were distributed to program and clinical partners in order to advise outreach and planning.

#### On this map:

- Schools
- Parks
- Rec centers
- Churches
- Housing complexes
- Neighborhoods

Maps were created for census tracts with high teen birth rates.



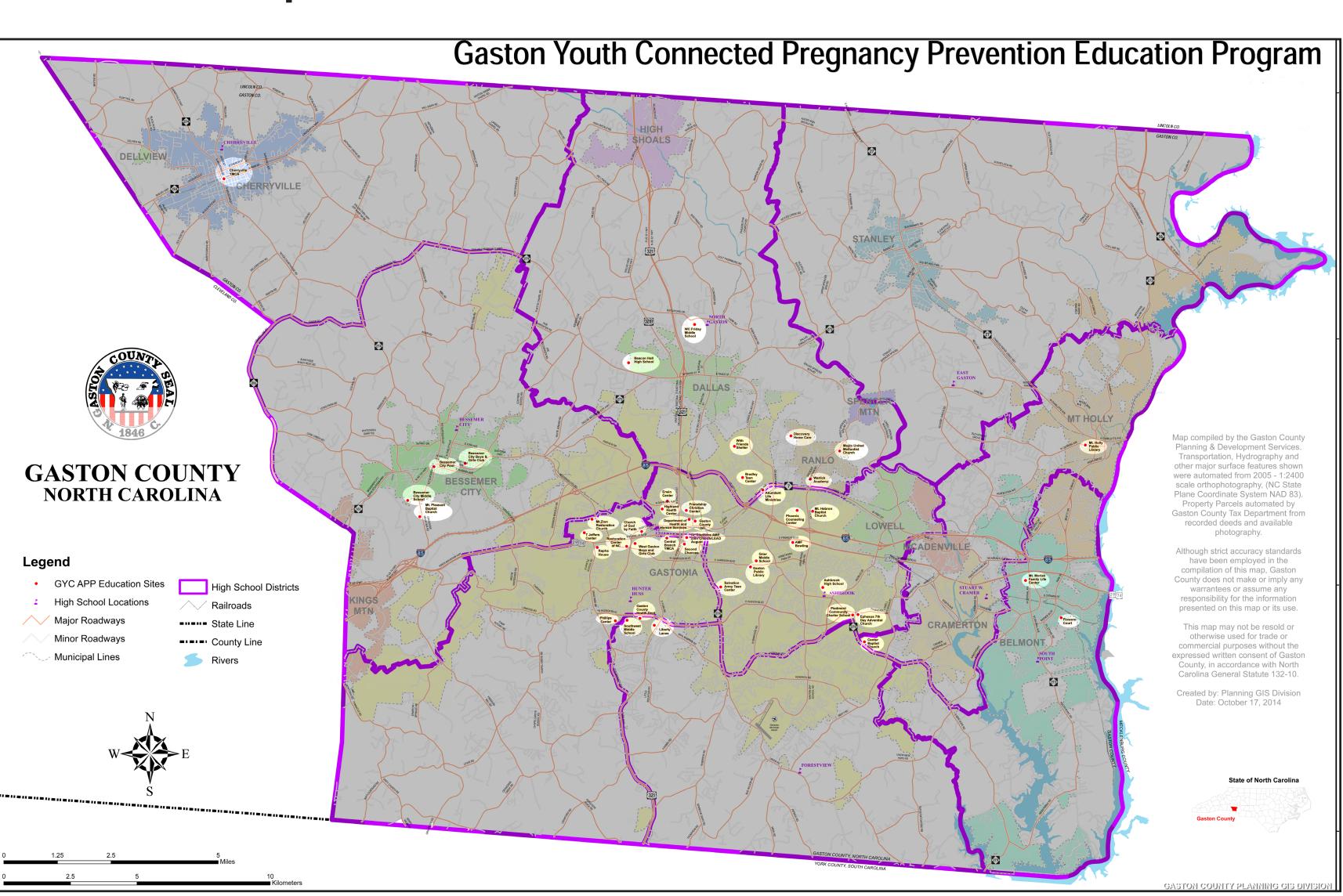
### How Partners Used Maps

Program and clinic partners used the maps to recruit for evidence-based programs, find new host sites for programs, and advertise adolescent-friendly sexual and reproductive health care available in the community.

Specific examples:

- Held program at a city pool
- Attended high school football games
- Placed an after-school program at every middle school in the hot-spot areas

Mapping Outcomes: Program and clinical partners focused programs and outreach in teen birth hot spots.



of youth who enrolled in GYC's evidence-based sexual health education programs attended a middle or high school located in areas identified on the maps as high-risk geographic areas.

Source: Program partners' enrollment records

## Report Card

Pre- and post-test scores of program participants from high-risk geographic areas show improvement in key indicators of pregnancy prevention knowledge.

|  | Before | After |
|--|--------|-------|
| Stated that abstinence is the most effective prevention method | 81%    | 94%   |
| Could identify 3 birth control methods                         | 25%    | 69%   |
| Knew where to access birth control in the community            | 48%    | 89%   |
| Intended to go to doctor for birth control when needed         | 74%    | 88%   |
| Average overall pregnancy prevention knowledge                 | 48%    | 85%   |

Source: Pre- and post-test results provided by program pa