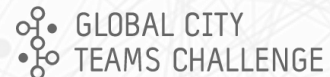




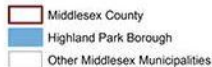
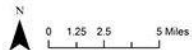
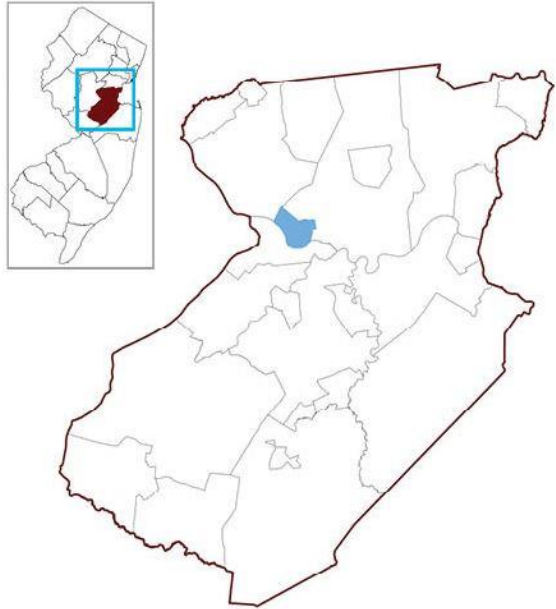
Hometown Dashboard

Smart City Technologies for Improving Quality of Life-Highland Park, NJ

6/14/2016



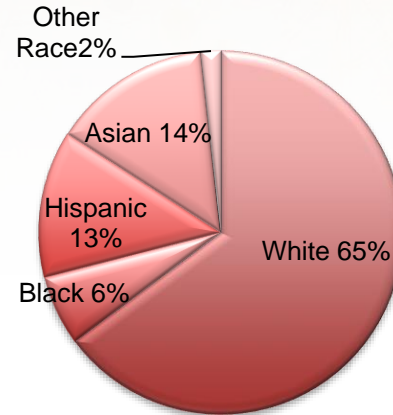
Highland Park Facts



Map: NJGIN
Pie: US Census Bureau

Total Area: 1.82 sq miles
Open Space: 563 acres

Population (2014): 14,224
Median Household Income (2014): \$66,414
Population with a **Graduate** Degree (2014): 39.9%



Community Facts and Opportunities

Population

- Anticipated population increase of 12% by 2017
- Fastest growing age group: 25-40 (32.9%)
- Close ties to Rutgers University - 64.3% of residents with at least a bachelor's
- Population is mobile and prefers eco-friendly transportation options

Diversity

- Nearly 26% of residents are foreign born
- 17.8% of Asian population compared to an 8.3% in NJ
- Ethnic character reflected in the variety of restaurants (Pino's: [the 1st BYOF in the state](#))

Density

- The 3rd densest municipality in Middlesex County, NJ - Rate: 7,729.1 persons/sq. mile

Arts, Sports and Culture

- Numerous classical art studios, music schools and dance studios
- Several art exhibitions
- Various historic sites and strong historical society
- Plenty of open space with parks, natural trails, picnic areas, and playgrounds
- Tennis-basketball-softball-soccer fields

Project Description

Objective:

- Municipalities are here to serve their residents, and public participation in governmental decisions is the key to a sustainable society
- It is also important for municipalities to provide transparency to their residents

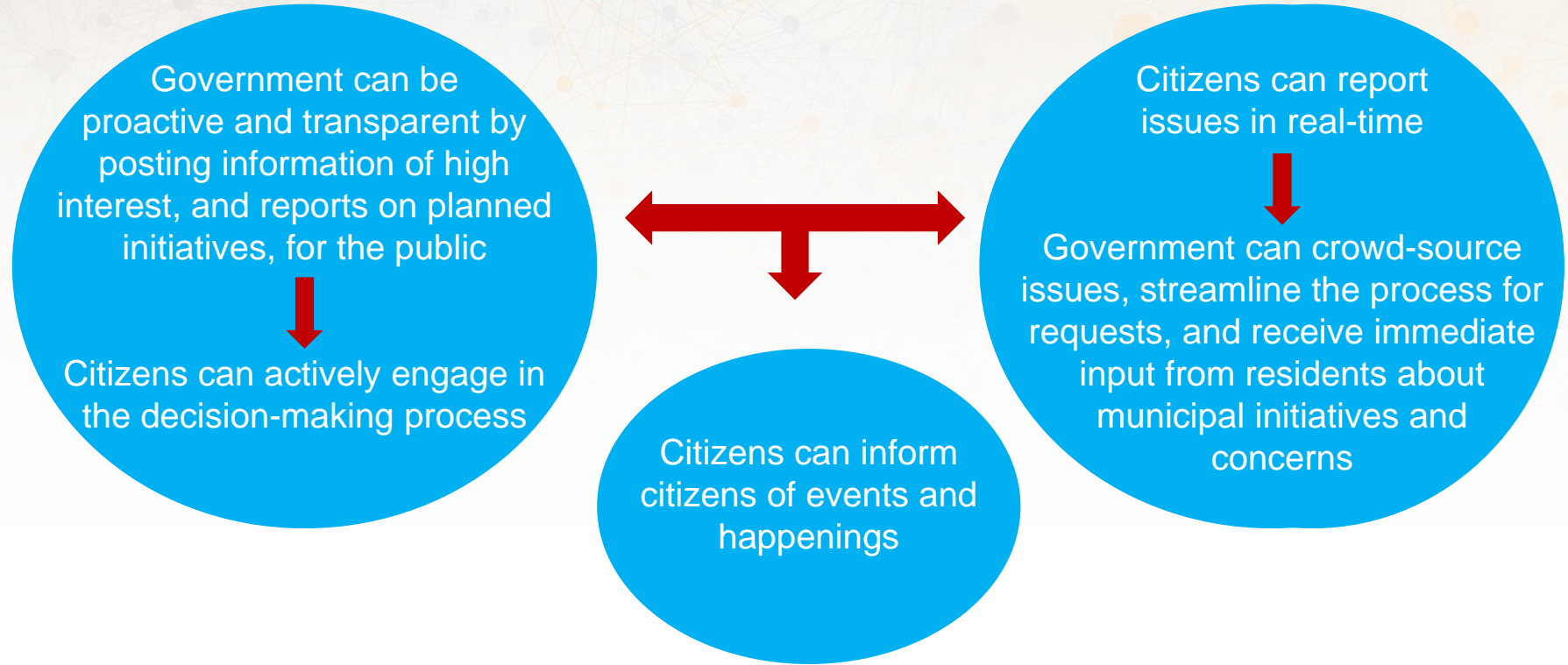
Therefore: Community engagement in the public service process is a win-win for the entire town

Challenge: Towns with a population under 60,000 cannot afford custom apps and in-house smart-community capabilities

The Answer:

- A standard platform, that is cost-effective and easily adapted to local needs
- A 3-way communication
 - **Government to Citizens**
 - **Citizens to Government**
 - **Citizens to Citizens**

The Platform - Change to Process



How it Works



The Platform

- A **multi-platform** (for iOS, Android, and website)
- Dynamic contents
- Feed from **existing social network** platforms
- Support a **reward system** for all responsive parties
- Appoint a **content manager** to publicize development policies, manage requests, and filter citizen news/events submission



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REPORT A CONCERN



Navigation

Through a user-friendly and bug-free interface design

Major features classified as

**Borough News
& Upcoming Events**
(government to citizens)

Issues & Requests
(citizens to government)

Social Network
(government to citizens)

End Goals

- ✓ Deliver a variety of useful functions to serve a town's unique characteristics
 - ✓ Improve QoL metrics for individuals, organizations, and community
 - ✓ Capable of being extended
 - ✓ Access standard, nationally available data sources
 - ✓ Accept locally crowd-sourced data and local official data
 - ✓ Available to smart phone users within the town without complicated logins
-

Major Requirement

Test a variety of capabilities in pilot communities and disseminate those that attract users

Examples

- **Independent Kids & Seniors**-> Encourage walking downtown
- **Yesteryear**-> Access local history info while walking
- **Visualizing a Better Downtown**-> GIS ped. animation + remote sensing-> redevelopment plans, crowdsourced reactions to alternative scenarios
- **Current Conditions**-> Report on air quality, noise, weather, crowdedness, police activity, traffic, hazards

A platform

for citizens, individuals, organizations and the community
improving
quality of life, public health, safety, civic pride, communication,
commercial revitalization, local employment and property values

Key Performance Indicators

Examples for specific apps

- 20% greater awareness of local history in a downtown survey
 - 25% fewer negative public comments at redevelopment agency meetings
 - 30% more economic activity downtown during good weather
-

Framework Uptake should be measured in towns per year adopting the framework, with a year 3 target of 10 towns and a year 5 target of 100 towns

Framework Cost-Effectiveness should be measured relative to what big cities pay for their custom capabilities (cheaper vs more expensive on a per capita basis)

Interoperability - Replicability - Scalability

- Standard structure and ontology to enable widespread and cost-effective adoption
- Incorporate de facto standards (i.e. Census, GIS, GoogleMaps)
- Support standard metrics of well-being as they emerge
- **Analytics:** based on sensor data and software -> inherently scalable, sustainable and able to be replicated
- Towns should be able to adopt the framework easily



Not yet determined if it can be locally hosted / if it needs central servers and a subscription arrangement

Impact

- BRING residents back to the streets and shops of their own downtowns
- ATTRACT new downtown developers and businesses
- IMPROVE the effectiveness of main street programs for commercial revitalization and civic pride
- INCREASE local service employment and local property values, providing relief to local taxpayers
- IMPROVE public health & quality of life

Funding

- Initially grant-funded
- Towns-business improvement districts-developers to pay fees
- for creating new features
- Funding development with advertising revenue



Thank You

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