SBStat | Neighborhood Stat

2021 Quarter 1 April 6, 2021

City of South Bend

Ground rules for SB Stat Meetings

1. No stupid questions

Use this space to ask and address difficult questions safely

2. Data-driven decision making

Strive to make decisions based on whatever most recent data is available

3. Relentless follow-up

Identify clear action items and owners after each meeting

4. A bias towards action

Continuously seek to improve: our data, our ways of working, etc.

Good questions to be asking…

- What are the next steps on this project? Who's going to own it?
- Do we have the data we need to make a good decision? If not, how can we get that data?
- Is there a strategy or hypothesis on this issue we want to test during the next quarter?

Today's Agenda

I. Project updates from previous Stat meeting

II. Data overview from previous Stat meeting

- Community Survey Geographic Breakdown
- Economy and construction data
- Quarterly Statistics Overview

III. Deep-dive analysis & discussion

- 2021 Infrastructure Planning & Management
- Strategic Communications for 'Rebuilding Our Streets' Plan

IV. Taking action

- Identifying clear action items and owners

V. Celebrating our values

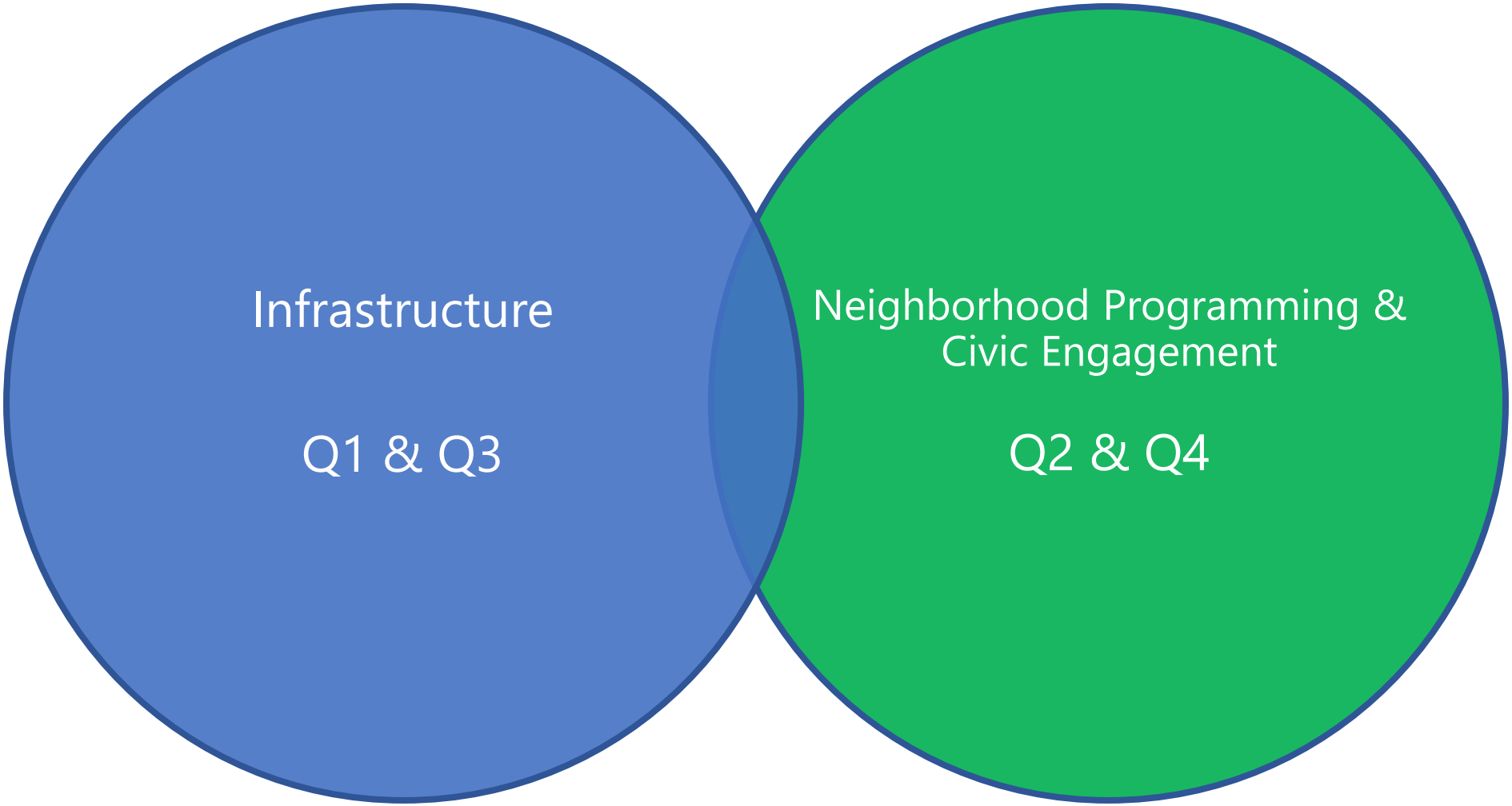
Neighborhood Stat Portfolio Summary

Status of SBStat projects in the queue for 2021

Project	Brief Description	Status
Community Survey Geographic Analysis	Breaking down community survey data to understand how perceptions vary across the City	
2021 Infrastructure Planning & Management	An overview of 2021 infrastructure projects and goals	
Rebuilding our Streets Plan – Strategic Communications	Communicating progress towards goals established in the City's Rebuilding Our Streets plan	
Street Dashboard (Phase II): High-level PASER Tracking	A public dashboard that tracks progress towards high-level PASER goals	
Project Management Dashboard	A public dashboard that serves as a one-stop shop for information on construction projects	

Legend Project on schedule Project delayed Project cancelled Project under consideration

2021 Neighborhood Stat



Highlights from this past quarter

Project updates from previous Stat meetings

Project Update – Rebuilding Our Streets Plan

- The City shared an initial draft with the Council and community in February 2021
- Press conference held on February 2 at intersection of Dundee Street and Ford Street on the City's west side

City of South Bend releases draft plan to rebuild streets

REBUILDING OUR STREETS PLAN

OUR GOAL

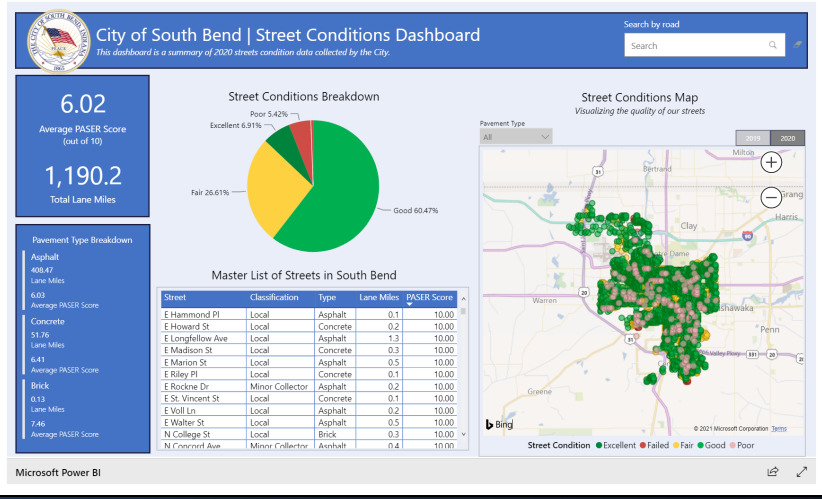
The Rebuilding Our Streets Plan lays out the City's shor
next 10 years. We believe these goals are both ambitiou
satisfaction with essential local infrastructure.

The first target for the City will be to address all "faile
streets and segments typically require full reconstructi
use the limited funds available to invest in streets that c
complete reconstruction. Unfortunately, this has result
changing our approach. In this plan, we aim to tackle the
from dipping into these conditions in the future.

The second target for the City is to continually improv
years. Pavement Surface Evaluation and Rating (PASER
compare street segments. The City has been using PASI
help make decisions about where to invest repair and re

STREETS CONDITIONS DASHBOARD

The Street Conditions dashboard is designed for elected officials and South Bend residents to look up the quality of the City's roads. The City of South Bend uses the Pavement Surface Evaluation and Rating (PASER) System developed by the University of Wisconsin-Madison to evaluate road conditions. This dashboard was developed in response to the City's Community Survey results, in which residents highlighted improving roads as a top priority for the City.



Communications Impact – Rebuilding Our Streets

Insights from social media

City shares initial draft to improve City streets

879
social media interactions

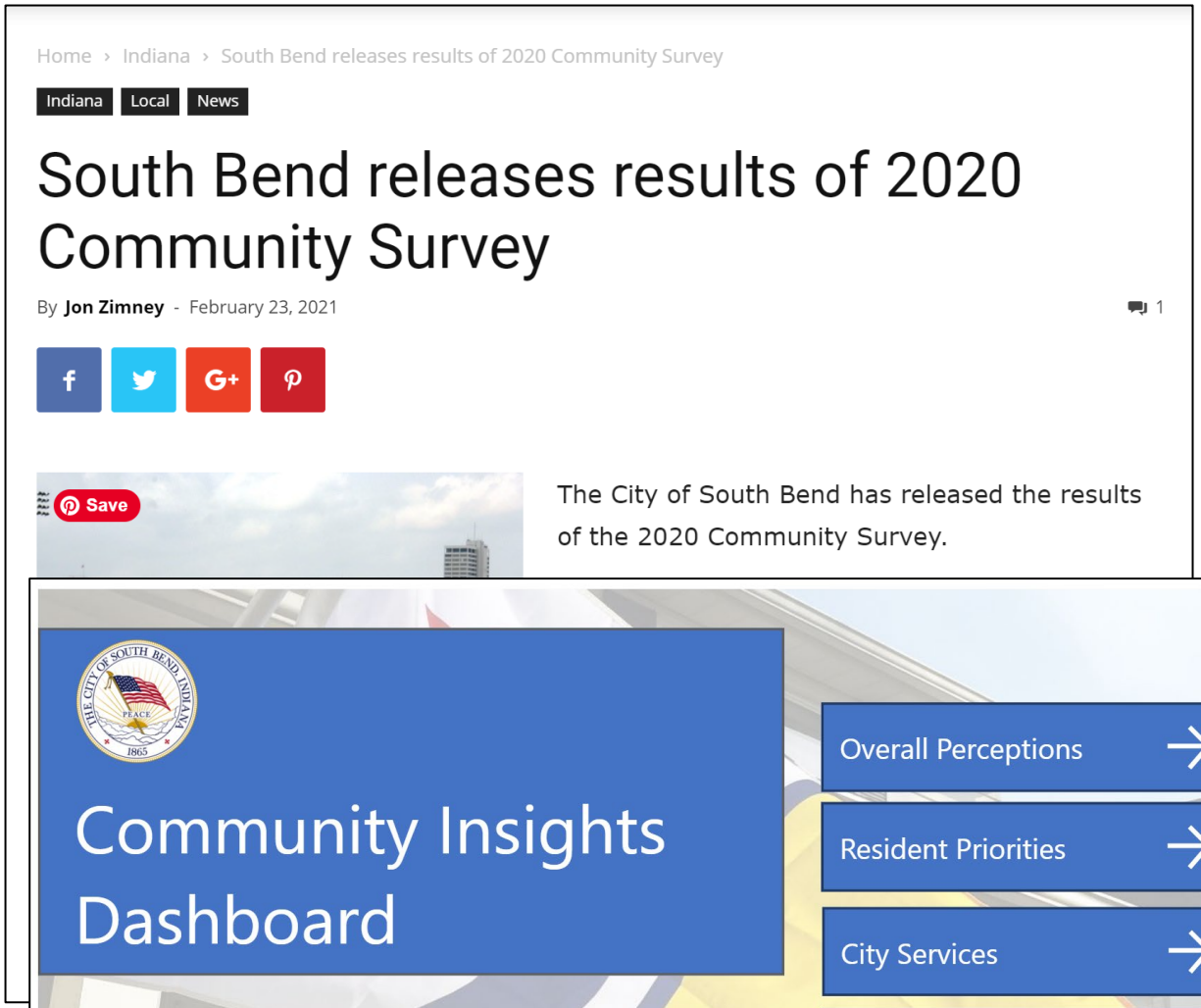
Rebuilding Our Streets announcement

3,482
social media interactions

Former mayor confirmed to Cabinet post

Project Update 2 - 2020 Community Survey

- The City shared the results of 2020 Community Survey with the Council and Community on February 23, 2021
- Denise Riedl provided Council an overview of the results and dashboard at the March 8 Council Meeting
- Department head memos are currently in development by Business Analytics Team



Data overview from previous Stat meeting

Summarizing data points and statistics related to core operations since the last Stat meeting

Community Survey – Geographic Analysis

- Background / Context
- Available data & analysis
- Discussion

Background + Context

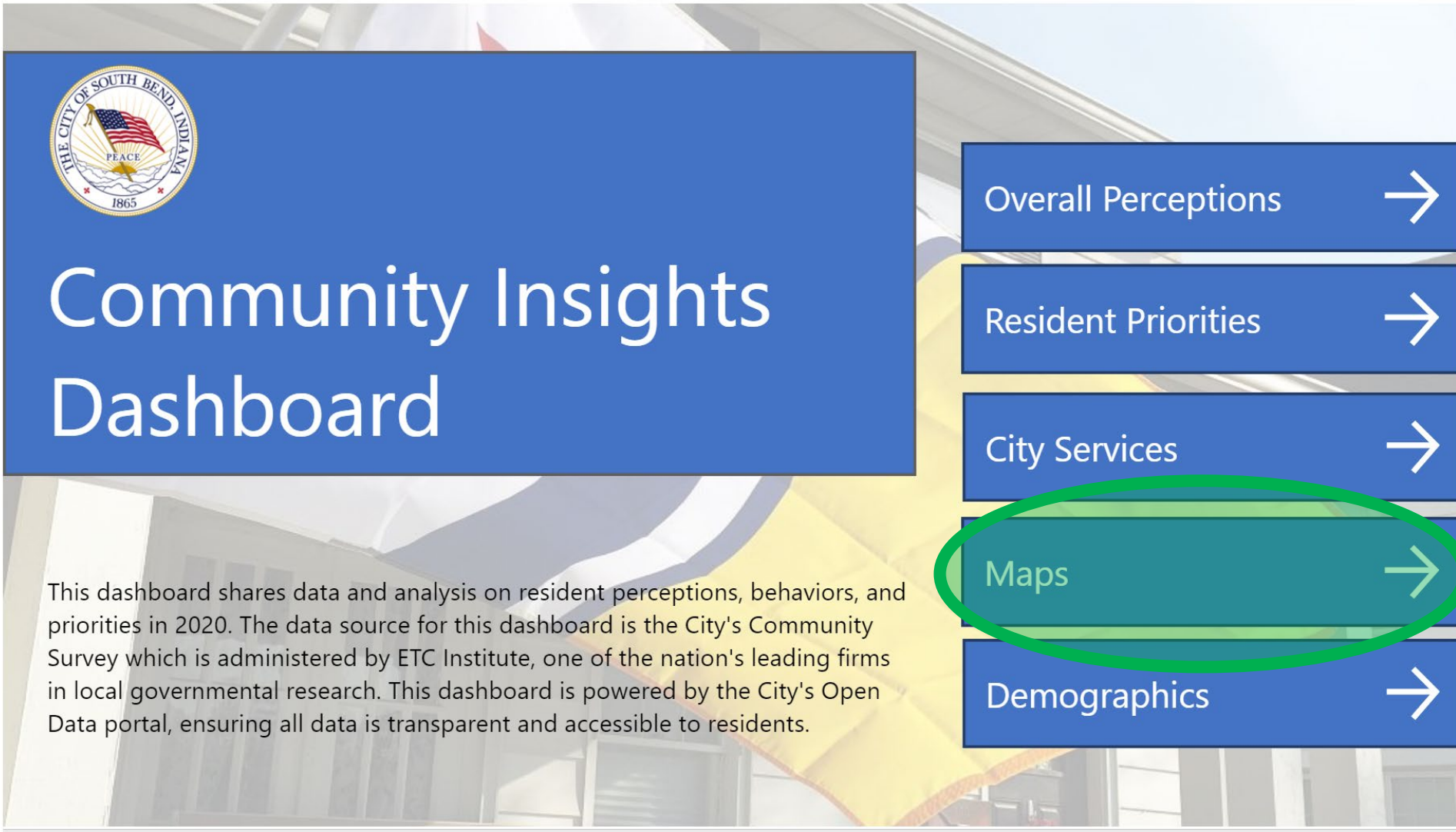
Purpose

To gather input from residents on City services and their priorities to inform decision-making and strategic investment.

Background

- Survey completed during July/August 2020
- Survey data is compiled and analyzed by ETC Institute, one of the nation's leading firms in the field of local governmental research
- Surveys, cover letter, and prepaid envelops sent by mail
  - Options to complete online and in Spanish

Breaking down the survey data geographically across the City

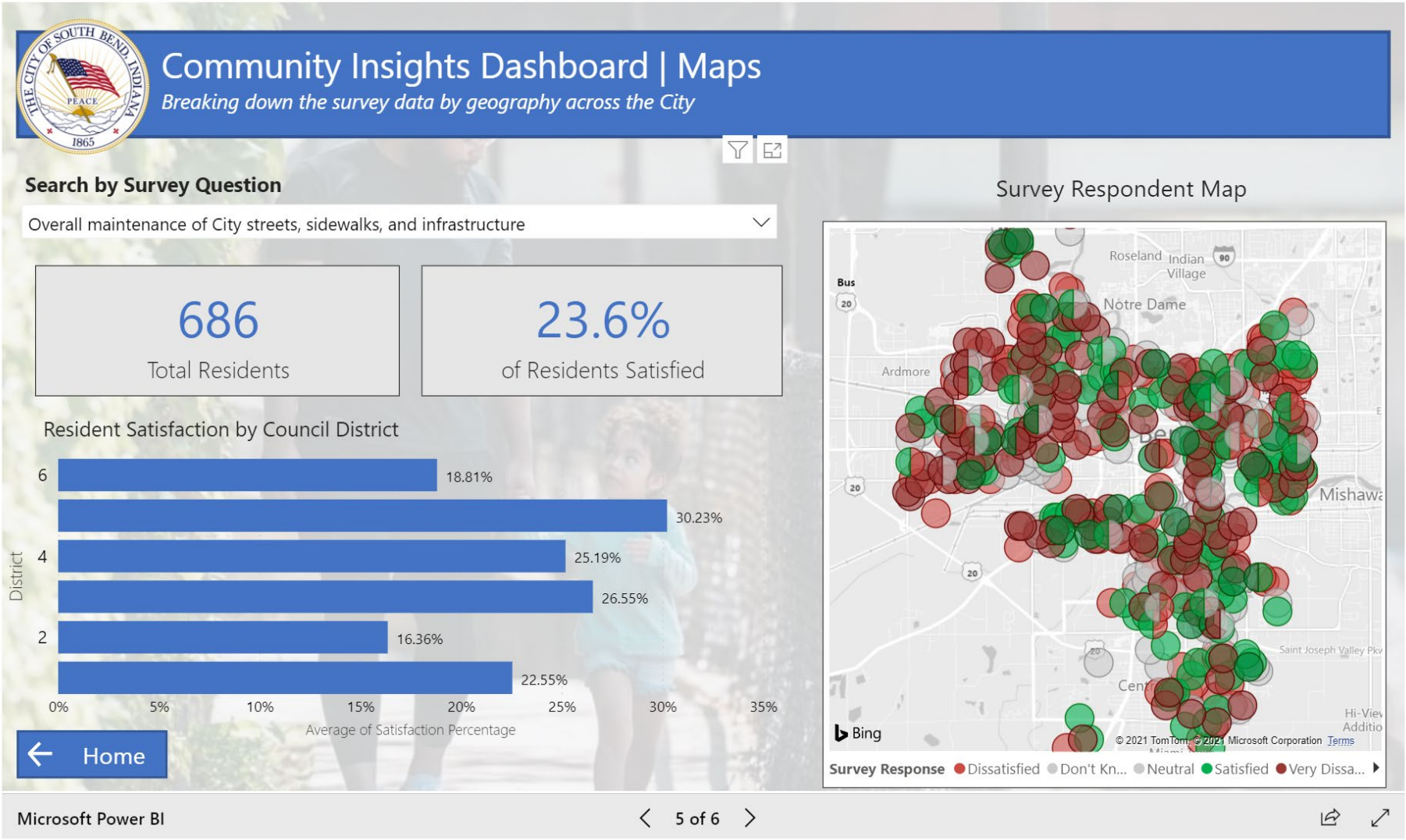


Questions to be thinking about…

- What trends or patterns do you see across the City when thinking about Council Districts?
- What do you find surprising or unexpected?
- What other research questions does this spark for you? What should we look more deeply into?

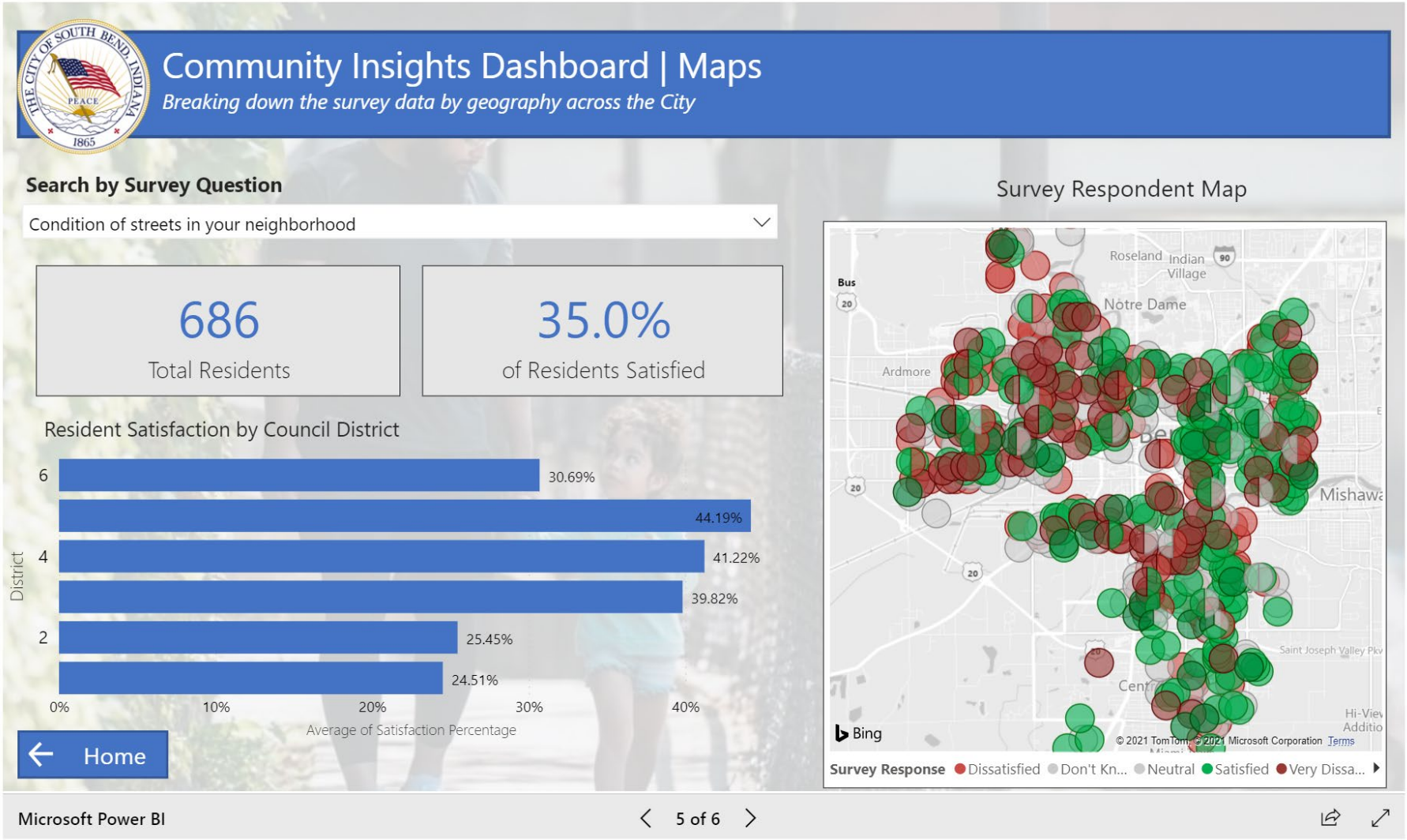
Satisfaction Comparison by Question

Overall maintenance of City streets, sidewalks, infrastructure



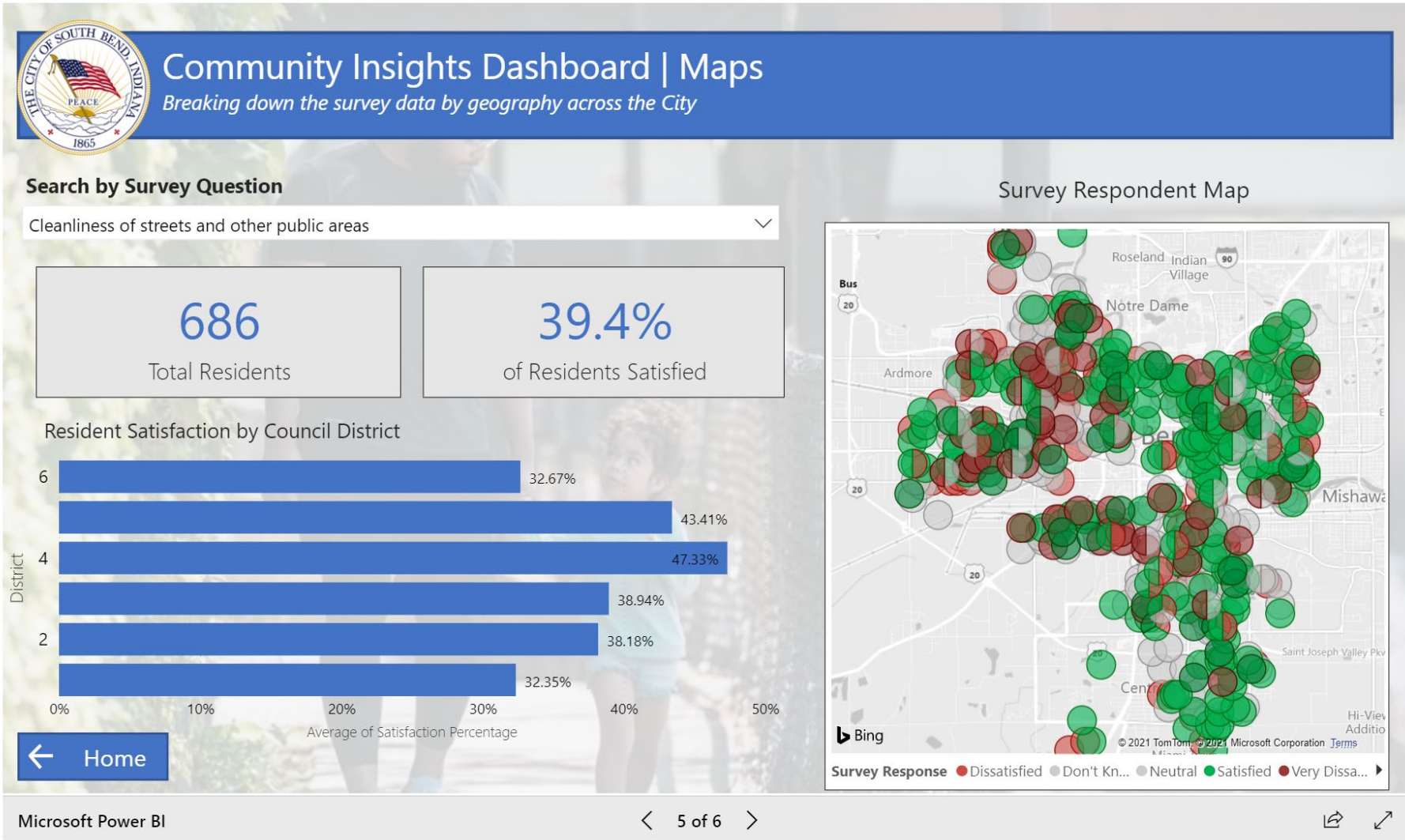
Satisfaction Comparison by Question

Condition of streets in your neighborhood



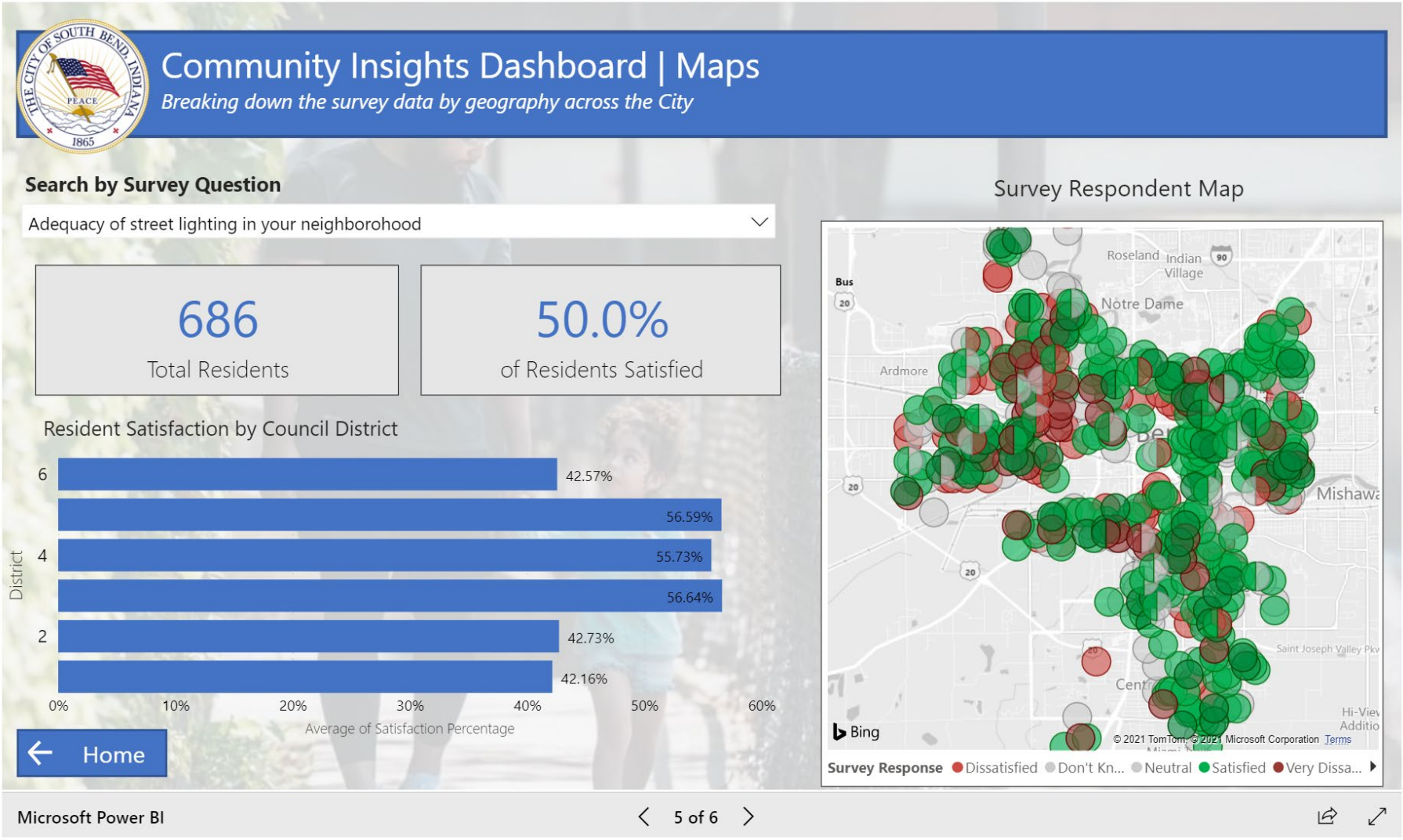
Satisfaction Comparison by Question

Cleanliness of streets and other public areas



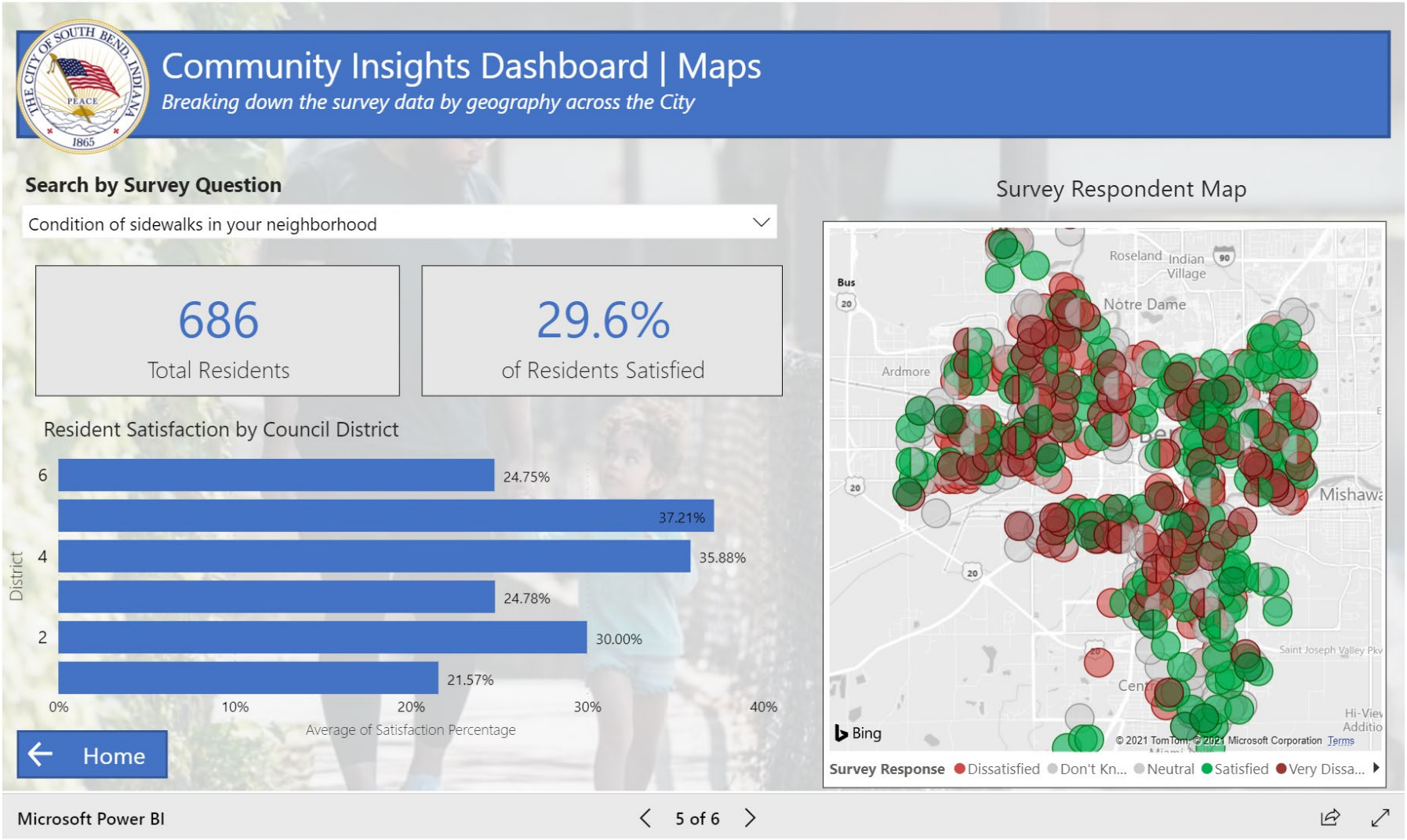
Satisfaction Comparison by Question

Adequacy of Street Lighting



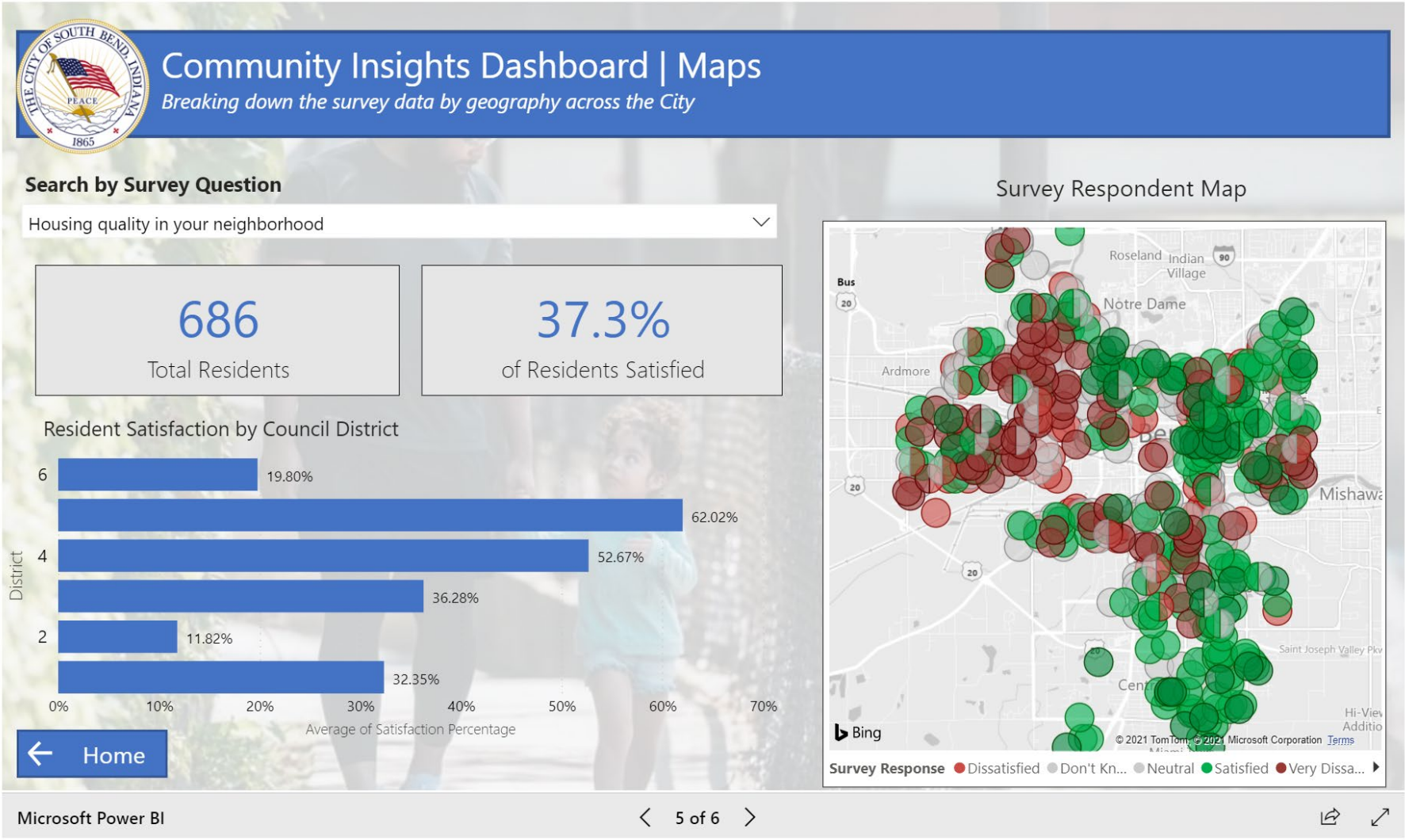
Satisfaction Comparison by Question

Condition of sidewalks in your neighborhood



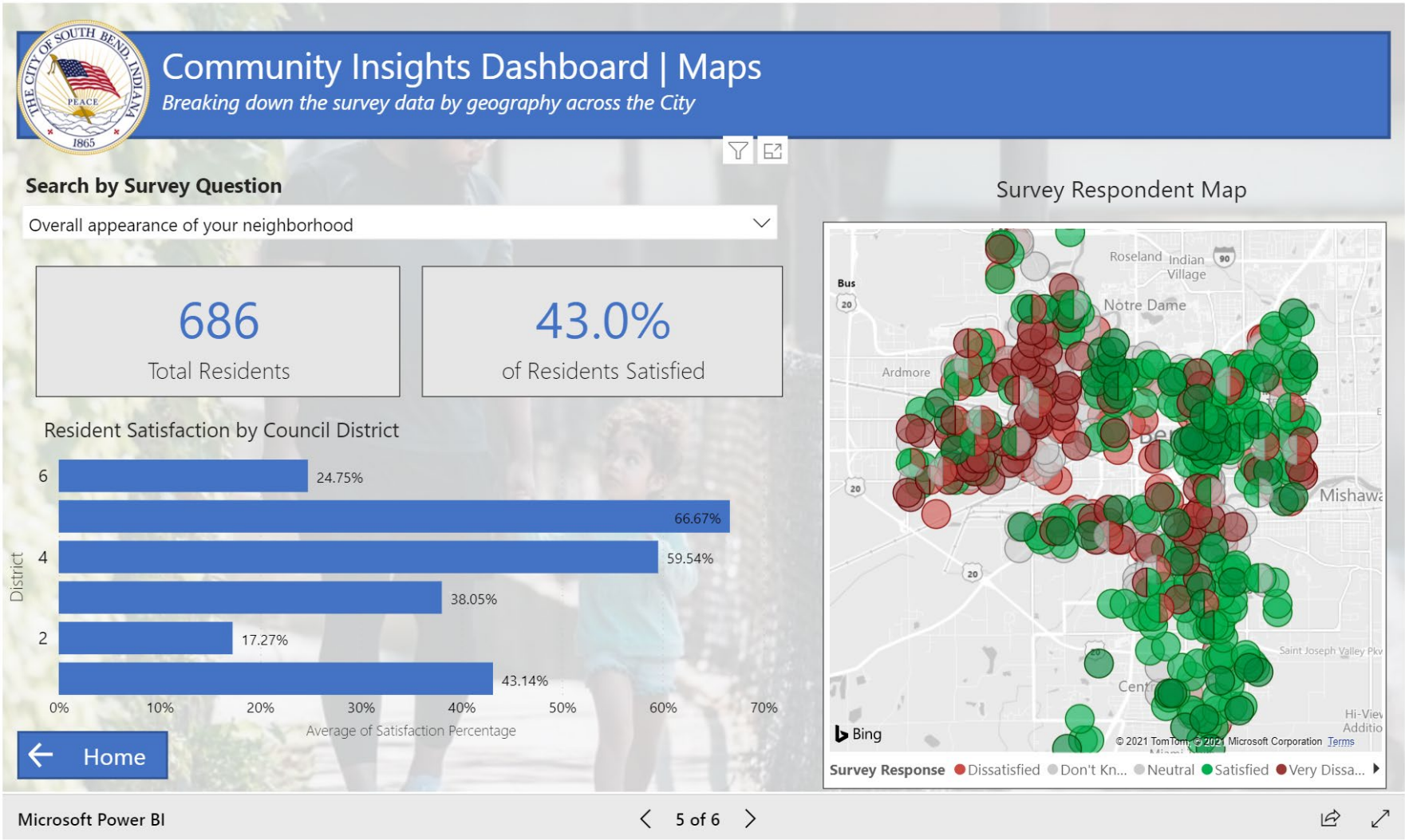
Satisfaction Comparison by Question

Housing quality in your neighborhood



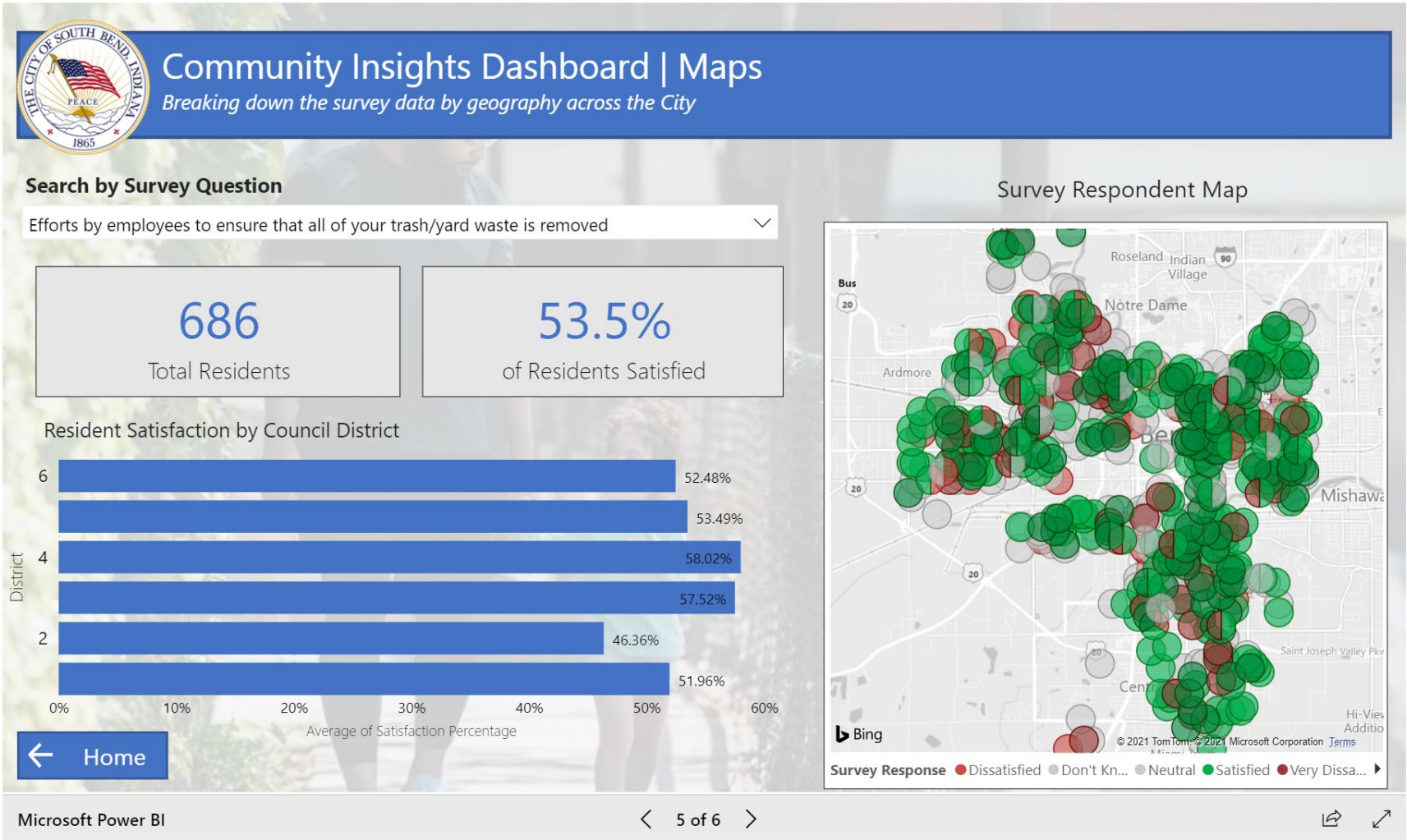
Satisfaction Comparison by Question

Overall appearance of your neighborhood



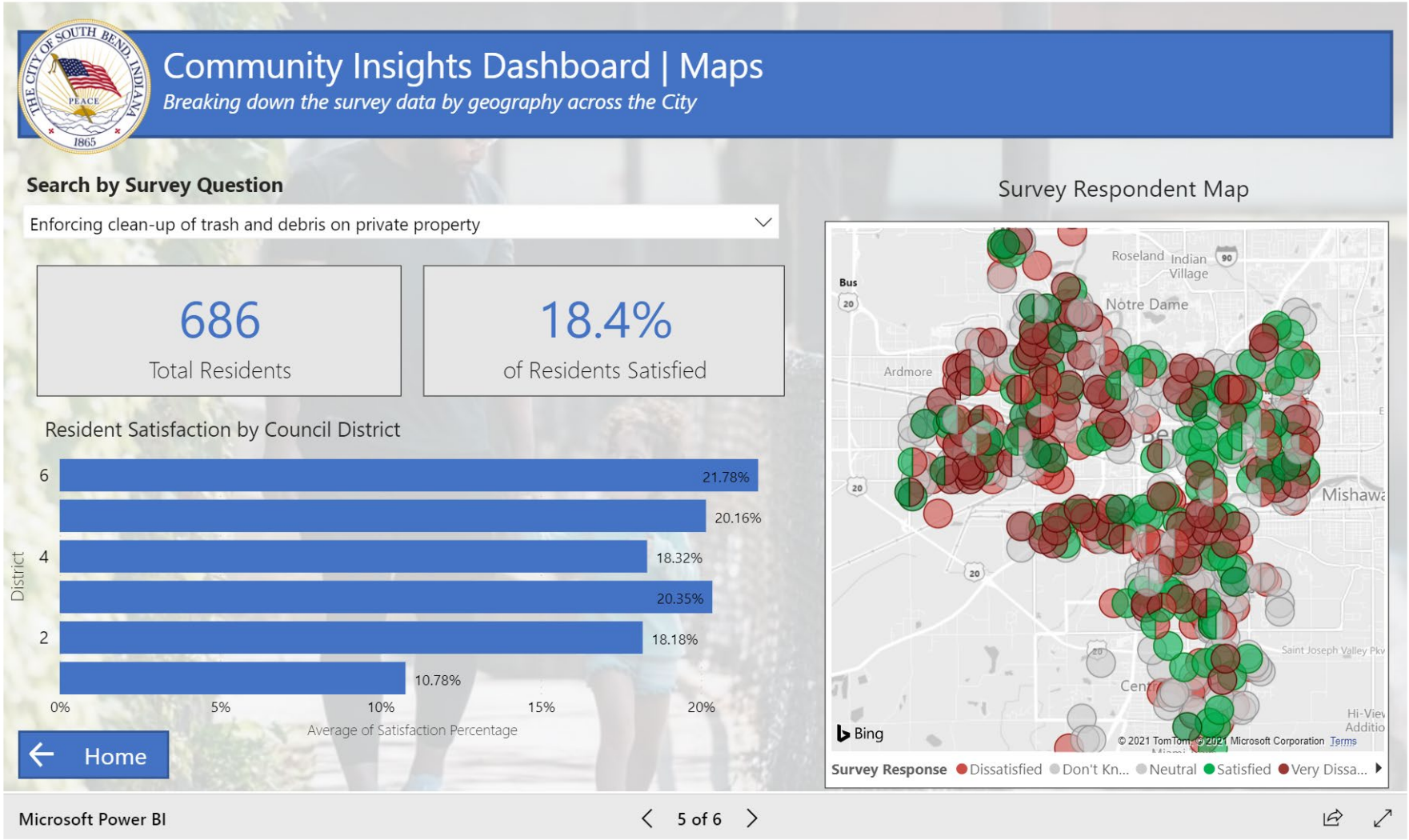
Satisfaction Comparison by Question

Efforts by employees to ensure that all of your trash/yard waste is removed



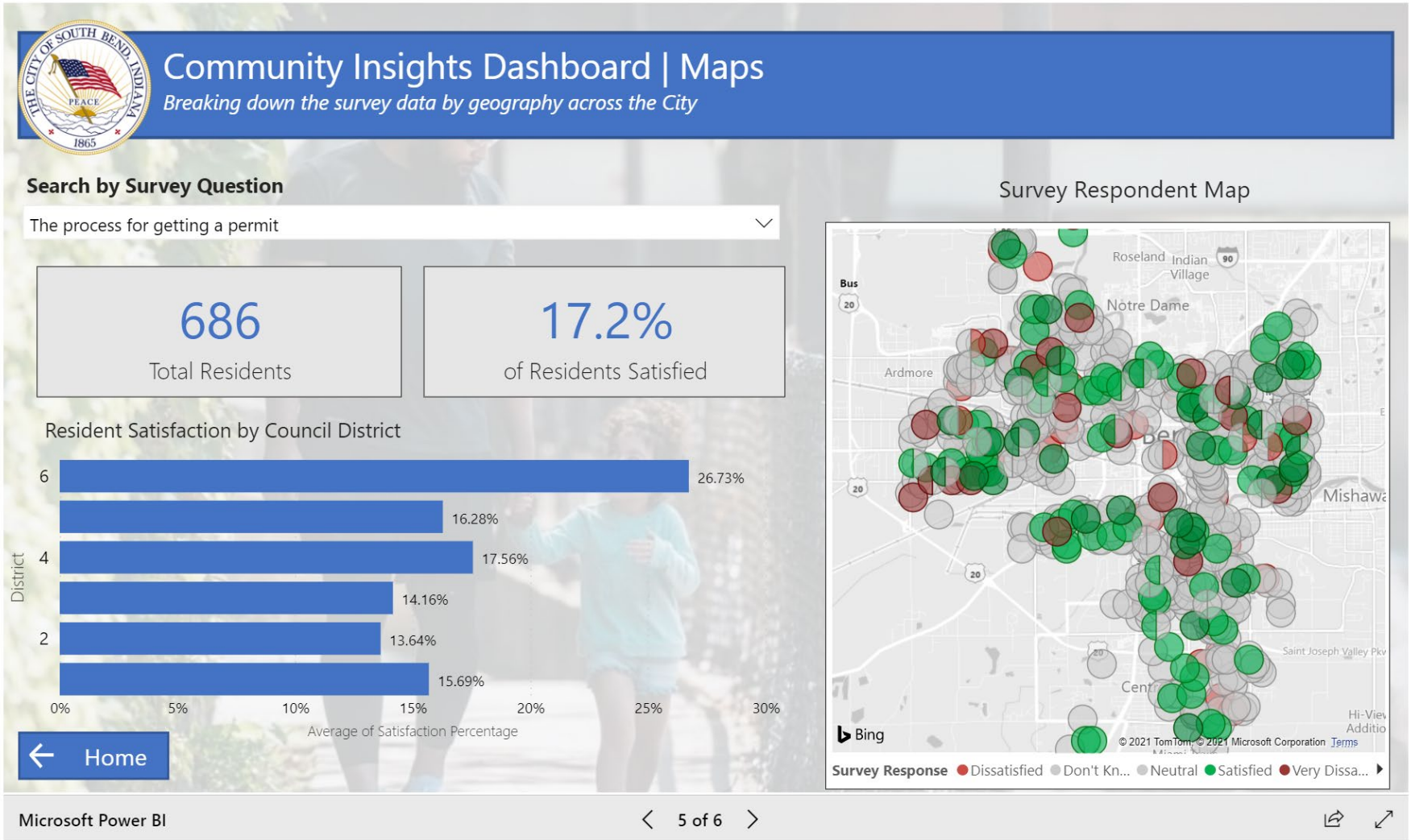
Satisfaction Comparison by Question

Enforcing clean-up of trash and debris on private property



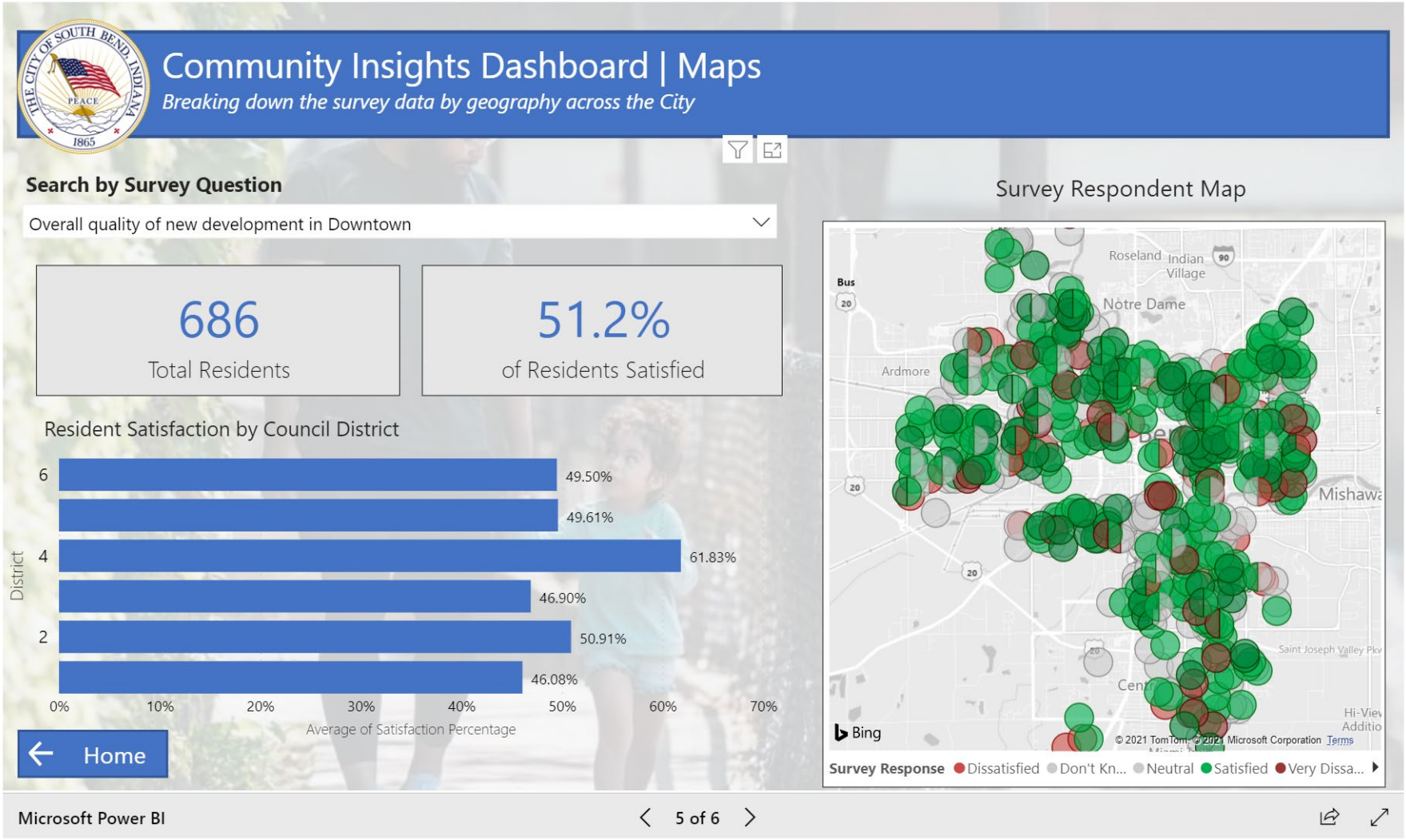
Satisfaction Comparison by Question

The process for getting a permit



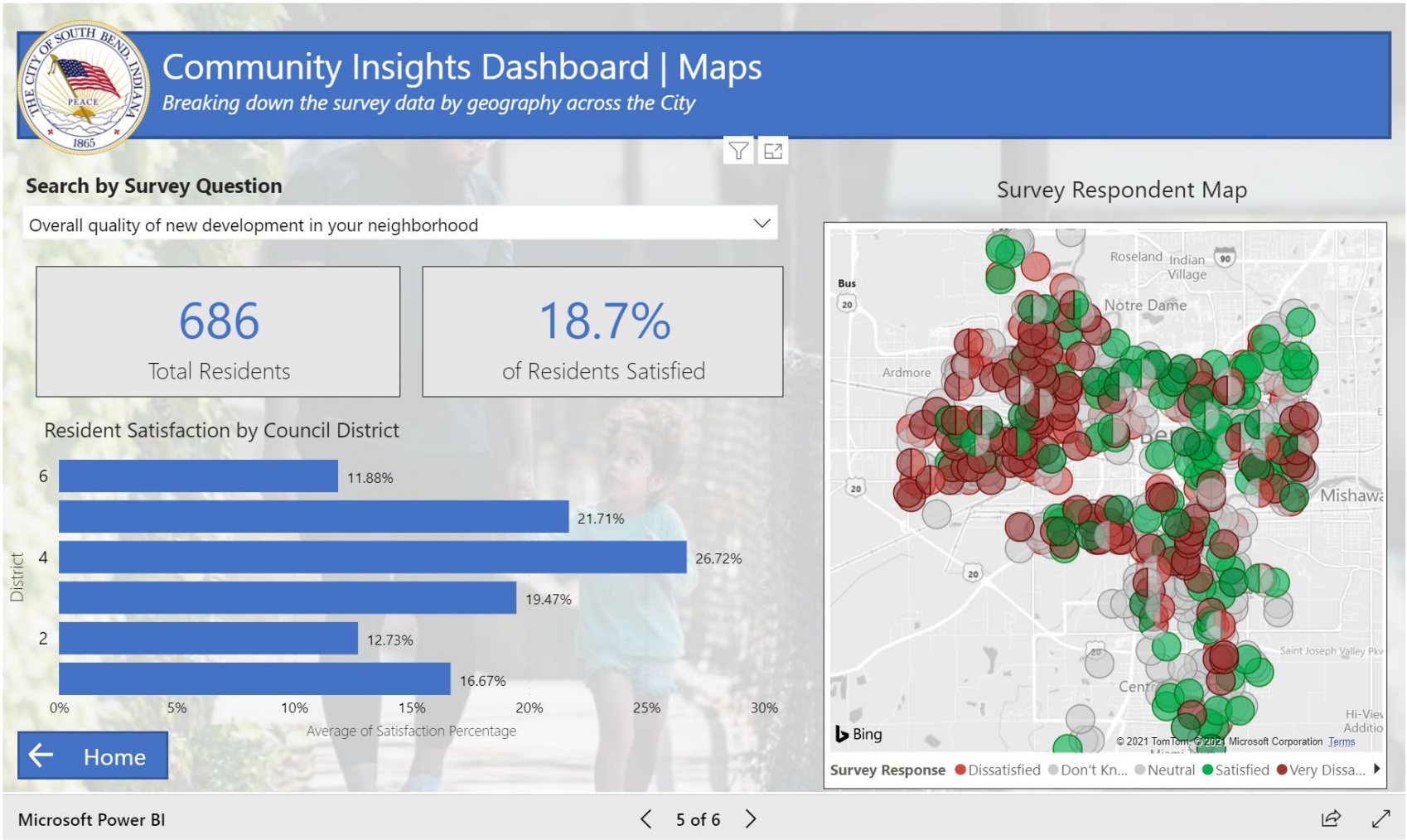
Satisfaction Comparison by Question

Quality of new development downtown



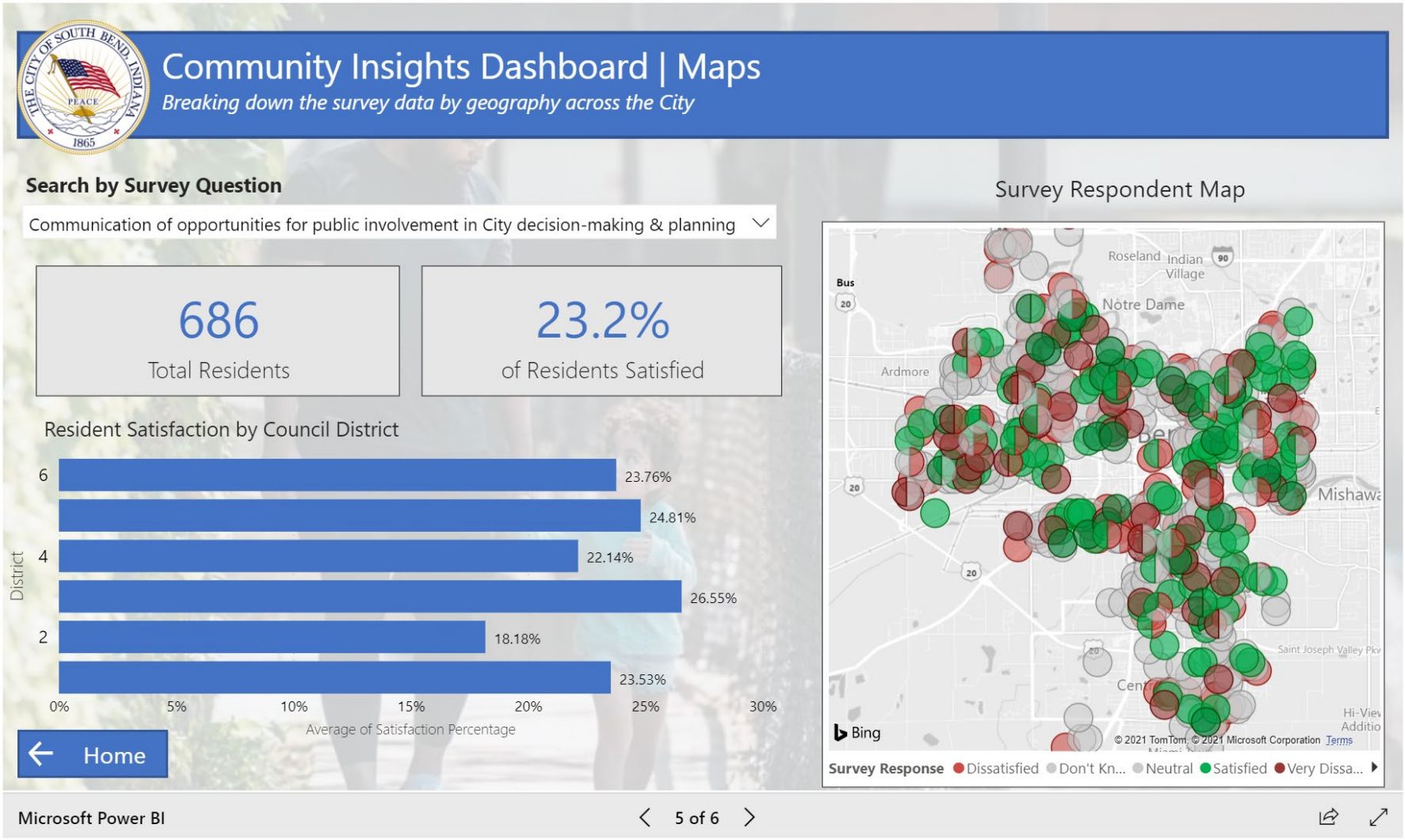
Satisfaction Comparison by Question

Overall quality of new development in your neighborhood



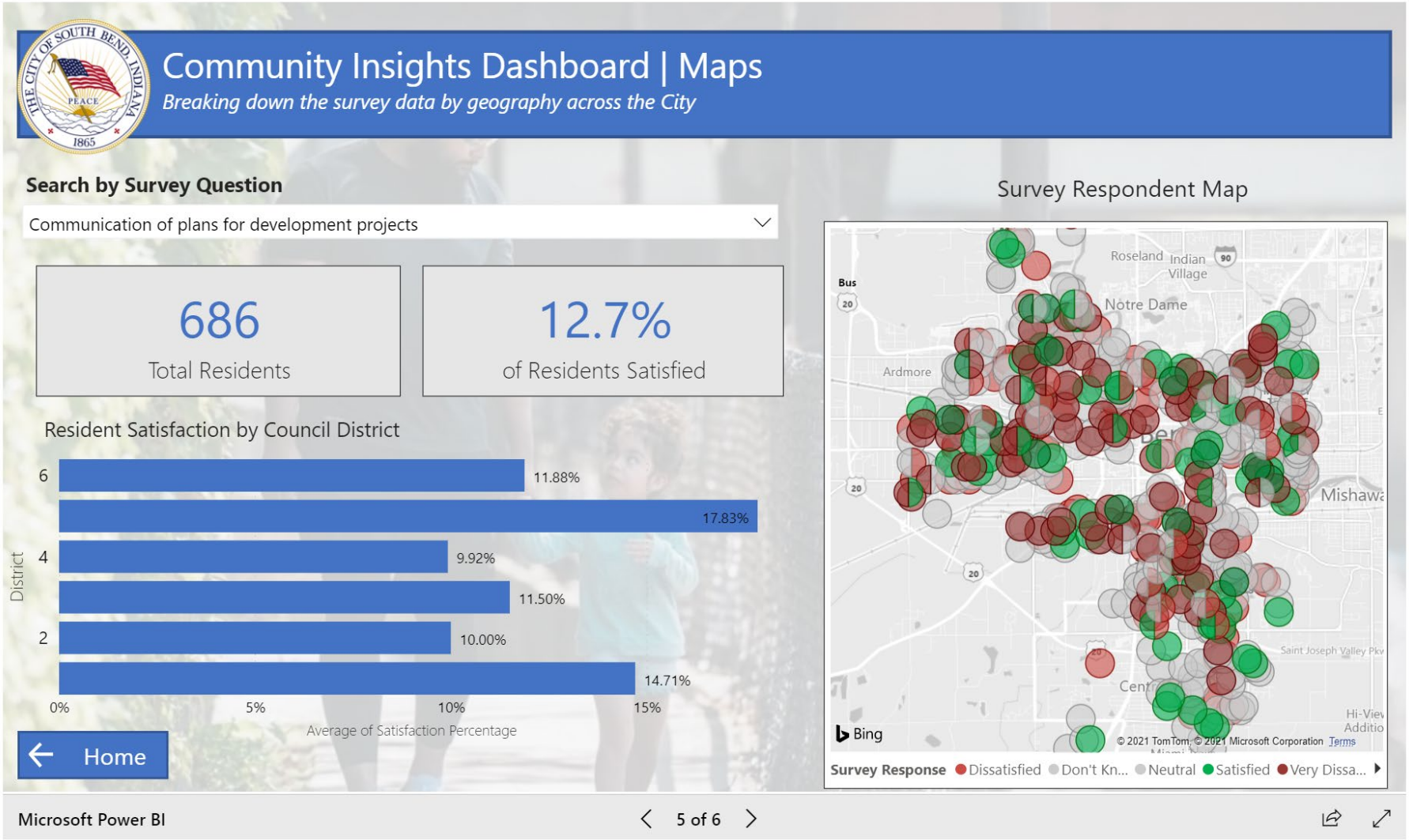
Satisfaction Comparison by Question

Communication of opportunities for public involvement in City decision-making & planning



Satisfaction Comparison by Question

Communication of plans for development projects



Key Influencers Visual

Using machine learning to understand what factors drive resident satisfaction

Discussion questions before closing out the topic

- General reactions or thoughts on the survey results broken down by geography?
  - Did this align with what you may have expected?
- What other research questions do you have? What should we look more deeply into?

Economy & Construction Data Overview

- Local Economy
- National Construction Outlook

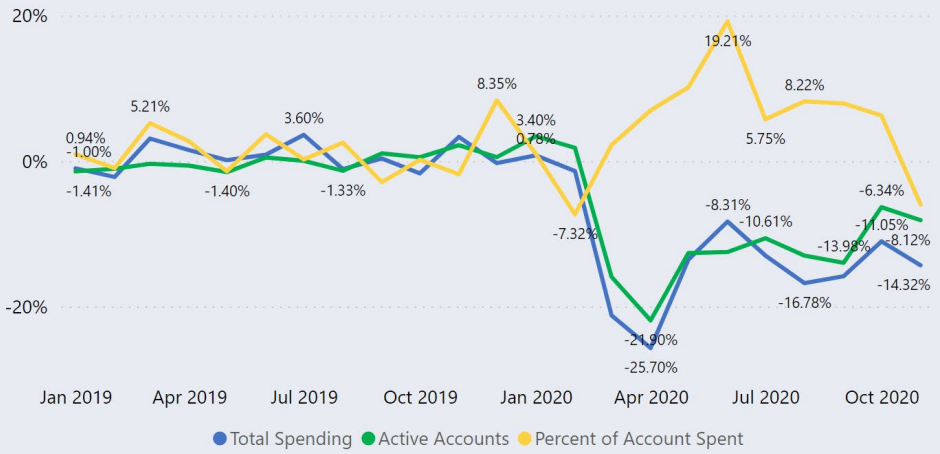
South Bend Local Economy Dashboard

A dashboard on local economy spending and trends

Search by Year: All

South Bend Financial Indicators

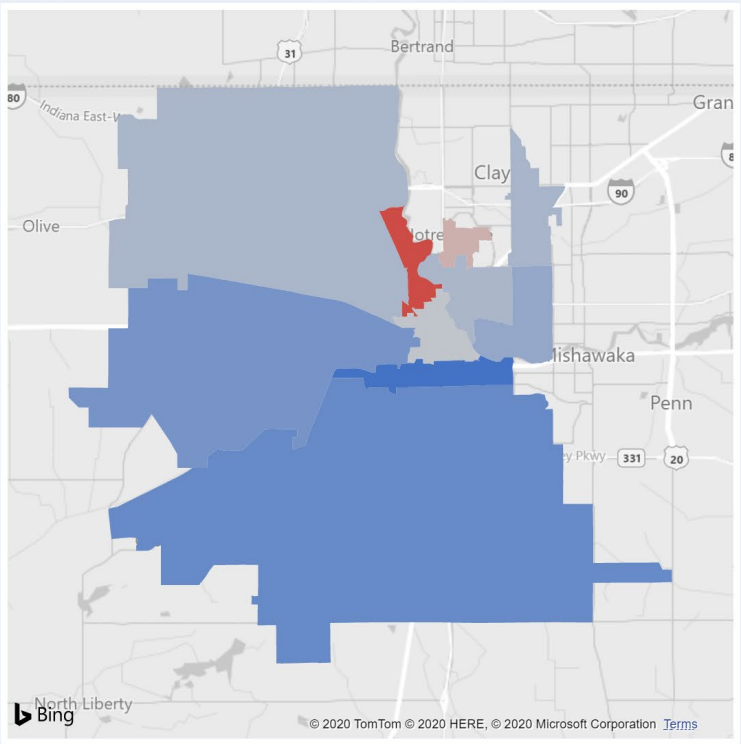
Year over Year Change



-5.73%	-4.76%	3.08%
Total Spending Year-over-Year Change	Active Accounts in Area Year-over-Year Change	Percent of Account Spent Year-over-Year Change

Retail Spending in South Bend

Year over Year Change



A lookback at the local economy in 2020

Accommodation & Food Service was hit hardest

- South Bend MSA's accommodation & food services GDP is expected to shrink by 7.7% between 2019Q4 and 2020Q4. This compares with a 8.1% fall across the US and 7.4% in Indiana.
- South Bend MSA's accommodation & food services employment is expected to shrink by 11.6% (2,000 jobs) over the same period. This compares with a 11.7% fall across the US and 11.4% in Indiana.

In South Bend, low-skill jobs are expected to account for 78% of total job losses to 2020Q2

- Nonwhite population at higher risk of job loss

In South Bend nearly 11,000 households are at risk of falling below the living wage threshold due to job losses during this downturn

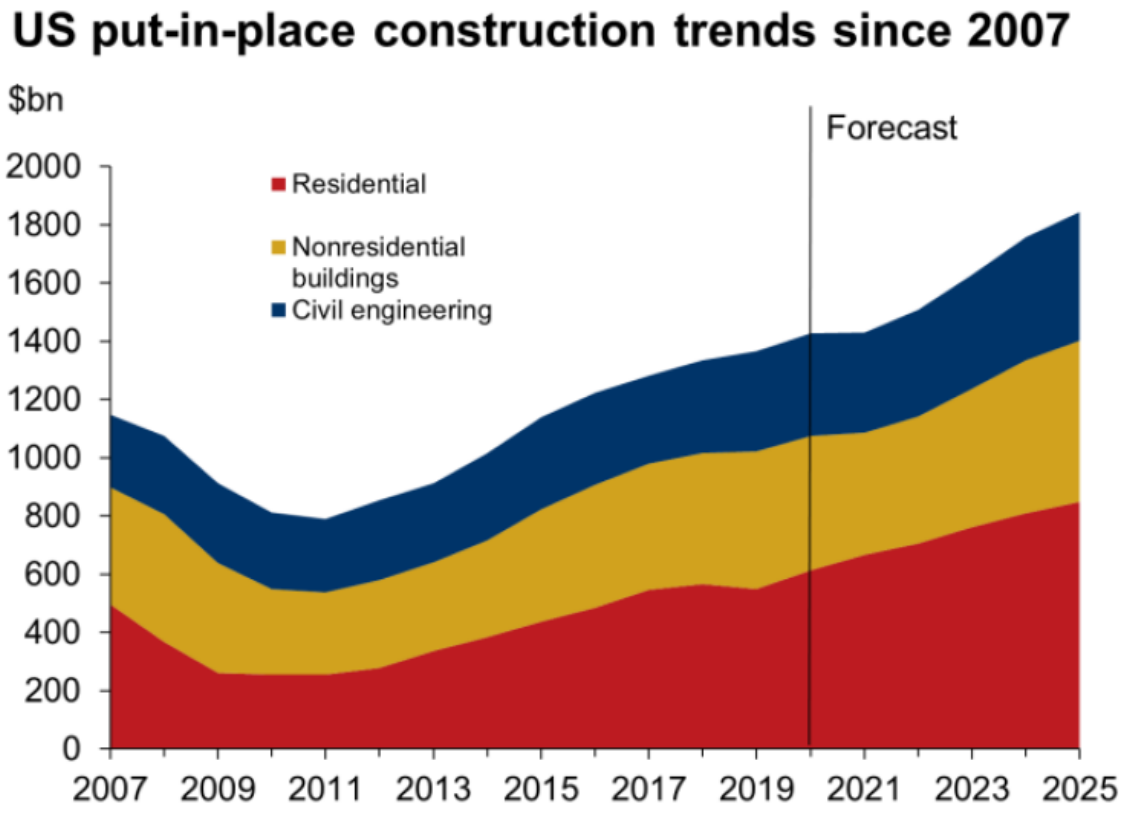
In St. Joseph County, unemployment peaked in April of 2020 at 20.4%; as of January 2021 was at 5.6%

- As a comparison, unemployment was 3-4% throughout 2019 and 10-13% throughout 2009.
- Additional burdens of childcare and health interacting with ability to work in 2020-2021

Source: Oxford Economics

US Construction Overview & Forecast

- Investment at home
  - The residential segment was the major driver of growth last year across the country; on an annual basis, residential construction spending increased 11% last year
  - Attributed to home renovations, relocations
- Office construction declines
  - It is highly likely that more flexible working arrangements will remain in place long after the pandemic is over
  - We expect further declines in office construction spending through 2022
- Upside risk to infrastructure
  - The infrastructure segment is set to grow 4.7% on average over the next five years, faster than its rate over the previous decade. The largest segment – power generation – is set to experience the fastest growth, with changes in policy offering additional upside risk.



Source: Oxford Economics

Quarterly Statistics- Neighborhood Stat

- Economy & Jobs
- Public Health
- Programmatic Data

New in 2021: Quarterly Statisitics Review

What's the Quarterly Statistics Review?

- New this year across all SB Stat Focus Areas is a review of recent data and statistics relevant to the Stat project portfolio.
- These reviews will occur in every Stat meeting to help the audience be data-driven in their thinking and ensure data important to residents stay top of mind.

How does this data help the City manage performance?

- Revisiting data frequently across departments helps the City develop common language for asking questions and working together.
- For Neighborhood Stat, this data will help City Leadership understand neighborhood equity and inform how city actions may affect outcomes.

March 2020 Survey Results

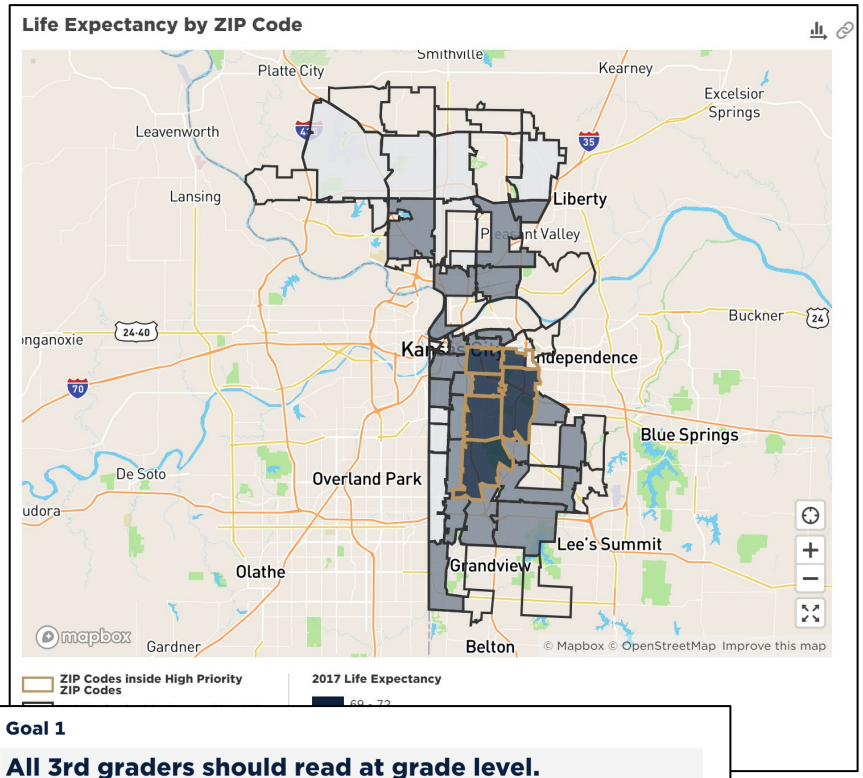
Survey Responses

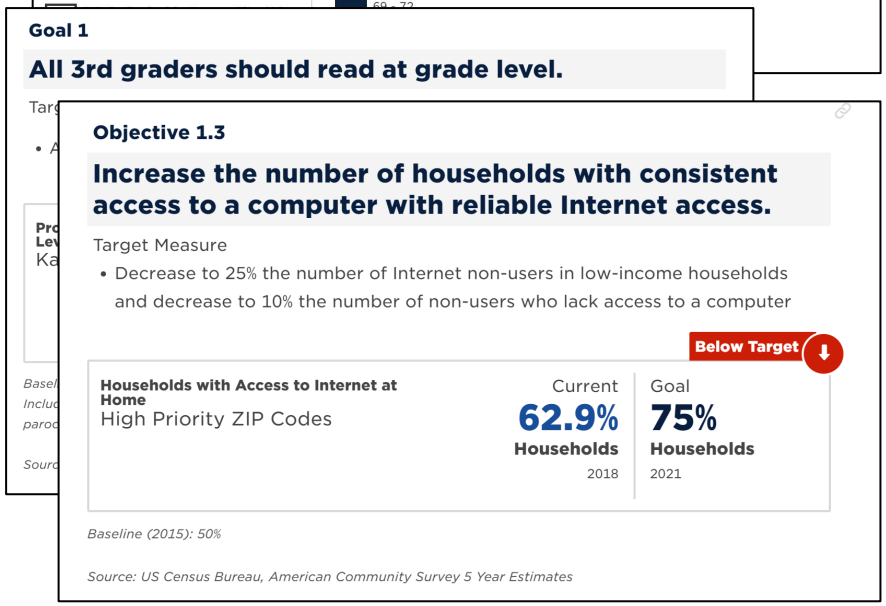
3. Please provide a brief explanation of the way(s) you could benefit from utilizing a neighborhood health indicator map in your work (e.g. specific projects, big picture ideas).

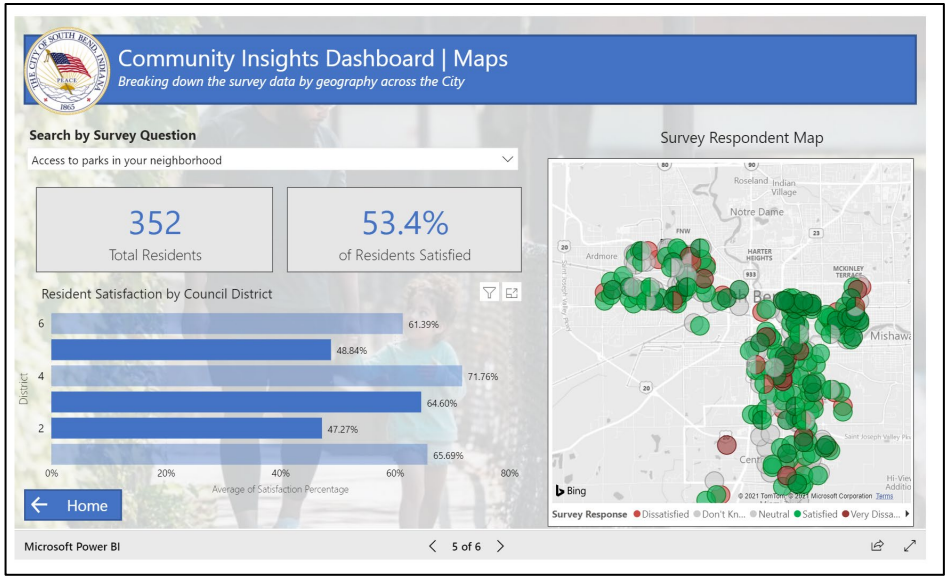
- Understand challenges facing specific neighborhoods
- Identify target areas for programs/services
- Track long-term impact of programs/services
- Provide residents with a way to see changes in City neighborhoods over time
- Inform neighborhood planning, policy making, outreach, budget prioritization, and local/national partnerships
- Ensure equitable service delivery
- Strengthen neighborhood connections and pride

Existing Use Cases – Community Indicators

- Public Health
- Education
- Income
- Resident Perceptions
- Housing Cost

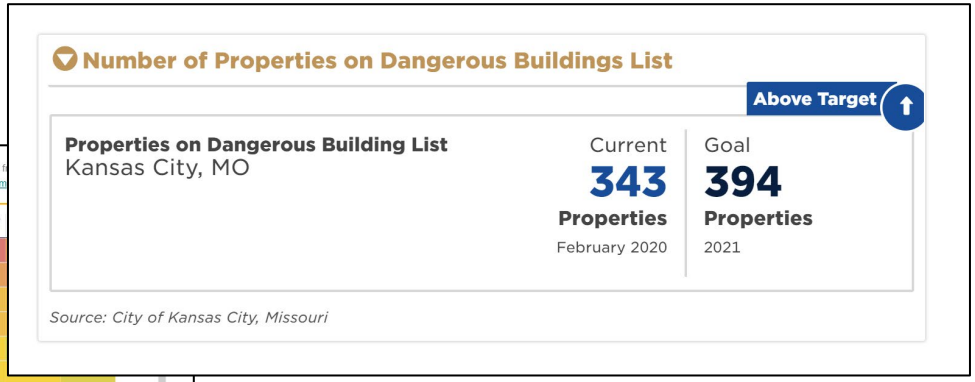






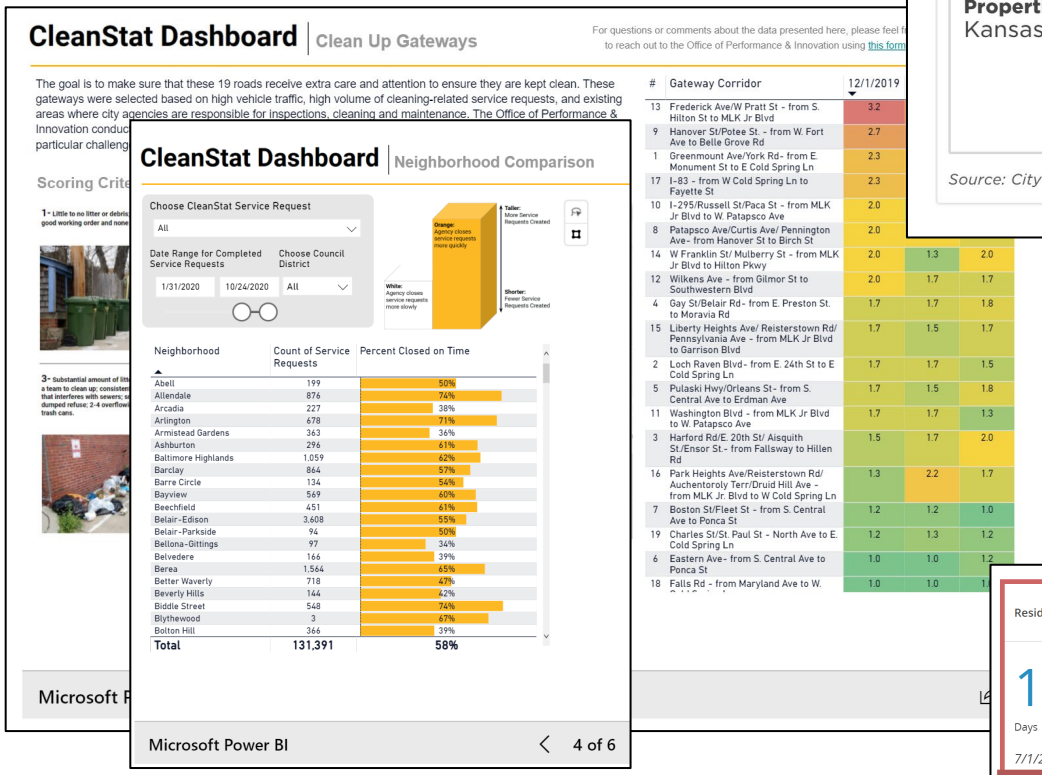
Existing Use Cases – Program Data

Community Health Dashboard
Kansas City, MO



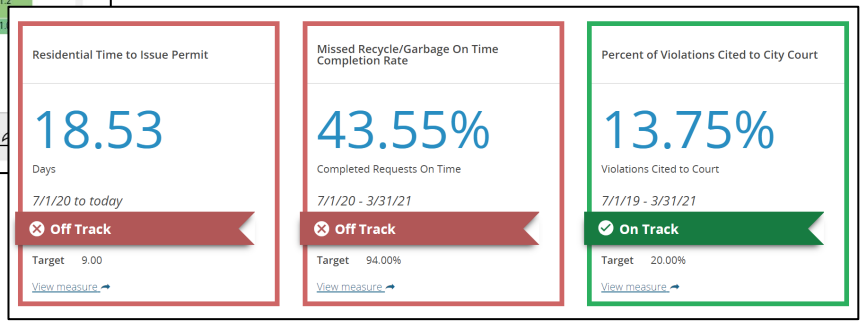
URL: https://dashboards.mysidewalk.com/kansas-city-mo-chip-dashboard/the-story

CleanStat Dashboard
Baltimore, MD



URL: https://www.baltopi.com/cleanstat#:~:text=CleanStat%20is%20a%20CitiStat%20initiative,and%20other%20illegal%20dumping%20issues.

Chattadata
Chattanooga, TN



URL: https://internal.chattadata.org/stories/s/rvkz-7xbn

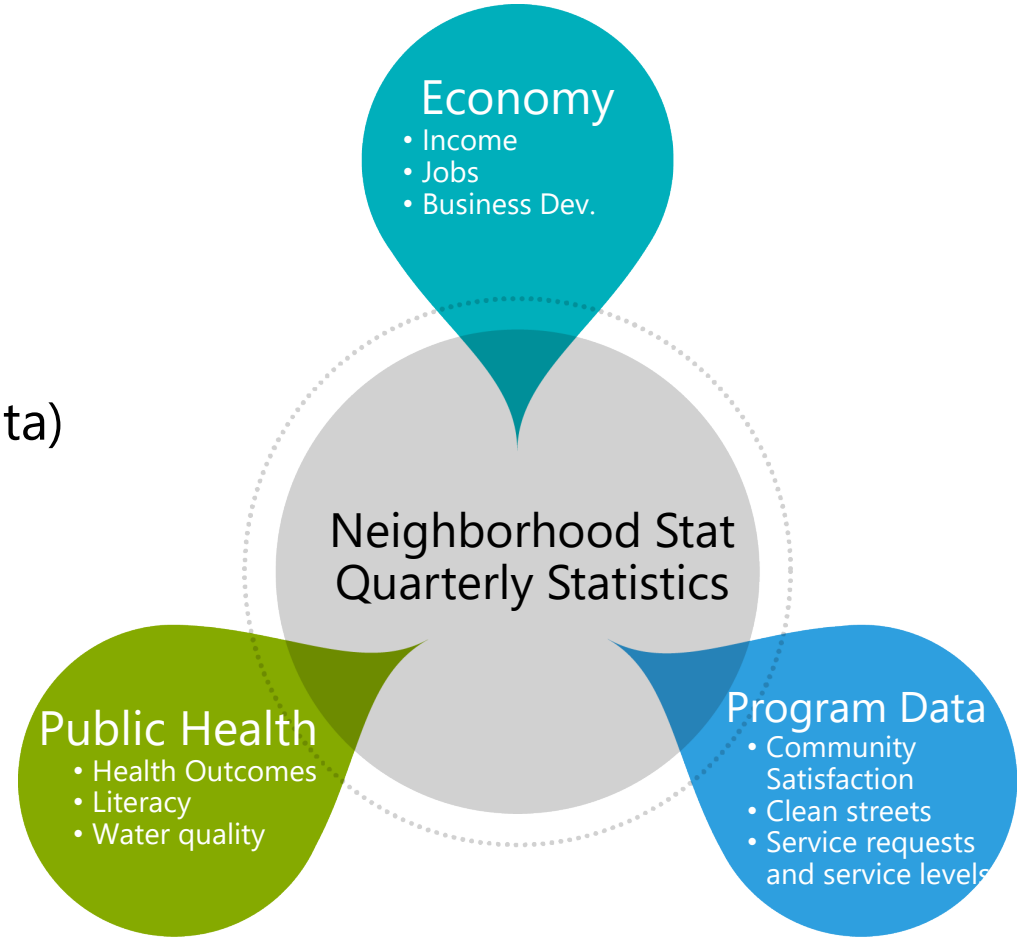
Initial metrics and geographic units of analysis

Initial Metrics

- Community Satisfaction
- Median Income
- 311 data
- Clean streets (routeware data)
- Health outcomes

Units of analysis

- Council District-level
- Census Tract



Discussion questions before closing out the topic

1. What did you like about the existing use cases shared? What didn't you like?
2. Is there anything missing from the initial metrics list that should be included?
3. What metrics would you love to see more analysis on?

Deep-dive analysis & discussion

Diving deep into a few key initiatives being undertaken to improve city performance

- 2021 Infrastructure Planning & Monitoring
- Strategic Communications for Rebuilding Our Streets Plan

2021 Infrastructure Planning & Management

- 2021 Construction Overview
- Best practices/use cases for managing infrastructure portfolio
- Options to improve performance

Secretary Pete Buttigieg
@SecretaryPete

Okay. NOW it's infrastructure week!

5:11 PM · Mar 31, 2021 · Twitter Web App

17.7K Retweets **1,703** Quote Tweets **157.2K** Likes

National Context

American Jobs Plan Proposal

The American Jobs Plan	
Spending	**$, blns**
Transportation infrastructure, including:	$621
$174bn for electric vehicles	
$115bn for highways and roads	
Green housing, schools, power and water, including:	$561
$229bn for water upgrades	
$213bn to build, retrofit 2mn housing units	
Investment in manufacturing, including:	$480
$180bn for research and development	
$50bn for domestic semidconductor manufacturing	
Elder and disability care	$400
High-speed broadband	$100
Workforce development	$100
Source: Oxford Economics/White House	$2,262

Back in South Bend

2021 Construction Overview

2021 CONSTRUCTION PROJECTS

CITY ENGINEER

ROAD REHABILIATION

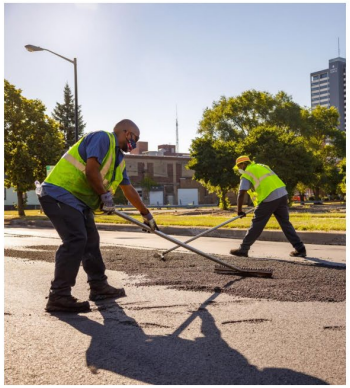
Rebuilding Our Streets Plan

Project Manager: Leslie Biek

Project Description:

- Full-depth pavement replacement on 10 roadway segments.
- Roadways were chosen due to poor condition. Requires a complete replacement.

Expected Bid Date: Quarter 2



CITY OF SOUTH BEND PUBLIC WORKS

2021 CONSTRUCTION SEASON KICKOFF MEETING

BRICK PAVEMENT RESTORATION

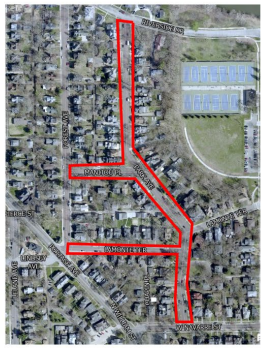
Rebuilding Our Streets Plan

Project Manager: Finn Cavanaugh

Project Description:

- Brick pavement patching, subgrade repair for Park Avenue, Manitou Place and Lamonte Terrace.
- Retain/reuse existing brick material

Expected Bid Date: Quarter 2



CITY OF SOUTH BEND PUBLIC WORKS

2021 CONSTRUCTION SEASON KICKOFF MEETING

EDDY STREET PHASE III TRAFFIC IMPROVEMENTS

Project Manager: Kyle Silveus, P.E.

Project Description:

- Howard Street improvements will extend from South Bend Avenue to west of the Eddy/Howard intersection. Includes an island to promote pedestrian safety.
- Corby Boulevard/South Bend Avenue intersection cleanup.

Expected Bid Date: Quarter 2

CITY OF SOUTH BEND PUBLIC WORKS

2021 CONSTRUCTION SEASON KICKOFF MEETING

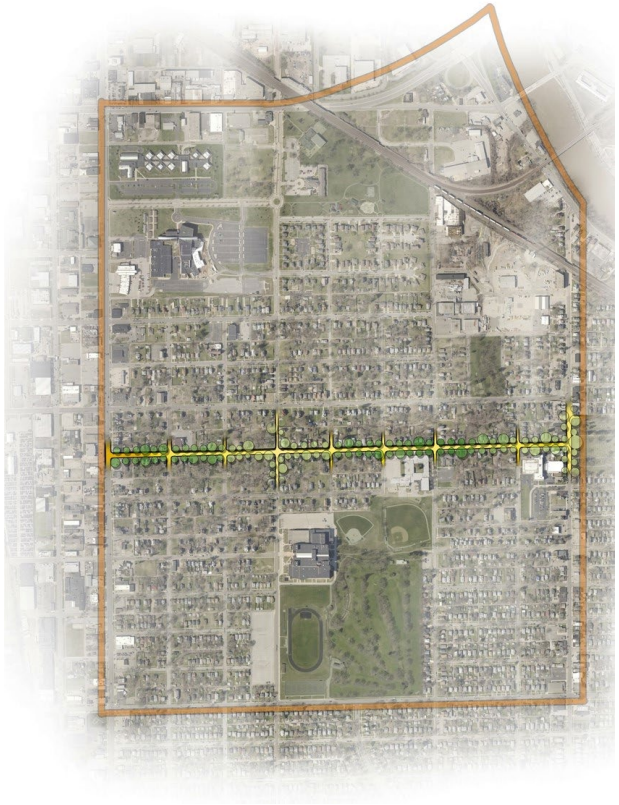
DUBAIL AVENUE STREETSCAPE

Project Manager: Charlie Brach

Project Description:

- Streetscape improvements along the Dubail corridor from Michigan to Miami streets including sidewalk replacement where needed.
- Traffic calming measures in line with the City's complete streets policy, including bumpouts at the intersections.

Expected Bid Date: Quarter 2



LINCOLN WAY WEST STREETSCAPE (OLIVE NODE)

Project Manager:
Finn Cavanaugh & Kyle Silveus, P.E.

Project Description:

- Full streetscape redesign
- Bike lane addition, curb bumpouts
- Parking lanes, permeable pavers
- Stormwater collection
- Pavement milling/overlay

Expected Bid Date: Quarter 2

EDDY STREET PHASE III TRAFFIC IMPROVEMENTS

Project Manager: Kyle Silveus, P.E.

Project Description:

- Howard Street improvements will extend from South Bend Avenue to west of the Eddy/Howard intersection. Includes an island to promote pedestrian safety.
- Corby Boulevard/South Bend Avenue intersection cleanup.

Expected Bid Date: Quarter 2

CURB AND SIDEWALK REPLACEMENT

Project Manager:
Alicia Pellegrino & Finn Cavanaugh

Project Description:

- Annual program to replace residential sidewalks, curbs and curb ramps in poor condition throughout the city.

Expected Bid Date: Quarter 2

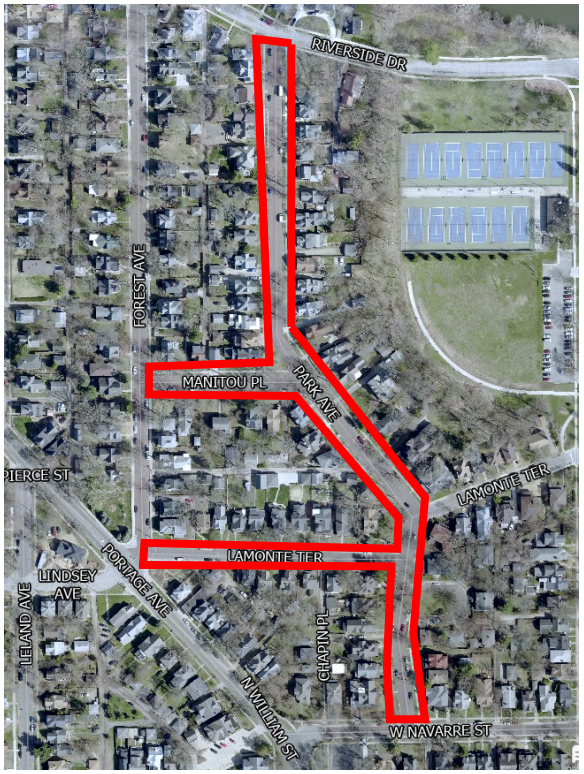
BRICK PAVEMENT RESTORATION

Project Manager: Finn Cavanaugh

Project Description:

- Brick pavement patching, subgrade repair for various streets across the City
- Retain/reuse existing brick material

Expected Bid Date: Quarter 2



PAVEMENT CRACK SEALING (MAJOR STREETS)

Project Manager: Finn Cavanaugh

Project Description:

- Quoted project:
- ~20 lane miles asphalt crack sealing at various arterial and collector roads

Expected Bid Date: Quarter 2

PAVEMENT MICROSEALING (RESIDENTIAL STREETS)

Project Manager: Finn Cavanaugh

Project Description:

- Quoted project:
- ~10 lane miles microseal (with crack seal) for residential streets

Expected Bid Date: Quarter 2

2021 ROAD REHABILITATION

Rebuild Our Streets Plan

Project Manager: Leslie Biek

Project Description:

- Full-depth pavement replacement of 10 roadway segments.
- Roadways were chosen due to poor condition. Requires a complete replacement.

Expected Bid Date: Quarter 2

2020 COMMUNITY CROSSINGS ROUND 2

Project Manager: Scott Kreeger

Project Description:

- 3" mill and overlay
  - Bowman Street
  - Ridgedale Road
- Adjustment to structures to match the grade of the road

Expected Bid Date: Quarter 2

CCMG 2021 ROUND 1 ROAD PAVEMENT

Rebuild Our Streets Plan

Project Manager: Leslie Biek, P.E.

Project Description:

- 3" mill and overlay on six roadway segments.
- ADA curb ramp replacement and adjustment to structures are included.

Expected Bid Date: Quarter 2

CONTRACTOR PAVING ROUNDS 1 & 2

Rebuild Our Streets Plan

Project Manager: Scott Kreeger

Project Description:

- 3" mill and overlay of several roadways across the city
- Correction of drainage issues by structure readjustments and wedge and level

Expected Bid Date: Quarter 2 & 3

By the Numbers

2021 Construction

7

Data point 1

Projects out to bid this year for ‘Rebuilding Our Streets Plan’ projects

22

Data point 2

Projects scheduled to be bid in quarter 2 (April – June)

5

Data point 3

Projects scheduled to be bid in quarter 3 (July - September)

7

Data point 4

Projects scheduled to be bid in quarter 4 and beyond

‘Rebuilding Our Streets’ Plan framework

GUIDING PRINCIPLES

There are five guiding principles shaping the City’s approach to street repair from 2021 - 2030:

1. **Fix failed streets.** Address all streets with a PASER of 1 or 2 (failed) over the next three years. A failed street is one that has deteriorated so much that it can no longer be maintained by the standard mill and overlay paving. The street may still be drivable, but the pavement has lost its integrity and has severe cracking. The only solution for a failed street is complete removal and rebuilding of the pavement layers from the ground up.

2. **Raise the bar.** Aim to increase average PASER to achieve and maintain a citywide average above a rating of 7 over the next 10 years. In 2020, the City’s average PASER was 6. The City will continue to track average PASER of other cities in Indiana and benchmark against them.

3. **Create geographical equity.** Monitor street conditions by council district, creating equitable street quality – especially residential street quality.

4. **Make data driven decisions.** Investing in new tools and processes to monitor progress on street conditions. The City has developed a public dashboard showing PASER ratings and is looking at alternative technologies to better analyze and track street condition annually.

5. **Share data and be more transparent.** Aim to be more transparent with residents, sharing plans for street repair proactively. This includes the methodology behind decisions to prioritize certain streets, street repair lists and the streets conditions dashboard for residents to monitor the City’s data on street quality over time.

6. **Increase efficiency.** Find ways to stretch the lifespan of our streets and invest more in upfront maintenance to reduce costs over the long term.

SB Stat Principles for Infrastructure Portfolio Management

Building on the 'Rebuilding Our Streets' Plan framework

01

Create geographical equity

+ *Build infrastructure with equity at the forefront of decision-making*
+ *Monitor infrastructure by Council District and census tracts*

02

Share data and be more transparent

+ *Invest in tools and new processes to monitor progress on infrastructure development and 2021 construction*
+ *Publicize data through dashboards and public reporting*

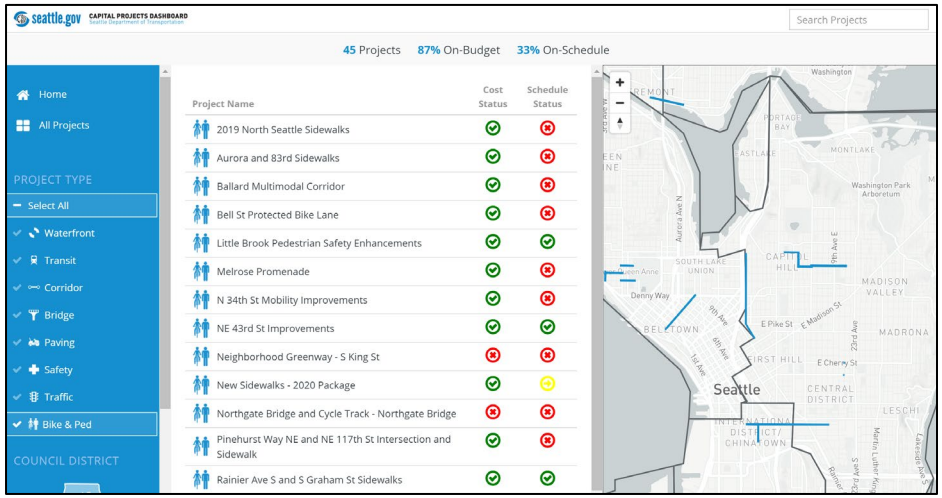
03

Make data-driven decisions

+ *Identify metrics that matter to residents and city operations*
+ *Revisit data frequently to develop common language for asking questions and working together*

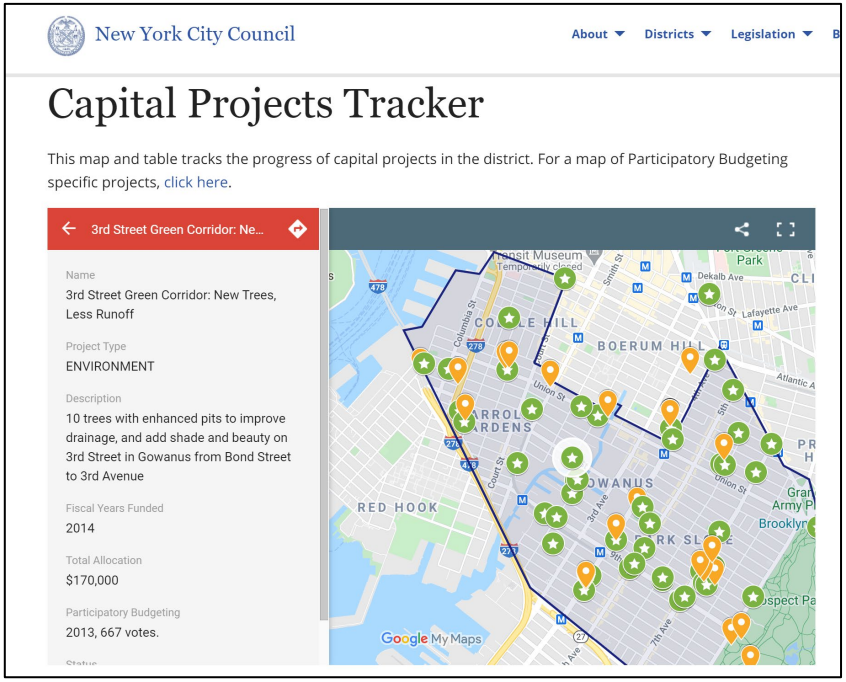
Best Practices & Use Cases

Seattle, Washington
Capital Projects Dashboard



URL: https://capitalprojects.seattle.gov/projects/WP00000357?categoryId=C99:&tab=list

New York, New York
Capital Projects Tracker



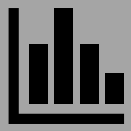
URL: https://council.nyc.gov/brad-lander/capital-projects-tracker/

Discussion questions before closing out the topic

1. What are metrics that matter to you when thinking about City infrastructure?
2. What did you like about the existing use cases? What was missing?
3. What questions should we provide an update on in Quarter 3 Stat (September 2021)?

Strategic Communications for Rebuilding Our Streets Plan

BACKGROUND / CONTEXT



DATA ANALYSIS

DISCUSSION

“During my conversations with residents throughout our city, I am struck by one thing I hear repeatedly – our streets, especially those in residential areas, are in desperate need of improvement and only seem to be getting worse. We can and must do better.”

— Mayor Mueller

Initial Project scope

- Document the progress of the Streets Plan (see southbendin.gov/streetsplan)
- Before and after pictures for the streets segments that were identified in the plan
- Pictures will be used throughout the year for social media campaigns and eventually for a story map showing residents the progress on the streets plan

Resident feedback on ‘Rebuilding Our Streets’ draft plan

- Residents encouraged to complete survey on streets plan as part of our draft plan roll out
- 40 total survey responses (n = 40)
- Most respondents stated they reviewed the draft plan and dashboard, and are interested in reviewing a dashboard that tracks streets plan progress

1. How satisfied are you with the City’s investment in Streets over the next three years? (1 - 10 scale, with 1 being 'not at all satisfied' and 10 being 'extremely satisfied')

More Details Insights

38 Responses

5.97 Average Number

2. Please share any feedback on the City’s strategy to address street conditions in the short term (1-3 years)

More Details

26 Responses

Latest Responses

"The plan looks mostly solid. I questions the indicator that all brick st

"Maybe if Pete hadn't spent all OUR money on smart streets more str

"Often, smaller areas (say, 4 X 4 ft) where the street was torn up for u

3. Please share any feedback on the City’s strategy to address street conditions in the long term (3-10 years)

More Details

20 Responses

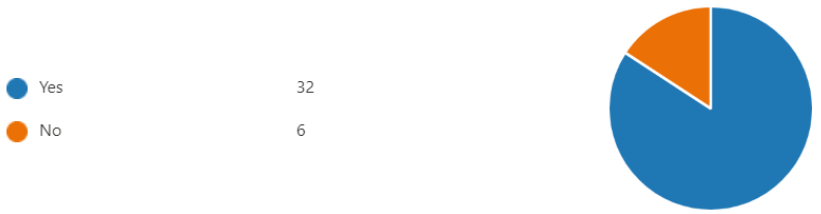
Latest Responses

"I appreciate the effort toward geographic equality. Too many neighb

"See No. 2"

4. Have you reviewed the City’s online Street Conditions Dashboard?

More Details



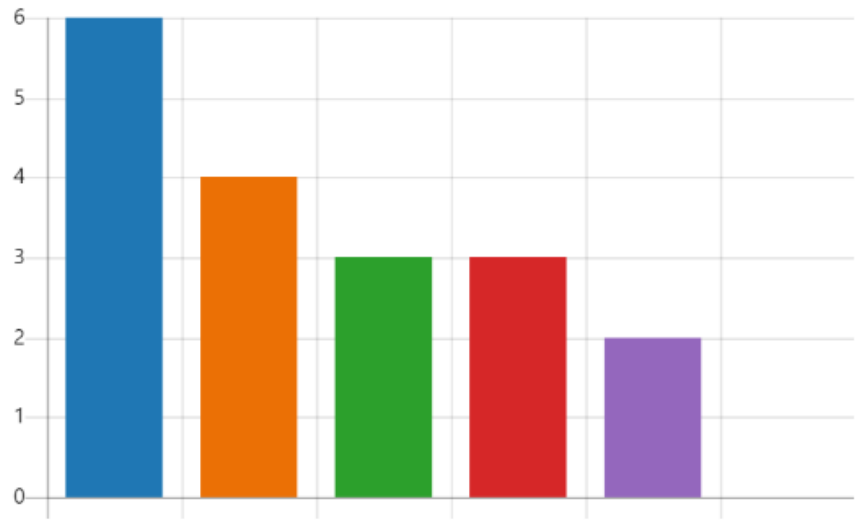
Survey Response Breakdown

Responses by Council District

9. Responder's Council District (Optional)

More Details

1st District	6
2nd District	4
3rd District	3
4th District	3
5th District	2
6th District	0



Survey Results Overview

- How satisfied are you with the City's investment in Streets over the next three years? (1 - 10 scale, with 1 being 'not at all satisfied' and 10 being 'extremely satisfied')?
  - 5.97 average
    - 43% of respondents gave a high rating (7-10)
    - 25% of respondents gave a low rating (1-3)
- Most qualitative feedback referenced frustration with current quality of streets

"I would like to see other considerations than a PASER scale for road conditions. We have alerted the city several times to frequent flooding issues on our street…I am not sure if it is a road or drainage issue, but we would love for it to be addressed to make things safer."

"I love the transparency of the grading system and list of pending improvements. While I agree with the importance of ongoing maintenance, I'm hopeful this plan will also look for opportunities at improving…pedestrian friendliness and intersections."

"I appreciate the effort toward geographic equality. Too many neighborhood streets have been overlooked."

Data-driven

projects being explored by the Public Works department and Innovation & Technology department

1. Connecting streets division data tracking and reporting to public dashboard on streets

2. A project management dashboard that tracks progress for key street construction projects

3. A high-level dashboard on PASER rating that tracks progress towards data targets outlined in 'Rebuilding Our Streets' Plan

Storytelling

projects being explored by the Public Works department and Innovation & Technology department

1. 'Before' and 'After' photos of key street repairs from 2021 – 2023

2. A GIS-based story map that highlights improvement of street networks and successful construction projects

Tentative next steps

1. Before/After photos
   - Pictures will be used throughout the year for social media campaigns
   - Photos will also be compiled for a story map illustrating residents the progress on the streets plan.
2. Create project management dashboard that tracks progress for key street construction projects
3. Create high-level dashboard on PASER rating that tracks progress towards data targets outlined in ‘Rebuilding Our Streets’ Plan
   - Connect streets division data tracking and reporting to public dashboard on streets

Discussion questions before closing out the topic

1. What is important to communicate to residents as we complete the rebuilding our streets plan?
2. How can this storytelling on the streets plan complement other Mayoral initiatives?
3. How do we respond when residents request other streets to be paved?

Taking action

Offering policy alternatives, data-based frameworks, and decision points to take action in improving the lives of South Bend residents

Taking Action

A quick summary of next steps

Community Survey	• Department-level memos • Additional research questions

Quarterly Statistics	• Initial Metrics
	  • Community Satisfaction
	  • Median Income
	  • 311 data
	  • Clean streets (routeware data)
	  • Health outcomes
	• Units of analysis
	  • Council District-level
	  • Census Tract

Infrastructure Planning / Strategic Comms for Streets Plan	• Create project management dashboard that tracks progress for key street construction projects • Create high-level dashboard on PASER rating that tracks progress towards data targets outlined in 'Rebuilding Our Streets' Plan • Before/After photos

Neighborhood Stat Portfolio Summary

Status of SBStat projects in the queue for 2021

Project	Brief Description	Status
Community Survey Geographic Analysis	Breaking down community survey data to understand how perceptions vary across the City	
2021 Infrastructure Planning & Monitoring	An overview of 2021 infrastructure projects and goals	
Rebuilding our Streets Plan – Strategic Communications	Communicating progress towards goals established in the City's Rebuilding Our Streets plan	
Street Dashboard (Phase II): High-level PASER Tracking	A public dashboard that tracks progress towards high-level PASER goals	
Project Management Dashboard	A public dashboard that serves as a one-stop shop for information on construction projects	

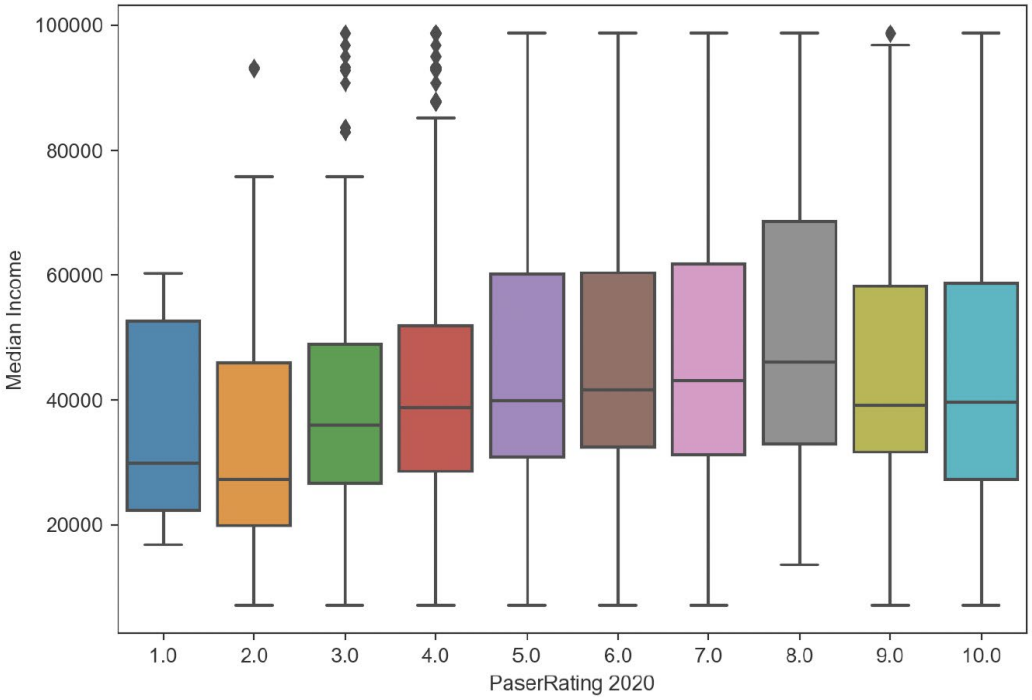
Legend Project on schedule Project delayed Project cancelled Project under consideration

Celebrating our values

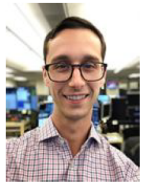
This section highlights exemplary work happening in the City to improve performance that may otherwise go unnoticed

Celebrating our Values

City staff working with data science graduate students



University of Notre Dame Team Background



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Jessica Owensby

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Georgia State University 2006

B.S. Computer Science
Carson-Newman College 2002

B.A. Philosophy
Carson-Newman College 2002

Principal Big Data Software Engineer in AT&T's Chief Data Office. Currently responsible for building robust Big Data pipelines and creating data sets Data Scientists train their models on. Jessica has extensive experience as a hands-on programmer, machine learning engineer, analyst and Hadoop Administrator. Lives in Alpharetta, GA.

SBStat | Neighborhood Stat

2021 Quarter 1 April 4, 2021

City of South Bend