



## MINUTES

CITY COMMISSION WORKSHOP MEETING  
MONDAY, NOVEMBER 13, 2023, AT 5:00 P.M.

CITY OF ST. AUGUSTINE BEACH, 2200 A1A South, St. Augustine Beach, FL 32080

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I. CALL TO ORDER

Mayor Samora called the meeting to order at 5:03 p.m.

II. PLEDGE OF ALLEGIANCE

The Commission recited the Pledge of Allegiance.

III. ROLL CALL

Present: Mayor Donald Samora, and Commissioners Undine C. George, Beth Sweeny, and Virginia Morgan.

Vice Mayor Dylan Rumrell attended virtually via Zoom.

Also present were City Manager Max Royle, City Clerk Dariana Fitzgerald, City Attorney Jeremiah Blocker, Public Works Director Ken Gatchell, and Engineering Director Jason Sparks.

IV. PRESENTATION ON THE SMART CITY CONCEPT

City Manager Royle advised that there would be a presentation from Mr. Clayton Levins of Smart North Florida and then we would discuss how it would impact our Vision Plan.

Mayor Samora advised that the Smart City concept was a big part of our Vision Plan that was adopted earlier this year, but we never received detailed information, so he looked forward to the presentation and discussing it. He asked Mr. Levins if he would like the Commission to jump in with questions as he gives his presentation. Mr. Levins said yes.

Clayton Levins, Executive Director of Smart North Florida, advised that Smart North Florida is a 501c3 not-for-profit that was born out of the Smart City movement and solely works with the public sector, not the private sector. He advised that they work within the north Florida region and their boundaries follow the North Florida Regional Planning Council. Their start was out of the North Florida TPO (Transportation Planning Organization) and Engineering Director Sparks is the City's representative on the Technical Advisory Committee of the TPO, which programs a lot of the State and Federal dollars into the FDOT (Florida Department of Transportation). He said that this movement started as an advocacy movement in 2016 when the City of Jacksonville and the JTA (Jacksonville Transit Authority) received their Federal build grant for autonomous vehicle deployment, and we realized that this Smart City concept was much bigger than we thought after we started getting calls from hospitals and schools. He advised that he has been around this movement since 2016 and he was then asked to run it as an organization, which they have done pretty well so far. He said that he read through the City's Vision Plan and that he hoped the Commission would find a tie-in after seeing his presentation. He said that the City has a great strategic framework and there are some tactical things that could bring a Smart City to life.

Mr. Levins presented a PowerPoint [Exhibit A]. He said that they pride themselves on knowing what the City's needs are and to see what fits. He has a very diverse audience, and if he cannot communicate with them, then he is not doing a good job to advance Smart Cities. He said that they believe in the idea of being better at the basics and to not add complexity into the day-to-day operations of the City, they try to add support at the local level with what they do, and you will see a lot of diversity in their approaches. He advised that they do not deal in the personal data of any community or its residents, and they do not partner with technologies that do it. All their technology partners that are deployed in the region are exclusively dedicated to solving problems and not reselling data.

Mr. Levins moved on to the next slide and said that there are four things that they look at for a Smart Region such as operating budgets, public sector labor, improving services, and that the size of the city does not matter. He moved on to the next slide and said that they have a partnership with the University of Florida and a growing partnership with other universities that pair data science students with public sector agencies, etc. to help bridge that data gap. He advised that they are not interested in the data collection side unless it is solving a problem or hits on some of the City's needs. He said that one of the biggest issues on the technology side is the speed at which we can get technology deployed.

Mr. Levins moved on and said the City could expect his company to scout and sandbox the technology, follow the data, and scale the solution. A lot of this applies to the framework that the City has in its Vision Plan, such as collecting and recording data along the roadways to provide information about the most vulnerable areas. He said that Keystone Heights used to have a \$40,000 a year consultant do their roadway collection and inventories, but with robotics, they are doing it with just one of their own team members for \$5,000 a year. He advised that there are some efficiencies out there that the City could look at that would work for the Smart City side of the Vision Plan. He said that this could also collect inventory data of the City's assets along the sides of the roads, and he has seen a lot more cities wanting to do more centralized asset views. He said that they work very closely with FDOT, such as for the Smart St. Augustine Project, which his company helped spur along.

Mr. Levins moved on and discussed "Trainfo", which provides early train detection, and "Modii", which is the digitization of physical assets into a platform that could be easily accessed. With respect to parking, a company like Modii, can integrate all the physical assets and the rules around them such as helping tourists find the best place to park and he showed a screen recording that was real-time of the City of St. Augustine's parking lots. He said that available street level parking spaces are high-value information. Commissioner George asked if this was currently available to the public downtown. Mr. Levins said yes and that he believed that they would be integrating it into the main website and the St. Augustine Tourism group is pushing it out through QR Codes. Commissioner George asked if it was also integrated into the Passport Parking App. Mr. Levins said yes. He said that being able to move sufficiently through your community is the life blood of the economies in these areas. Commissioner George said that the City does not have paid parking, so we do not have a way to gauge it. Mr. Levins said that it does not have to be paid parking nor is it an endorsement for paid parking. He recommended to look at in-the-ground sensors for surface lots, which is typically expensive and may not be the right fit for the City, but you could also look at camera technology, which is very easily programed to identify vehicles. He said that he noticed in the Vision Plan that the City was looking at pedestrian safety and that there was camera technology that could be used at four-way intersections and could provide quick analysis and have robust recommendations in less than a month. It is extremely disruptive, but in a good way because of the speed that it can be deployed. He highly recommended looking at companies that have hardware and software integrations. He said that it would be twenty-four hours of analysis that would be set up and pumped through historical data with a full consulting report of

what is going on at that intersection, which could then be used to bolster other work that the City is having done.

Mr. Levins moved on and discussed filling the gaps with data coordination and connecting the dots with the elements of the community where there are gaps/successes and how they are playing together. He said that they did a year-long pilot stormwater sensor deployment in Neptune Beach and the data that was produced was able to be taken to the City of Jacksonville and Duval County to show that they were able to target two culverts, and the County put it in the budget. They were not able to prioritize their projects very well because they did not have this historical data. But now they know that they could fit two projects into this year's budget, etc., which is the critical notion that we would want to get to. Engineer Sparks advised that it could also be interfaced with the hydraulic model to help the City with the Master Drainage Plan.

Mr. Levins advised that where his company tries to focus, and where they have seen the gaps in the Smart City side, is in operational and infrastructure, which is where the most investment is needed. He said that the City's Vision Plan was to add art to the public spaces and to ensure the tree canopy, and he would highly recommend the "Heat Island Effect", which is consistently used around communities for any type of funding that you might want to go for. His company tries to fit and educate the region on core infrastructure and that there are opportunities to take advantage of and use for capital investment plans. He said that the City's Vision Plan has a solid framework and strategy and that there are even more tactical elements that the City could add to support the day-to-day work.

#### V. DISCUSSION OF THE 2023 VISION PLAN

Mayor Samora thanked Mr. Levins for his presentation. He said that this is a workshop, which is a chance for us to talk and see if any of these ideas would benefit the City. He advised that there are some SEPAC members here that may have input that they would like to share. He said that what he would like to come from this workshop is possibly identifying the top three Smart City projects that were identified in the Vision Plan and, at some point, we could explore those. He said that the Vision Plan identified zoning and land use projects, safe and complete streets, parking, use of the plazas, beaches, sustainability and resilience, public safety, parks and recreation, and the pier area.

Mr. Levins advised that this year the TPO experimented with sponsoring consulting projects around the region for certain priority projects for communities such as Smart City Master Planning. He recommended adding that as consideration for a potential project opportunity if it meets the City's strategic priorities. He said that Keystone Heights was a pilot concept. He suggested that they follow the State funding cycles with their new fiscal starting in July. Director Sparks advised that they are taking orders now.

Commissioner Sweeny asked Mr. Levins if he was working with or knew of any entities that would aid or help develop more pedestrian friendly bike paths and walkways. Mr. Levins said yes and that he would be happy to share those with the City. Director Sparks advised that the TPO has some grant funding sources with a unified work plan, which are fifty-fifty matches each year and would often fund these types of studies that are focused solely on planning for transportation alternatives. Mr. Levins said that there are models that have a shared platform with other nearby communities and that software companies will try to meet you in the middle, and you should push them to do that.

Mayor Samora asked the City Engineering Director for his thoughts. Engineering Director Sparks advised that after reviewing the Vision Plan and the current projects that we have going such as the Vulnerability Assessment, a big part of it is populating and truing up our GIS data, which could

possibly be interfaced with Smart North Florida and the resources that they have. He said that drainage has also been a huge topic over the six months that he has been with the City. He said that it seemed like the County had done some work on the crosswalks on the Boulevard but that a signal at Madrid Street would be a long shot because the study data is not there unless someone else wanted to pay for it. He said that the City has just over fifty plazas that could be identified for how to better use them, the plaza at A and 1<sup>st</sup> Streets is being used for parking, but other options could be explored. He said that one of his other thoughts was "drone-on-drone" technology, which could be used for construction management or to survey an area to determine where to focus our forces and get some of the intelligence as well with stormwater transducers. He said that he talked with the City of St. Augustine recently to possibly have a meeting regarding their inner-city circulator bus. Mayor Samora asked if there was a way to measure how many people transition between the two cities. Mr. Levins said that there is some modeling data that could show a non-specific picture of who was leaving and who was coming in and there are some solutions that could help tabulate it more specifically, but you would want to know your risk profile related to what was being counted. He said to form a partnership with the City of St. Augustine, you could probably rely more on modeling data. They would be able to relate to the models that the City brought before them, and it would not be a FDOT threshold that would require specific things to be done so it would probably move pretty fast.

Mayor Samora asked the Public Works Director if he heard anything that he thought would be helpful. Public Works Director Gatchell advised that Engineering Director Sparks hit most of it right on the head and that the City's biggest thing right now is drainage and paving. Director Sparks added that it would also be maintaining those assets.

Commissioner Sweeny said that she was intrigued by the sensor data. She asked if it would complement the work that Crawford, Murphy and Tilly (CMT) did for the City that modeled and assessed the drainage and then identified where the issues were or would this be redundant. Director Sparks advised that the work was approximately seventy-five percent complete, and this would complement CMT's efforts with real-time data and not a fifty-year or hundred-year event. Mayor Samora asked if would be verifying the modeling that was done. Director Sparks said that it would over time. He said that you would want to install the transducers in strategic manholes, at the box culvert under A1A, at 11<sup>th</sup> Street and Mickler Boulevard where it tends to stage up, and put some on the downstream side of the Mizell canal.

Mayor Samora asked if this information would be heavily relied on by anyone that the City engages with to model the drainage system and produce an accurate model. Director Sparks said yes. Mayor Samora said that if we implemented something to model the drainage, then we could possibly make better decisions going forward. Director Sparks advised that, in the past, he had seen gauges that could be manually read at strategic locations, but this newer technology is more real-time.

Commissioner Sweeny asked if cities would use this solely for data collection purposes or could it be used for ongoing monitoring instead of sending a person out during a hurricane. Mr. Levins said that was exactly right and that is why he always says that the core is to focus on the problem statement. He said that for Neptune Beach, their problem this time was not real-time monitoring, they needed to know where there problems were and to access funding. So, they collected the data for a year and then they presented it to get it funded. He said that this serves the purpose of keeping your employees safe while still being able to understand what is going on during those significant events and they are now looking at a drone that can actually go underwater. He said that you could use a lot of the data for emergency planning scenarios but there was a chance that some of this equipment could get knocked offline. Director Sparks advised that the City would be able to make better use of its hands-on-deck employees. Mr. Levins advised that that is one of

the biggest benefits and they are still working to calculate some of the effects of those benefits. Director Sparks said that "Digital Twin" is a data eater, and its purpose is to help us make better decisions. Mr. Levins said that each point shown on his map could have stormwater sensors, or other public asset monitors, such as the remote gate locks that Clay County is looking into for their parks, and there are even trash can monitors that can detect the fill rate.

Mayor Samora said that there are some SEPAC members here that may want to weigh in.

Craig Thomson, 6 D Street, SEPAC member, said that on Page 11 of the Vision Plan, SEPAC had a goal to reduce stormwater runoff and downstream water pollution. He said that the Vulnerability Study's design parameters were based on a twenty-five-year storm and climate change acknowledged that there are more rain events. He advised that there have been studies done for what to expect in the future. He agreed that there is a need for data, specifically for if the City adopts a Utility Plan for drainage and the calculations of the standard Impervious Surface Ratio (ISR) unit is based on how much of a site is pervious or not. He said that finding the ISR and finding out how much more intense rainfall there could be, would be the design parameters that you would need to redesign the infrastructure. He said that in the articles that he reads, infrastructure is under designed for the current issues and climate change, and getting the data and adjusting what we can, would be very important. He advised that SEPAC made a recommendation to have more dry retention areas and to try to get residential and commercial to retain the first half inch of water. So, knowing what the problems are from actual data is very critical right now, instead of from a twenty-five-year storm event that was developed fifty years ago. He said that we also have a Climate Action Plan, which is part of the Comprehensive Plan, and the data could be used to make recommendations. Mr. Levins agreed and said that that was a great observation. He said that he mentioned earlier the "Heat Island Effect", but the impervious surface data is critical, and it is being used a lot for Planning and Zoning to understand where the real-time vulnerabilities are.

Commissioner Sweeny asked if there were data solutions for Stormwater Utility Fee calculations. Director Sparks advised that there is an Artificial Intelligence (AI) tool called "Deep Learning" that can examine impervious surface areas, which would be part of the proposal that the City is getting that will help us determine what the utility rate will be.

Mayor Samora introduced Margaret England and said that she was a huge part of putting the City's Vision Plan together.

Margaret England, 425 Ocean Drive, said that this was a wonderful presentation, but she was more excited about having a connection with someone or an organization that could be an advocate. She said that she knows that the North Florida TPO can do wonderful things, they have the staff, and can do projects. She advised that she and the City Manager have written to them in the past asking to have attention given to City projects, but we are not getting the attention that we need from them, and this might be an advocate for some of the City's projects. She suggested that the City should reach out to St. Johns County's new Administrator, Joy Andrews, asking her to move the fire station at the pier. She said that the City runs a very lean workforce that barely has time to get the minimum done and we do not have an advocate to do grant research, etc., and if we want to get any part of the Vision Plan done, we will need an advocate to keep up with it and see what is available.

Mayor Samora asked Ms. England and the Commissioners for their suggestions of the high priority areas to focus on and to possibly have it on a future agenda. Mayor Samora said that what he heard was a focus on pedestrians, traffic, and ways of getting around the City, and also a huge focus on stormwater.

Ms. England said that this is a pedestrian City and pedestrian safety, and stormwater are both

good areas of focus. She said that it is a Vision Plan so some of the other things would be further down the line and to keep your eyes and ears open for opportunities. She mentioned that the TPO had a sidewalk project that we could not get in on.

Commissioner Morgan agreed that those were two high points, and that she would add what Director Gatchell said, to use the technology to identify things in the road that need maintenance. Commissioner Sweeny agreed with those two high points and said that her only other takeaway would be for the City to jump on the TPO sponsoring of Smart Cities. Commissioner George agreed with the prioritizations, but for strategic consideration, she would like to see parking with beach access be a priority because it impacts the whole community, along with the County, which is in line with tourism and there is usually a lot of money going in that direction. She said that even the congestion that happens at the beach driving ramps could be a good collaboration with the County since they are County managed.

Mayor Samora thanked Mr. Levins for his presentation, and he thanked everyone that participated. He suggested for the City Manager to put it on an agenda moving forward and that the priorities are pedestrian/bicycle data for moving around the City, stormwater, and parking for beach access. He said that we could then have broader discussions with SEPAC and the Planning and Zoning Board.

Mayor Samora moved on to Item VI.

VI. ADJOURNMENT

Mayor Samora asked for a motion to adjourn.

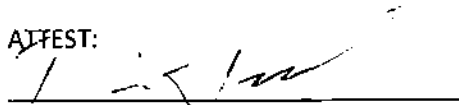
**Motion:** to adjourn. **Moved by** Commissioner George, **Seconded by** Commissioner Sweeny. Motion passed unanimously.

Mayor Samora adjourned the meeting at 6:00 p.m.



Donald Samora, Mayor

ATTEST:



Dariana Fitzgerald, City Clerk



1

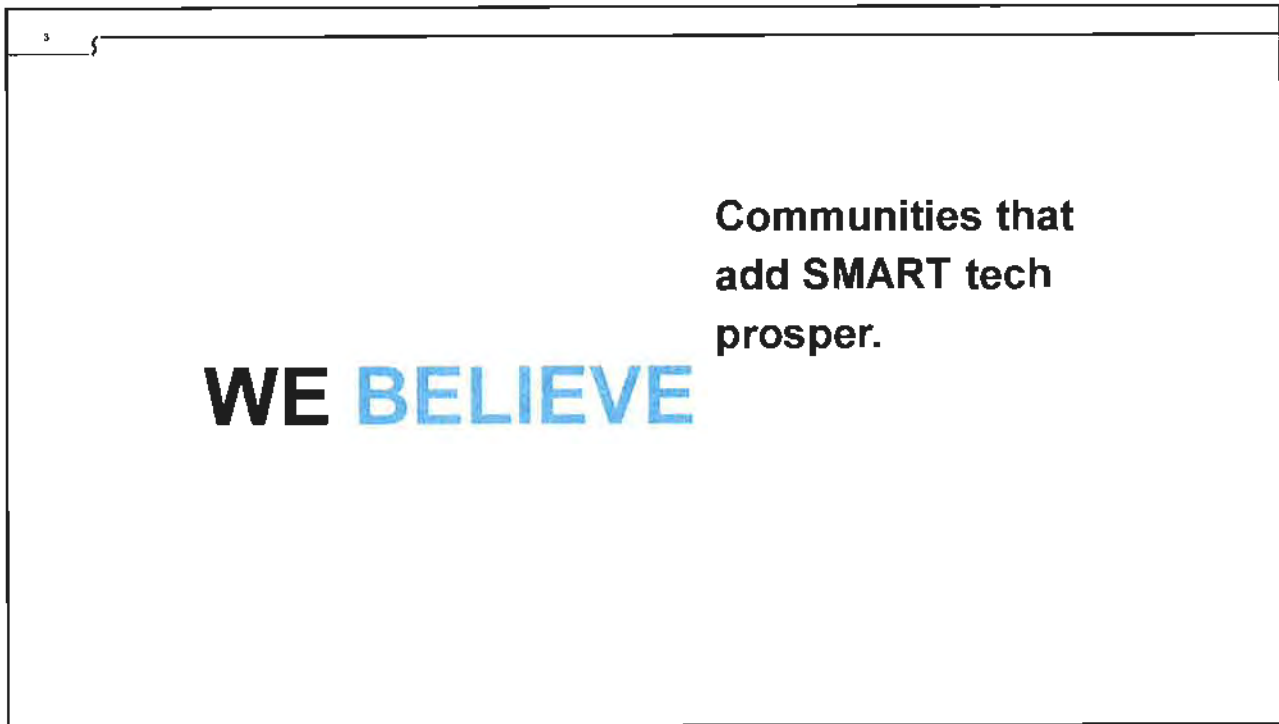
OUR START



2

Exhibit A-1  
Date 11-13-2023  
Wksp

1



3



4

Exhibit A-2  
Date 11-13-2023  
Wtsp

## HOW WE DO IT

Understand thoroughly.  
Communicate simply.  
Solve pragmatically.

5

## YES, WE'RE DIFFERENT

We're a non-profit  
501c3, not a tech  
reseller.

6

10-75

5/11

Exhibit A-3  
Date 11-13-2023  
Wksp

7

# A Different Kind Of Smart Region

<b>OPERATING BUDGETS</b>	<b>PUBLIC SECTOR LABOR</b>	<b>IMPROVING SERVICES</b>	<b>NO MATTER THE CITY SIZE</b>
Because it all hits the bottom line	Only 60% of public sector workers returned after the pandemic	As in traffic, trains, parking, flooding, etc.	From Keystone Heights to St. Augustine to Jacksonville

7

8

## INVESTMENTS

- Data Coordination
- Smart Tech
- Regional Collaboration

## RETURN ON INVESTMENTS

- Opportunity
- Transparency
- Competitiveness
- Better Policy
- Sustainability

8

Exhibit A-4  
 Date 11-13-2023  
 Wksp

WHAT YOU CAN  
EXPECT

SCOUTING TECH SOLUTIONS

— Refine problems

Scout tech options

Match solutions

9

WHAT YOU CAN  
EXPECT

SANDBOXING THE TECH

— Understand the tech

Accelerate adoption

Gather the Info

10

Exhibit A-5  
Date 11-13-2023  
Wksp

11

WHAT YOU CAN EXPECT

FOLLOWING THE DATA

- Analyze
- Visualize
- Report

11

12

WHAT YOU CAN EXPECT

SCALING THE SOLUTION

- Help leaders lead
- Scale smart

12

Exhibit A-6  
 Date 11-13-2023  
 Wtsp

13

WHAT YOU CAN EXPECT

TELL THE STORY — Case studies  
Scalable adoption

13

14

WHAT WE'RE DOING NOW



**ROADBOTICS**

FILLING REAL POTHOLES  
WITH ARTIFICIAL INTELLIGENCE (A.I.)

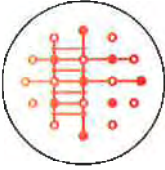
Pilot — Clay Co.  
20-year plan — Nassau Co.  
Deploying — St. Augustine, Keystone Heights,  
Bunnell, Neptune Beach

14

Exhibit A-7  
Date 11-13-2023  
Wisp

15

## WHAT WE'RE DOING NOW



**TRAINFO**


**SAVING LIVES  
WITH EARLY TRAIN DETECTORS**

Pilot - FDOT District 2  
Approved - FDOT Innovation Product List (IPL)  
Sole Source Contract

15

16

## WHAT WE'RE DOING NOW



**MODII**

**PARKING SMART IN ST. AUGUSTINE  
WITH DIGITAL TWINS**

Pilot -- City of St. Augustine  
Phase 2 impending


16

Exhibit A-8  
Date 11-13-2023  
Wksp



17

# WHAT WE'RE DOING NOW



## UNDERSTANDING TRAFFIC CONDITIONS WITH ARTIFICIAL INTELLIGENCE

Pilot – Clay County

Plan to use for Autonomous Vehicle Deployments

**STREETSCOPE**

18

Exhibit A-9  
Date 11-13-2023  
whsp

19

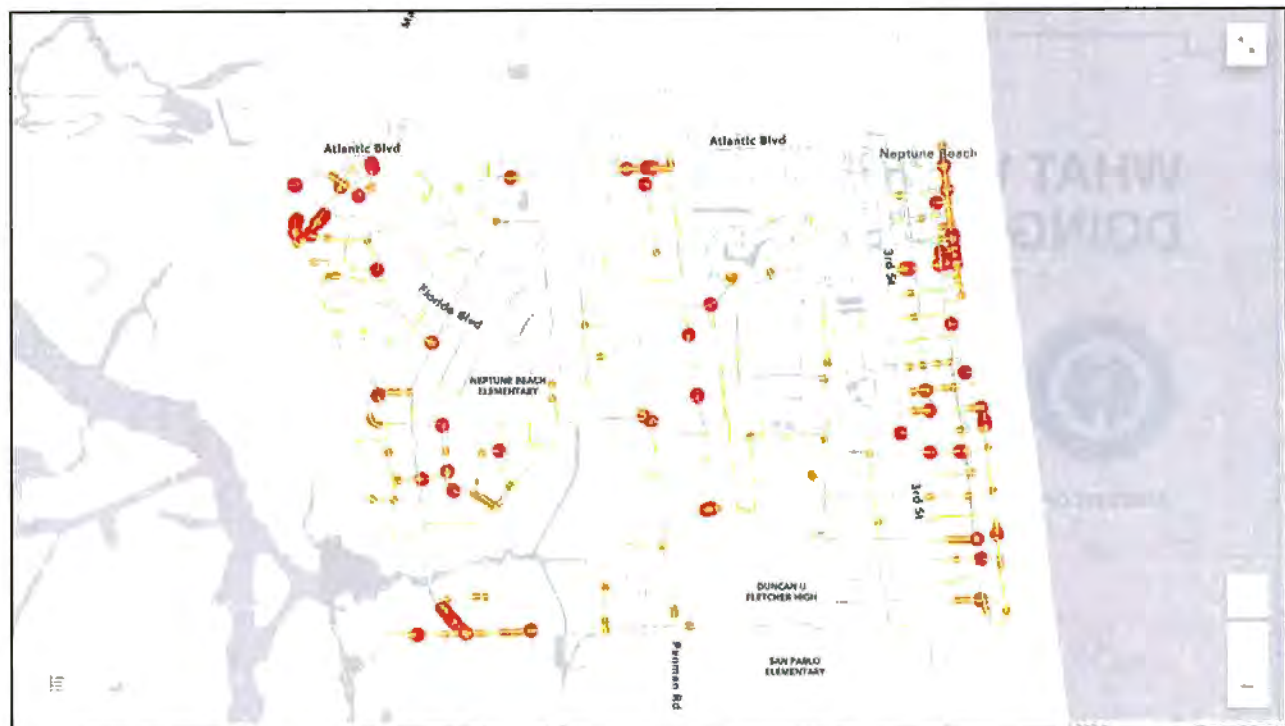
# WHAT WE'RE DOING NOW



## FILLING THE GAPS WITH DATA COORDINATION

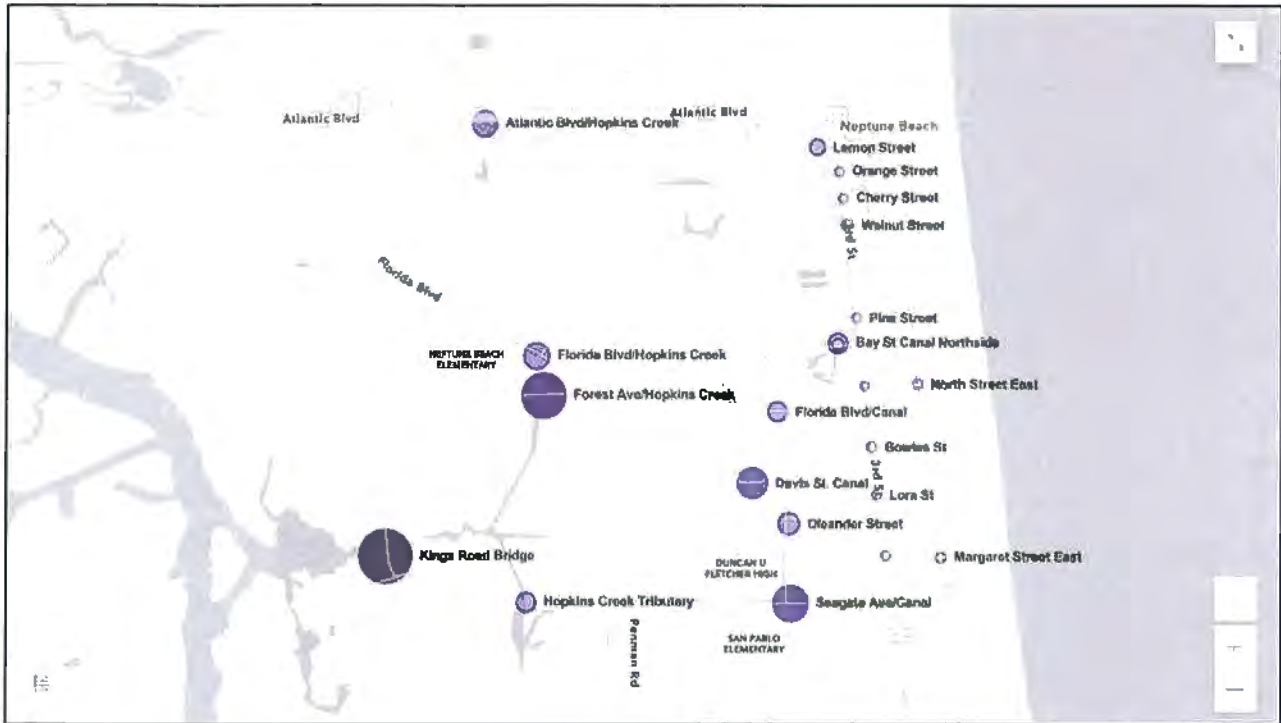
Performing data consulting projects for regional non-profits and public sector

19

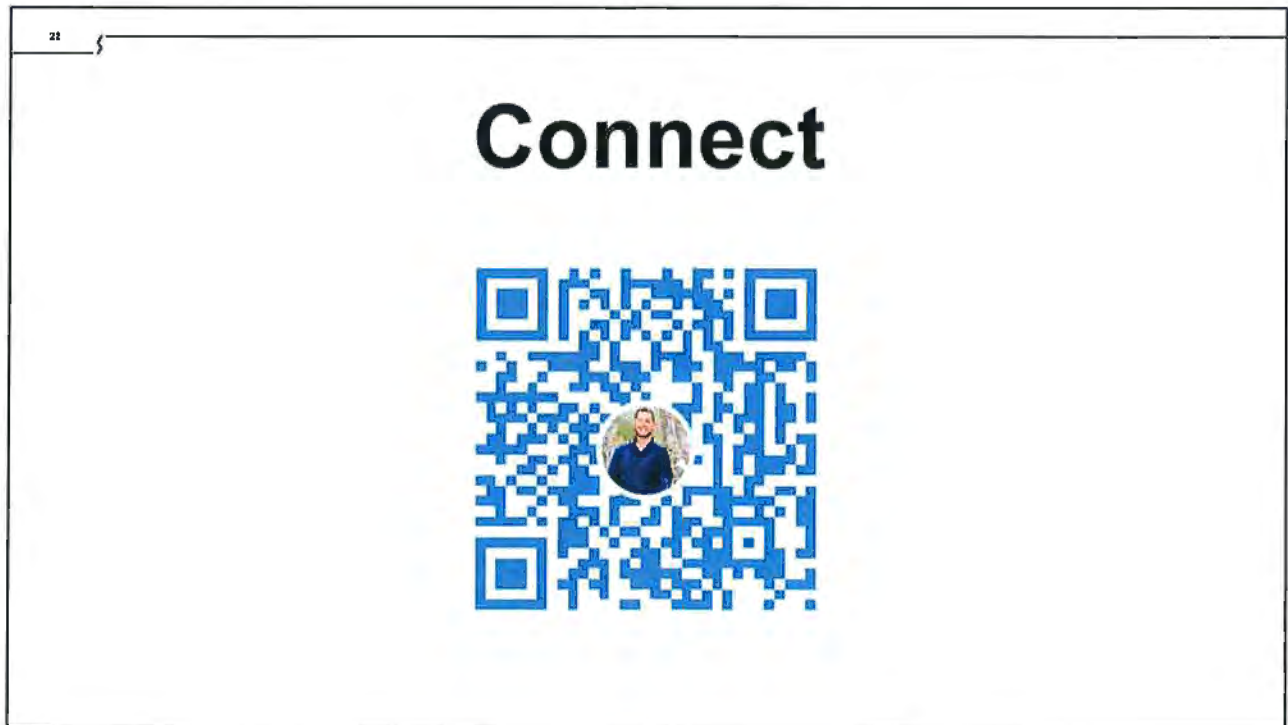


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Exhibit A-10  
 Date 11-13-2023  
Wtosp



21



22

Exhibit A-11  
 Date 11-13-2023  
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