

**City of Fort Lauderdale  
Infrastructure Task Force Committee  
May 6, 2019  
2:00pm to 5:00pm  
Fort Lauderdale City Hall  
100 N. Andrews Avenue  
8<sup>th</sup> Floor Conference Room  
Fort Lauderdale, FL 33301**

<b>MEMBERS</b>		<b>PRESENT</b>	<b>ABSENT</b>
Marilyn Mammano	P	24	1
Ralph Zeltman	P	24	1
Peter Partington	P	5	0
Roosevelt Walters	P	23	2
Fred Stresau	A	20	5
Norm Ostrau	P	22	1
David Orshefsky	A	21	1
Jacquelyn Scott	P	9	1
Gerald Angeli	P	1	0

**Staff Present**

Paul Berg, Director-Public Works  
Joe Kenney, Assistant Public Works Director-Engineering  
Talal Abi-Karam, Assistant Public Works Director-Utilities  
Brandy Leighton, Sr. Project Manager  
Jill Prizlee, Chief Engineer  
Meredith Shuster, Senior Administrative Assistant

**Consultant**

Patricia Carney, PE, Hazen & Sawyer, P.C.

Roll was called at 2:02 p.m. and a quorum was established.

1. Call to Order:
  - **Roll Call**
  
2. Approval of Agenda
  - Motion to approve the May 6, 2019 Agenda with corrections made by Mr. Walters and seconded by Mr. Zeltman**
  - Chairperson Mammano requested to add an item regarding a technology called Zonar that can create a visualization of Future Land Use Maps being presented to the City Commission by the Gridics Company at its May 7<sup>th</sup> Conference Meeting. In discussion it was decided to add this item to the June agenda.

Item 5 New Business A. on the status of the Consent Order will be held prior to the General Discussion portion of the agenda to facilitate the consultant.

**Motion to approve the agenda approved unanimously by voice vote**

3. Approval of Previous Meeting Minutes
  - A. March 7, 2019
  - Motion to approve the March 7, 2019 Minutes made by Mr. Partington and seconded by Mr. Walters**

**Motion to approve the March 7, 2019 minutes approved unanimously by show of hands**

B. April 1, 2019

**Motion to approve the April 1, 2019 Minutes with or without corrections made by Mr. Walters and seconded by Mr. Zeltman**

Ms. Shuster stated the minutes are in summary format and diligent effort is made to summarize the topic. [At the request of the Committee], names of the participants are added but the statements made will not be verbatim. Mr. Walters reminded the Committee that one cannot go back and adjust the minutes to add what was “meant or intended” to be said. The Committee agreed it did not want to return to a verbatim form of minutes.

**Motion to approve the April 7, 2019 minutes approved unanimously by voice vote**

4. General Discussion and Comments by Committee Members

A. Welcome Gerald Angeli

Mr. Angeli (Gerry) was welcomed to the Committee as the representative appointed by the Chamber of Commerce. He is a resident of Victoria Park with an industrial background.

B. The July 1st meeting hold as scheduled, cancel or reschedule to July 18<sup>th</sup>, due to the Fourth of July Holiday

**Motion to reschedule the July 1, 2019 Meeting to July 18th due to the 4th of July Holiday made by Ms. Scott and seconded by Mr. Walters**

**Motion to reschedule approved unanimously by show of hands**

C. The September 2<sup>nd</sup> meeting move to Thursday, September 5<sup>th</sup> due to the Labor Day Holiday

**Motion to reschedule the September 2, 2019 Meeting to September 5th due to the Labor Day Holiday made by Mr. Partington and seconded by Mr. Zeltman**

**Motion to reschedule approved unanimously by voice vote**

D. Discuss Open Space, Parks

Mr. Stresau forwarded his view via memo on Open Space and Parks to the Committee members to introduce the subject for discussion. He also forwarded photographic examples of the City of Houston showing wide sidewalks and open space plazas.

Ms. Mammano mentioned the active outreach being done to update the Comprehensive Plan. Her feedback from the community indicates this is one of the top issues.

The question was asked to define the difference between “parks” vs “open space” as they often are used interchangeably. Also asked, did the 5 acres include street plazas, medians, and the like?

Mr. Zeltman gave several reasons why an “open space” may not be suitable for a park; therefore the use of “park” and “open space” should not be interchangeable. It was agreed.

Ms. Mammano explained the 5 acres per 1,000 residents is essentially the land under the jurisdiction of the Parks Department. She asked how the 5 acres of open space/parks per 1,000 residents was determined and should that be the correct ratio? Does an area with large backyards and swales need as much parkland as perhaps a higher density area such as downtown?

Mr. Kenney stated there is 950 acres of parkland maintained by the City's Parks Department. He offered a general definition of a park as "open space available to all". He will obtain a more specific definition for the Committee. It was clarified that the actual residential population of the City is used as the metric in the calculation. Tourists are not included. Also, State and County parks are not included in the 950 acres of parkland maintained by the City's Park's Department.

Discussion included the planning for future population growth and the ability to maintain the current standard. The chairperson expressed a comfort level if the 950 acreage of actual parks is the basis of the 5 acres per 1,000 residents. Mr. Kenney stated currently, the actual figure is 5.3 acres per 1,000 residents.

Mr. Walters commented that accommodation of the future growth will be vertical due to lack of available land and Mr. Ostrau was wondering at what point the population will cap out, if ever.

Mr. Partington mentioned the decrease to around 3 acres per 1,000 residents mentioned in the Comprehensive Plan presentation. In order to maintain the 5/1000 ratio, by 2045 the City would need to add another 281 acres to maintain that ratio.

Ms. Mammano stated now may be the time to land bank land for the future or add open space requirements to the developer; otherwise by 2045 we will be 281 acres short. She emphasized that now is the proper time for the Committee to make recommendations to the Commission on all the infrastructure elements of the Comprehensive Plan.

There was general consensus that parks and open space will be added to the June agenda with the goal being a recommendation to the Commission.

Five questions presented to staff were:

1. What comprises the 950 acres?
2. Where does the ratio of 5 acres per 1,000 residents come from?
3. Is the ratio based on a safety or health factor?
4. How does the seasonal population figure in?
5. Discern the difference between "open space" and "parks"

#### E. FAU Traffic Study

Mr. Ostrau mentioned that FAU is doing a traffic study using personal devices that is incredible in its scope. The data can be gathered inexpensively and is extensive.

Ms. Mammano was aware of the study method and stated the City has been using it on 17th Street. Using technology to deal with an issue to visualize it is a move forward.

### 5. New Business

- A. Consent Order – Update – Hazen and Sawyer, P.C. [2:15 PM] [Meeting Videos](#)  
Brandy Leighton, Sr. Project Manager for the Consent Order and Patricia Carney, the Program Manager with Hazen and Sawyer did the presentation.

The Consent Order effective from September 29, 2017 to September 30, 2026 was a negotiated agreement amicably entered with FDEP ("Florida Department of Environmental Protection") to improve the infrastructure of the City. It includes 51 milestones which include planning and capital projects. There are 24 milestones in the first 21 months and to date, 24 milestones have been reached, 13 are in progress and the balance are mainly administrative milestones including the semi-annual reports.

It was asked if the State [of Florida] comes in to inspect a project once it is finished. Ms. Carney explained usually there are no inspections. When a project is completed, it is

certified and signed off by the consultant and the City. The documents are submitted and comments can be made; however, the State trusts the certifications.

Mr. Berg added all work is done according to the permits and plans. Plans are sealed and certified. The submitted documents are carefully reviewed. At some point; however, the State may choose to spot check.

Mr. Zeltman added there are certain tests performed on construction projects to verify the construction work.

Mr. Partington inquired about the bidding process.

Ms. Leighton stated it is a combination of design/bid/build and design/build. Ms. Carney stated the majority of the projects completed have been design/bid/build and the upcoming projects will be more design/build.

To respond to the use of design/bid/build which is generally more expensive, Ms. Leighton explained that many projects were already being planned prior to the Consent Order. The use of bond money mandates that the quickest delivery method be utilized. It also utilizes the City's team more for quality functions.

Mr. Partington asked if there were enough funds using these methods. Ms. Carney explained that the cost models built by Hazen and Sawyer took into account the projects that were thought to be design/bid/build and design/build.

Ms. Mammano asked about the difference between the \$200 Million bond and the \$135 Million cost of the Consent Order. Ms. Leighton confirmed that the balance was used for water and sewer projects per the master plan.

Mr. Walters asked about the pending 14 milestones if they were pending due to lack of funds or some other reason.

Ms. Leighton answered that the pending milestones are mainly administrative. The City is required to submit semi-annual reports. The 14 milestones include 12 that are these reports due over the next six years.

It was asked about the benchmarks showing on a map in the presentation. Ms. Carney described a benchmark as a point where everyone agrees on a certain elevation. These points are certified by the State. When laying out a plan, one then relates it to these benchmarks of common agreement.

Ms. Leighton and Ms. Carney explained the City's benchmarks were from old datum. The State uses a new datum system. The City's benchmarks are now entered into the new datum system.

It was asked if the exhibits indicated that the entire sewer system has been mapped. Ms. Carney confirmed it does. The mapping is due at the end of June and so it is close to being complete. She confirmed Ms. Mammano's inquiry that by the end of June, the City will have all of its sewer system mapped. The City will know location at that time but not the condition. The conditions come with the capacity assessment. The modeling portion determines if a pipe is over capacity or not. The asset management part will look at the condition of the pumps etc. to determine condition assessments.

Ms. Mammano confirmed with Ms. Carney that the City will have the location and condition of the pipes for the entire City. Ms. Carney confirmed it is in the process now of doing so. The City will have a gravity model for the basins where it is known there will be a lot of development. It will be a tool that as allocations are requested, a model can be made to see if the capacity of the current infrastructure is sufficient. If not, conversation about whether new infrastructure needs can occur.

Ms. Leighton added the City needs to report pipes that are exceeding capacity to FDEP.

Mr. Partington brought up that impact fees are fixed and made the point that the impact fees, whether current or proposed, are the same regardless of where the development is. Will there be a different fee for different basins?

Mr. Kenney stated the rate study increases all impact fees but does not use a basin by basin approach.

Ms. Mammano asked about I/I and what percentage of the gravity lines will have been treated by the end of this project.

Ms. Carney stated there are 186 basins and the 6 highest priorities are being addressed right now. Mr. Kenney added that about 10% of the City's sewer system will be done by this project ending in September of 2020. He further answered that the 10% includes both the Consent Order projects and other projects outside the Consent Order.

Ms. Mammano followed up with asking if 10% was a "good number". Mr. Kenney stated it was the 10% that was of the highest priority. It's addressing the oldest and worst systems. It addresses the areas where operations continually have to address issues after any rain event.

Mr. Zeltman added that it is only 10% of the system but represents a higher percentage of flows being handled by the system.

Ms. Carney confirmed and explained the map showing the peaks that occur during the day and after a rain event. By doing a calculation of the GPD ("Gallons per Day") per inch per diameter mile flowing in and over the entire length and diameter of a given piece in the system; its capacity can be determined and ranked. There is an acceptable standard level. Anything above that level needs to be addressed and below that level does not have to be addressed.

She further explained the mathematics and process used in determining the condition and capacity, including the different terrains found in the different basins of the City. In conclusion confirmed with Ms. Mammano's inquiry that the results are hard data the City can use in determining its priorities and spending.

Mr. Zeltman stated in defense of design/build, it can also save money because of the time saved through a more collaborative relationship between the contractor and engineer. Problems are more easily resolved. His experience in managing design/build projects was coming in ahead of schedule and under budget.

Ms. Leighton confirmed that an advantage of the contractor working with the engineer is plans can be reviewed prior to final completion to discover problems and figure out solutions.

Ms. Mammano confirmed that the Committee will see the next semi-annual report due to the FDEP by July 31<sup>st</sup>. Mr. Kenney confirmed it would.

B. Stantec Report on Water and Wastewater Rate Study [3:16 PM] [Meeting Videos](#)

Mr. Kenney reviewed with the Committee the presentation given by the consultant to the City Commission on April 15<sup>th</sup> and slightly updated when given to Budget Advisory Board (“BAB”) on April 16<sup>th</sup>.

Mr. Kenney expressed the rate study addresses the Committee’s recommendations for long term funding of infrastructure, the phase out of the ROI and the analysis and recommendation to increase impact fees.

A summary of the presentation includes:

- No rate increase for 2020
- A 5% total rate increase thereafter with the increase higher for wastewater than water
- Rate will be able to fund the CIP and proposed new debt
- Sewer rates will increase more than water.
  1. Water revenue exceeds expenses
  2. Sewer revenue falls short of expenses
  3. Impact fee update: The study used a “buy-in” system meaning the system is built and New Development would buy-in to it

Ms. Mammano asked about the timing needed to put this new rate structure in effect with the concern that it be an extensive timeframe of perhaps years.

Mr. Berg explained although it will not take years if adopted by the Commission, there will be a work load issue of rewriting the ordinance and calculating the new rate structures for water and wastewater along with restructuring the system accordingly. It will be a comprehensive adjustment that will go along with the budget process. The 5% increase needs to be removed for FY 2020 and the new rate structure amounts will need to be projected for future years. If approved, the goal is to begin the new rate structure on October 1, 2019.

The Commission has seen the presentation twice and requested further information to be presented at the May 21<sup>st</sup> meeting. He encouraged the Committee to attend or watch.

In answer to the question of why there will be no 5% increase in 2020, he stated it wasn’t a political decision. Although it was known there was a disparity between water and sewer, it was not known how much of an impact it would have. Time was needed to work out the new rate structure and get it accurate. It was decided to implement the rate structure first in order for people to have time to understand it.

In response to Ms. Mammano summarizing this as a “timeout” on the 5% increase, Mr. Berg stated the 5% is still needed to fund the additional \$200 Million in bond increments that will occur in the future to implement the water and sewer master plan.

On behalf of Commissioner Moraitis, Ms. Mammano asked why the ROI being redeemed wasn’t enough to stop the 5% increases during those years, or even lower the rates.

Mr. Berg explained that in this fiscal year after Hurricane Irma there were major repairs needed at the cryogenic plant for GTL causing a large expense and the hurricane caused the power sources from FPL going into the plant to become unreliable. Those two projects cost about \$30 Million. The amount gets averaged over 20 years. The \$5 Million saved this year from the ROI was pretty much used up.

Ms. Mammano asked what would have happened if the \$5 Million hadn’t been there.

Mr. Berg explained the money would have needed to be raised possibly by increasing fees. The increase would have amounted to a 19% increase in 2021. The rate study addressed what would happen without the return of the ROI. The return of the ROI funds to water and sewer currently provided for these unexpected expenses. In agreement with Mr. Partington, with proper management there is a possibility that it could aid in reducing rates in the future.

Mr. Angeli stated the rate study did not mention cost efficiencies to deliver the services and what reductions in water rates could be had. Discussion included the increases in other overhead costs; however, Mr. Berg explained that efficiencies are built into the system. As an example, this year the City saved \$240,000 in power consumption at GTL. Efficiencies get built into the rate structure because it is based on the cost of running the plants. Per the ordinance, true costs are determined on an annual basis. If certain criteria are met, a rebate is issued.

Staff will provide the criteria for rebates to the Board members.

Mr. Partington asked if the funding in the rate structure took into account the funding recommendations in the Reiss Report. Mr. Kenney confirmed long term funding needs have been built in.

Mr. Walters asked about any pushback from the neighbors. Mr. Berg stated that there have been speakers questioning the 55% the multi-dwelling residents pay; however, it is because they use about 55% of what a single family home uses.

Ms. Mammano expressed equity has always been a focal point of this Committee to ensure everyone pays their fair share.

The rate structure includes a fixed user fee of \$2.49 charged to everyone who hooks up to get water from Fort Lauderdale.

Mr. Partington pointed out the need to have a fixed fee to assist in securing bonds as cost increases may induce consumption decrease.

Mr. Berg directed the Committee to another portion of the report. For a 5/8" meter at the average usage of 5,000 gallons of combined water and wastewater, the current rate is \$66.27. Under the new structure it would increase to \$67.13. The same size meter using 2,000 gallons of combined water and sewer currently pays \$31.49. Under the new rate structure that amount would decrease to \$30.01. Overall, the midpoint is 5,000 GPD if less is used, bills should decrease between 0 – 2%. It encourages conservation. The consumptive use permit for water and the structure of the water rates are required to accelerate with higher usage.

The Committee decided to communicate its favor with adopting the rate study to the Commission at the May 21<sup>st</sup> meeting. There was discussion if the recommendation should pertain specifically to the fixed fees for all users or be expanded to support the rate study in total. The decision was to endorse the rate study in its totality.

- 1. Member Ms. Jacquelyn Scott made the motion, seconded by member Mr. Roosevelt Walters recommending the City Commission:**

**Support the recommendation of the Water and Sewer Rate Study of April 16, 2019.**

**In a voice vote, the motion carried unanimously.**

6. Old Business
  - A. Commission Discussion on ITF Recommendation

Ms. Mammano reported that she was at the Commission Conference Meeting April 16<sup>th</sup> during the Commissioners discussion of the Committee's recommendation regarding the future of an infrastructure advisory board. The conclusion was the Commission will take action closer to the end of the term of this Task Force which ends on March 7, 2020.

Mr. Angeli was of the opinion that the Commission placed value on this Committee and that it should continue in some manner.

B. Recommendations to the Comprehensive Plan Elements: Infrastructure, Transportation and Community Investment

Mr. Partington suggested the Committee look at the "big picture issues" such as parks and including funding when reviewing the Comprehensive Plan to avoid getting bogged down. The Committee had made several suggestions during the presentations and was invited to make individual suggestions through the website.

Ms. Mammano acknowledged the attempt to remain at the 30,000 foot level; but regardless of the level of recommendation it is worth the discussion. Infrastructure needs to be included in future consideration.

In reference to the Comprehensive Plan, the discussion of capacity assessment and the use of Zonar technology, Ms. Mammano asked, if the information provided on the capacity of the system is just given to the City to use as it will or is it projected into the current and future development of the City.

Mr. Kenney responded there are assumptions about future growth already embedded in the model. As an example, if one looks at the Zonar depiction of the City at its current growth level, it would be beyond the capacity of the current system. He stated it would be a good discussion to include. Models take into consideration future project population growth and different scenarios.

Mr. Partington reiterated his earlier point that as basins get near development capacity and new infrastructure is needed, impact fees outside of that basin may be subsidizing it. Approaches to fund new capacity may need to be addressed outside of the impact fees or the impact fees for that basin may need to be addressed differently.

Ms. Mammano mentioned in her experience, where there was capacity at the plant but not in the lateral between the plant and the project, the developer was required to pay for its replacement in addition to the impact fees. She pointed out that there are project specific things development has to do.

Mr. Kenney affirmed that is the current policy.

Ms. Scott knew of a situation that came in front of the Planning and Zoning Board where a developer wanted to bypass one pump station and go to a different one because of age and capacity. It was not allowed.

Mr. Kenney was familiar with that development which is in the review process. The developer will not be replacing the pump station in question but will be required to install about 5-6 blocks of new sewer main.

7. Informational Items -

A. Update on the Differences between Capacity Calculations

Mr. Partington reported on the question from the April meeting as to why there were differences in deriving the capacity numbers for the George T. Lohmeyer Plant ("GTL"). After reviewing the issue with Joe Kenney, he reported that the most recent capacity numbers being used for development

use a more conservation approach. Using 48 MGD AADF (millions of gallons per day average annual daily flow) for GTL is the better number to use. The remaining capacity of 7.5 MGD is more conservative. He added per the Reiss report, if growth continued at the same pace, a new injection well would be needed by 2020.

Mr. Kenney presented a capacity letter from the FDEP on GTL, Fiveash and Peele Dixie. He explained there is a State standard and a County Standard and both are calculated a little differently. The City staff looks at both and is publishing the more conservative. He expressed using the more conservative calculation is the current City policy. It is an administrative decision and a recommendation to the Commission would not be needed.

## 8. Public Comments

Mr. Boyd Corbin agreed with the Committee on its comments concerning ROI. He spoke of the dirt in the aquifer water. He suggested using GAC or membrane filtration instead of treating with flushing and ammonia. He states using ammonia creates a biofilm which leads to nitrification meaning bacteria is in the drinking water. Turning off the ammonia to rid the biofilm is called a free chlorination burn, which he states the City is not doing. He stated the process was stopped last year because the City was getting six times the level of bacteria above EPA standards. He found out that the City is increasing the amount of chloramine to combat the nitrification caused by the chloramine added to the water. What is the City's current plan for inhibiting nitrification in the drinking water since the City stopped these burns, he asked? He believes it could work if there was a whole lot of flushing but stated the City isn't doing that. In order for it to work, he states the City must increase oxidation reduction potential when the ammonia is increased. He then asked about accounts referenced in the presentation showing increases between 17% and 90% and asked which accounts those were.

Mr. Kenney didn't have an immediate answer but will get back to the Committee and Mr. Corbin. Mr. Corbin requested the following be answered:

1. How are we increasing the ORP (Oxidation Reduction Potential)?
2. What is the past schedule and future schedule for increased chloramine in time and quantity?
3. What level is the chloramine being raised to when the chloramine is increased?

## 9. Adjournment 4:14 PM

**Motion to adjourn: Chair entertained a motion to adjourn – Mr. Zeltman “so moved” and Mr. Ostrau seconded.**

**Motion approved unanimously by voice vote**

Next Regular Meeting June 3, 2019

## Response to Parks Comp Plan Questions

June 3, 2019

### 1. What is included in the City's existing 956.5 acres of parkland?

The Parks and Recreation System Master Plan shows a total of 956.5 acres of parkland based upon an inventory of park system resources. The park includes community parks, special use parks, large urban parks, neighborhood parks, school parks, and urban open space. A map of all the parks can be found on page 69 of the Parks and Recreation System Master Plan which can be found [here](#).

#### a. And, what is the definition of a park versus open space?

Open space is land that is undeveloped that has no buildings and is accessible to the public. A park is an area of land, usually in a largely natural state, for the enjoyment of the public, having facilities for rest and recreation.

### 2. Why 5 acres per 1,000 residents? Essentially, where did that number come from?

Based upon an analysis of our current population of 182,000, the city is providing 5.26 acres of parks per 1,000 people. The goal is to maintain the existing level of service 5 acres of park and open space per 1,000 residents. The adopted comprehensive plan level of service is 3 acres per 1,000 residents.

### 3. Is it a safety issue? Is it a health issue?

Parks and open spaces play a role in contributing to economic development and revitalization, healthy outcomes for city residents, and green infrastructure solutions for managing stormwater.

### 4. What about seasonal population?

The level of service analysis uses the city's permanent population. The Parks Master Plan recommends that in addition to the focus on the full-time residents of Fort Lauderdale, with significant number of seasonal residents and tourists in the community, future programming should address these two markets as well. When assessing needs and priorities, the city will need to "attempting to serve from the occasional visitor or tourist who is looking for something unique or special, to the seasonal resident who desires special activities and facilities, to the full-time resident who may have more traditional needs. Added to this is the need to serve the special needs segment of the community in an effective manner which is often through partnerships with other organizations."

### 5. How will parks and/or open space be handled with new development?

Park impact fees will continue to be collected for building permits for each new dwelling unit and hotel/motel room. With the codification of the Downtown Master Plan into the unified land development regulations (ULDR), code language will be developed to support a continuous network of public and private spaces that collectively contribute to the public realm.

**From:** [Peter Partington](#)  
**To:** [Meredith Shuster](#)  
**Cc:** [Joseph Kenney](#); [Paul Berg](#)  
**Subject:** Recommendations to the Comprehensive Plan Elements.  
**Date:** Friday, May 17, 2019 7:33:02 AM

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I will not be at the ITF meeting of June 3, 2019. The above subject will be on the agenda. The following is my input for the meeting. I have tried to concentrate on big picture items. Please forward/distribute this as necessary.

- Community Investment.

The Comp Plan should include the recommendations the ITF made to the Commission under cover of a memo dated August 28, 2018. Specifically the 4 recommendations under [1] Water and Sewer, [2] Stormwater, [3] Roads, Sidewalks and Seawalls and [4] Impact Fees. #3 is especially important and recommends the support of the CIP to the financial extent of 7-10% of the General Fund Operating Budget.

- Infrastructure Concurrency Management, Water [objective C1 2.1 and SWS 2.1]

The draft plan states that the existing LOS is measured by the number of gallons/day based on average flows experienced and number of equivalent residential units [ERU] and that the LOS shall be 197 gallons per capita per day, with a goal of 170 GCPD through 2028. A reduced consumption rate is desirable and the 170 GCPD goal is not ambitious enough. The policies for conservation should be more specific toward that end.

- Wastewater Service Provision and Capacity [Objectives SWS 1.1 and 1.2].

The LOS should be based on the maximum 3 month average daily flow. I question the use of the FDEP capacity of 56.6 MGD. At this time the BCEP capacity of 48 MGD is more appropriate. The FDEP capacity will require the construction of an additional injection well.

- Infrastructure Concurrency Management, [Stormwater]. [objective C1 2.1 and SWS 6.1]

There is reference to LOS based on the City's Watershed Asset Management Plan [WAMP]. I am not sure what this is or how it relates, if at all, to the SFWMD standards. Can this be clarified especially to ensure there is nothing in conflict? There are policies to raise road and building floor elevations to meet certain storm occurrence events. Climate change means that storms will become more severe and the occurrence standards are likely to become ever more difficult to implement. The City cannot just keep raising things out of the flooding. New development drainage standards have a role to play. The Comp Plan proposes the retention of the first inch of storm water for developments. This standard must be more ambitious i.e. a greater amount of water retained on site. This will lead to increased pervious areas. There will be a benefit to overall drainage and increased open space. This suggestion falls also under the heading of improving resiliency by increasing pervious retention areas.

- Parks and Recreation Element. Park LOS [PR 1.1.1]

This was discussed at some length based on Fred Stresau's letter on the May 6 Agenda. I am supportive of changing the current goal for Parks [ie public parks under public control] from 3 acres per 1000 residents to 5 acres. I recognize that the projected population increase will make this difficult to achieve but a Comprehensive Plan should be ambitious and parks are an essential element of all great cities.

Infrastructure Concurrency Management [Transportation, Objectives C1 2.1 and TM 1.6].

All LOS used here should be multi modal. Using traffic capacity [vpd] LOS is no longer acceptable. Research is needed on appropriate multimodal LOS standards for use in the Comp Plan.

I am opposed to the blanket use of traffic LOS 'D' for all local roads. An acceptable multi modal LOS should be established for each category of local road [eg residential collectors, residential roads and roads serving commercial uses] based on their adjoining land uses. More traffic is acceptable on local roads in commercial areas than local roads through residential areas.

Peter Partington

5/17/2019

Infrastructure [Water Sewer]. I do not remember seeing any reference to the CUSMP[Reese Report]. This is the long term plan for future water/sewer improvements.



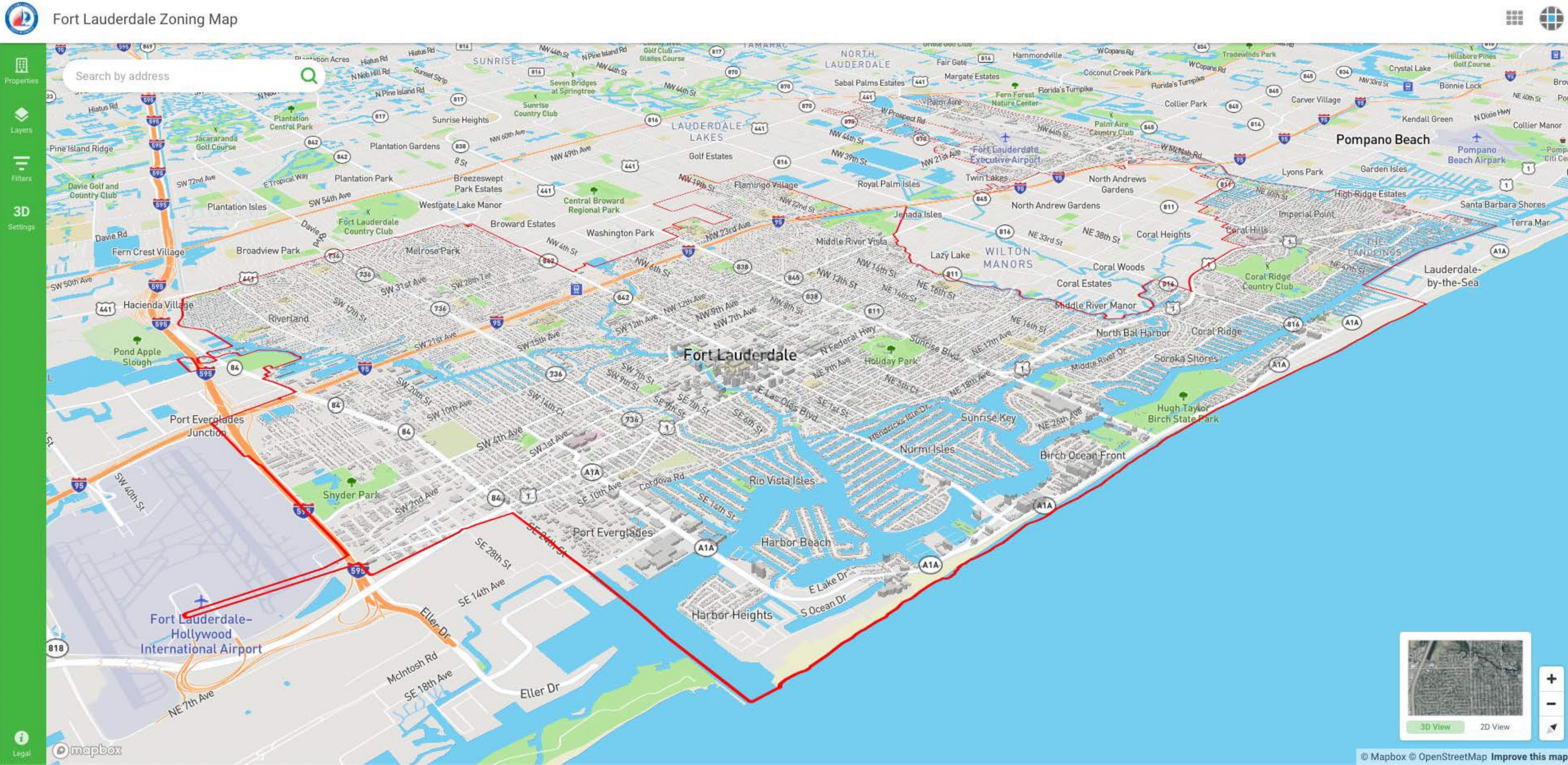
**INTELLIGENT ZONING & DEVELOPMENT DATA SOLUTIONS**

# CodeHUB

## Map Product Overview

# 3D City Base Map:

- View existing structures in 3D.
- Rotate map for varying viewpoints.
- Improve context around development decisions and discussions.



<https://fortlauderdale.gridics.com>



# 3D City Base Map:

- View and analyze mass, scale and architectural detail of downtown buildings based on context and area character.

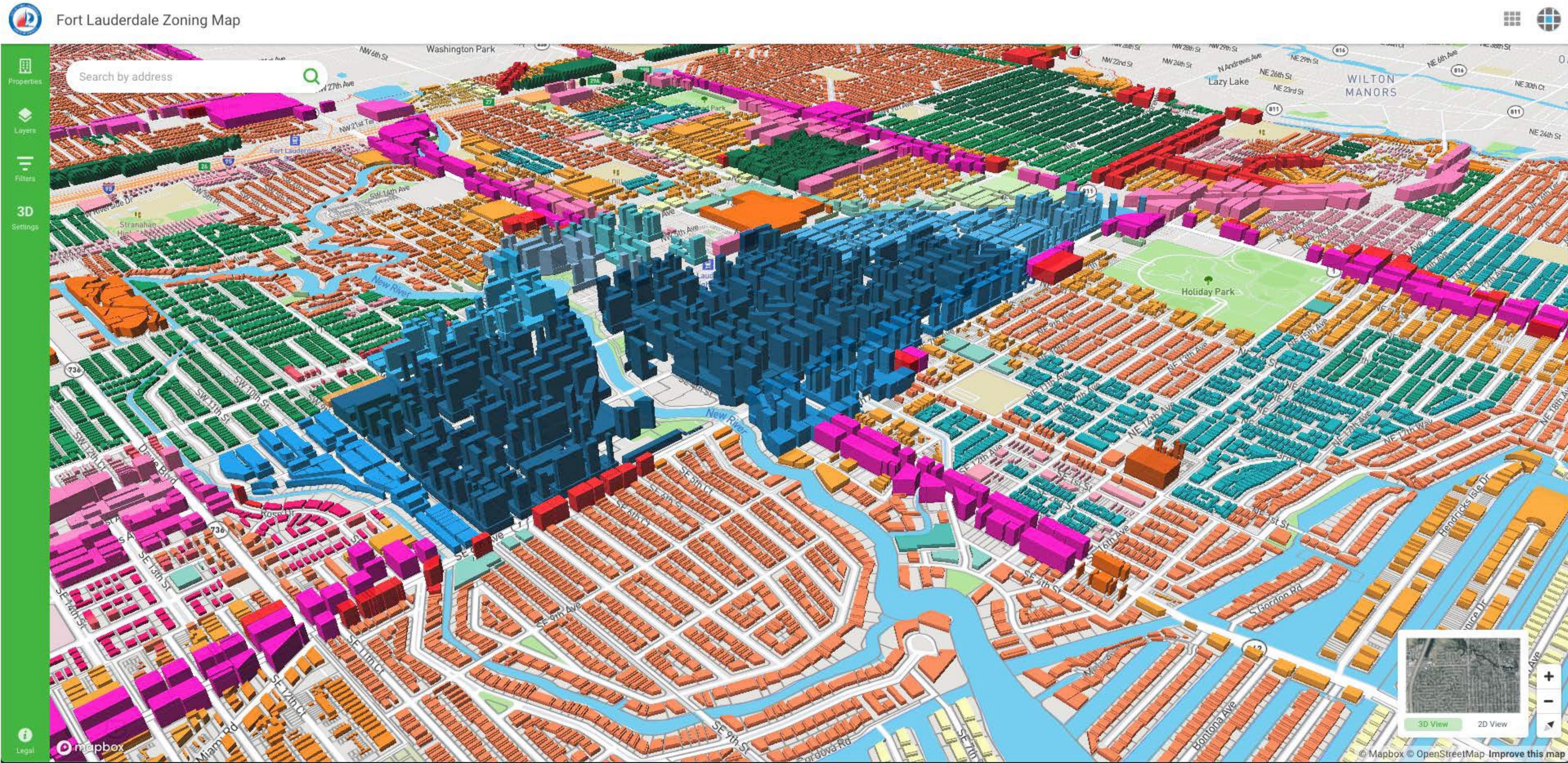


<https://fortlauderdale.gridics.com>



# 3D Zoning Map:

- View development potential of each parcel, according to zoning
- Quickly visualize context of each area relative to neighboring zones.



<https://fortlauderdale.gridics.com>



# 3D Zoning Map: - Visualize maximum allowances relative to existing structures.

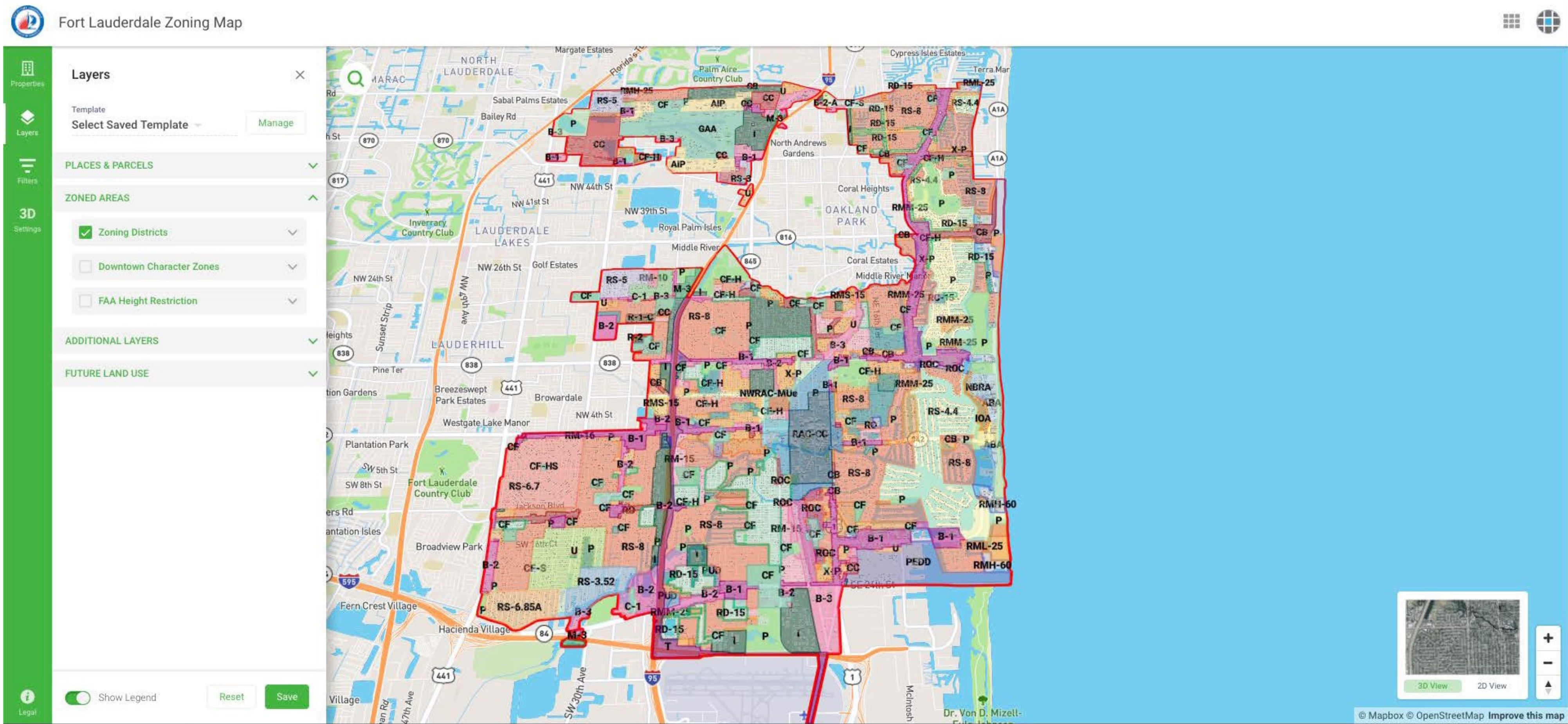


<https://fortlauderdale.gridics.com>

 Gridics

# 3D Zoning Map:

- Easy to navigate interface and menus.
- Add custom data layers for review by staff and policy makers prior to approval.

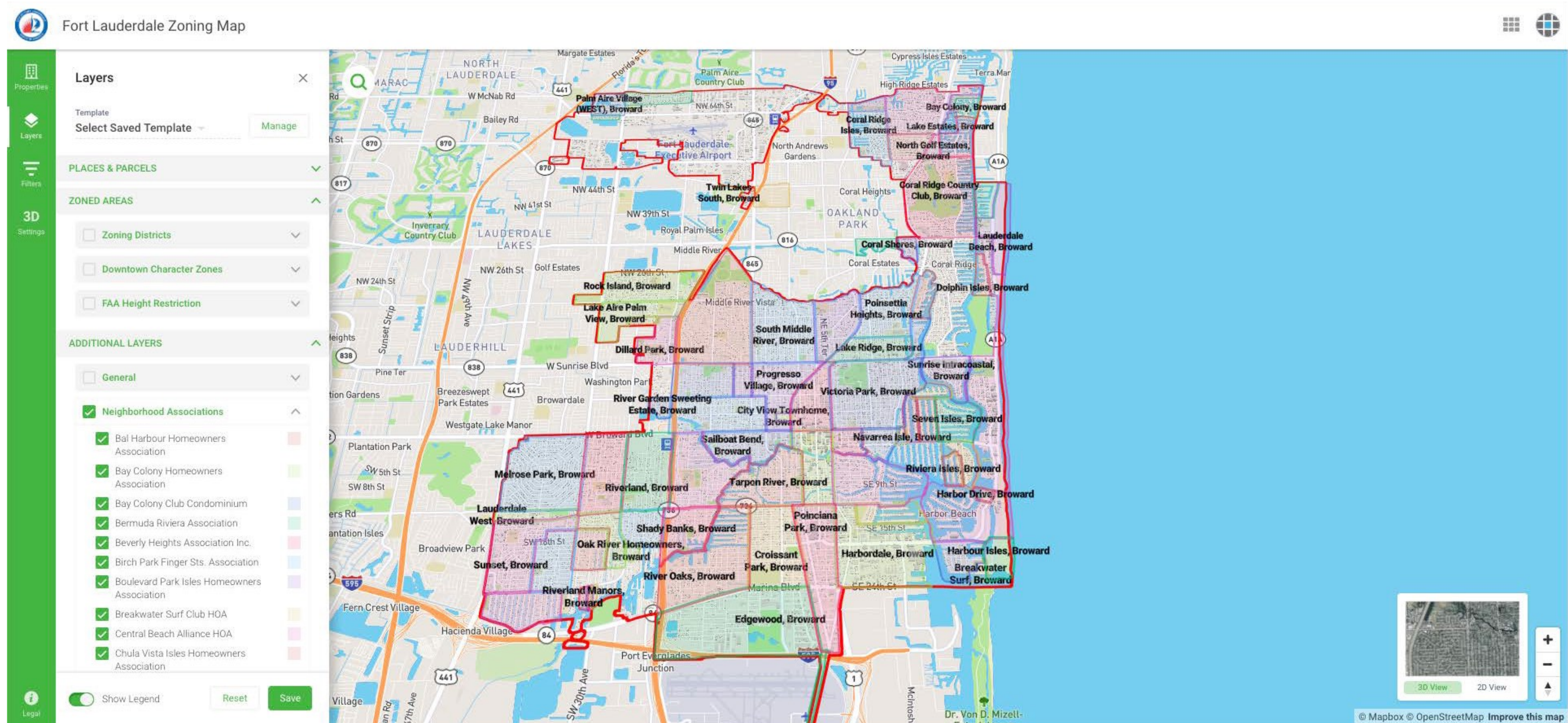


<https://fortlauderdale.gridics.com>



# Beyond Zoning

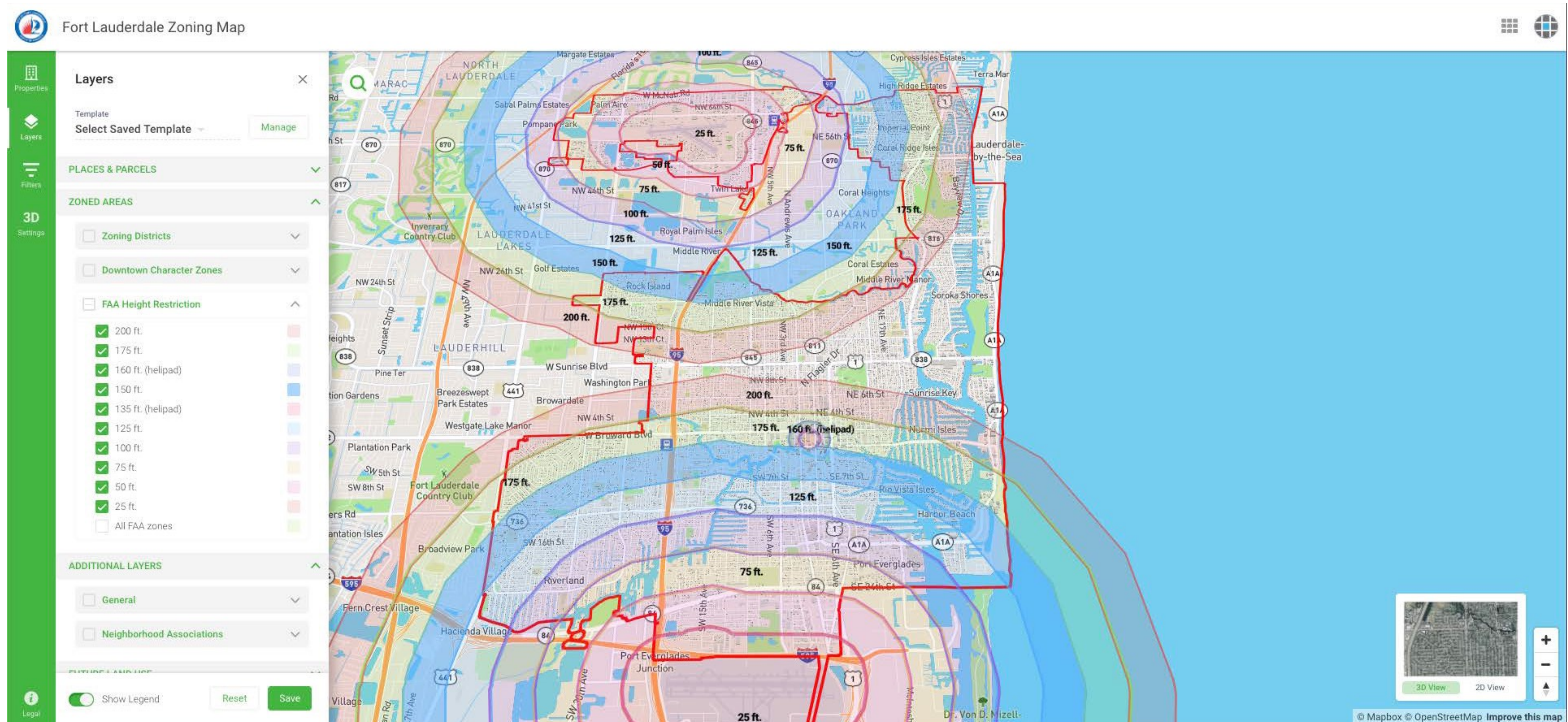
- View other commonly defined areas like opportunity zones, neighborhoods, districts and more.



<https://fortlauderdale.gridics.com>

# Beyond Zoning

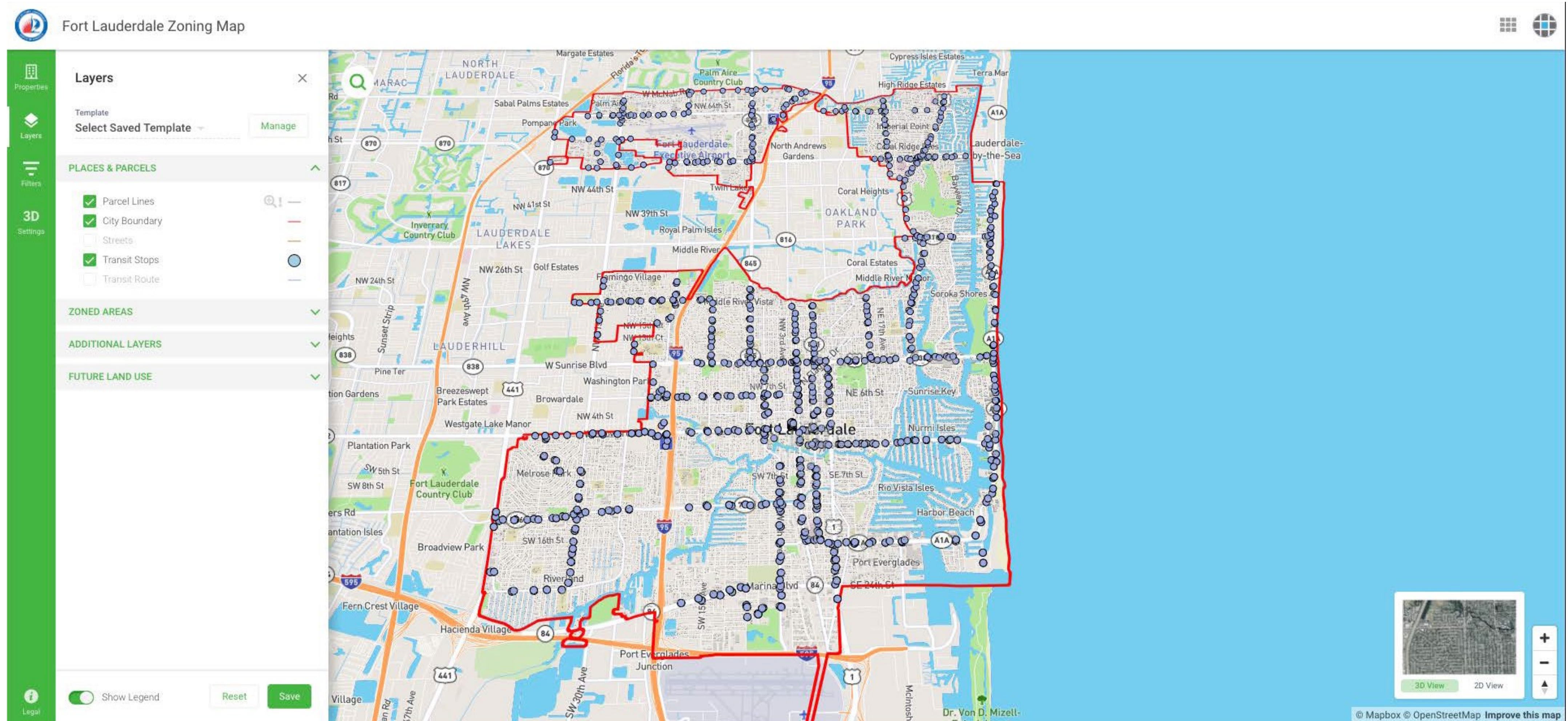
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# Beyond Zoning

- View other commonly defined areas like opportunity zones, neighborhoods, districts and more.



<https://fortlauderdale.gridics.com>

# Property Record & Zoning Details

- Tax assessor records and parcel shapes.
- Gridics unique calculated zoning details.

**Fort Lauderdale Zoning Map**

411 N New River Dr E Apt #603, Fort Lauderdale, 33301

Property Details **Zoning** Layers Allowances

**BASIC ZONING**

Zoning Code: Fort Lauderdale

Zone: RAC

Sub-Zone: CC

Type: N

Current Land Use: 4 - Condominium

Municipality Future Land Use: D REGIONAL ACTIVITY CENTER

County Future Land Use: Regional Activity Center

**ADDITIONAL ZONES**

FEMA Flood Zone: AH Broward County

Base Flood Elevation: 8

**OVERLAYS**

- FAA-150
- Parking Table 1 (Citywide)
- Downtown Core - Design Guidelines
- Parking Table 3 (RAC-CC, RAC-AS)
- CANCEL VARIANCE - TEMP

**VARIANCES**

Lot Area too small or too large

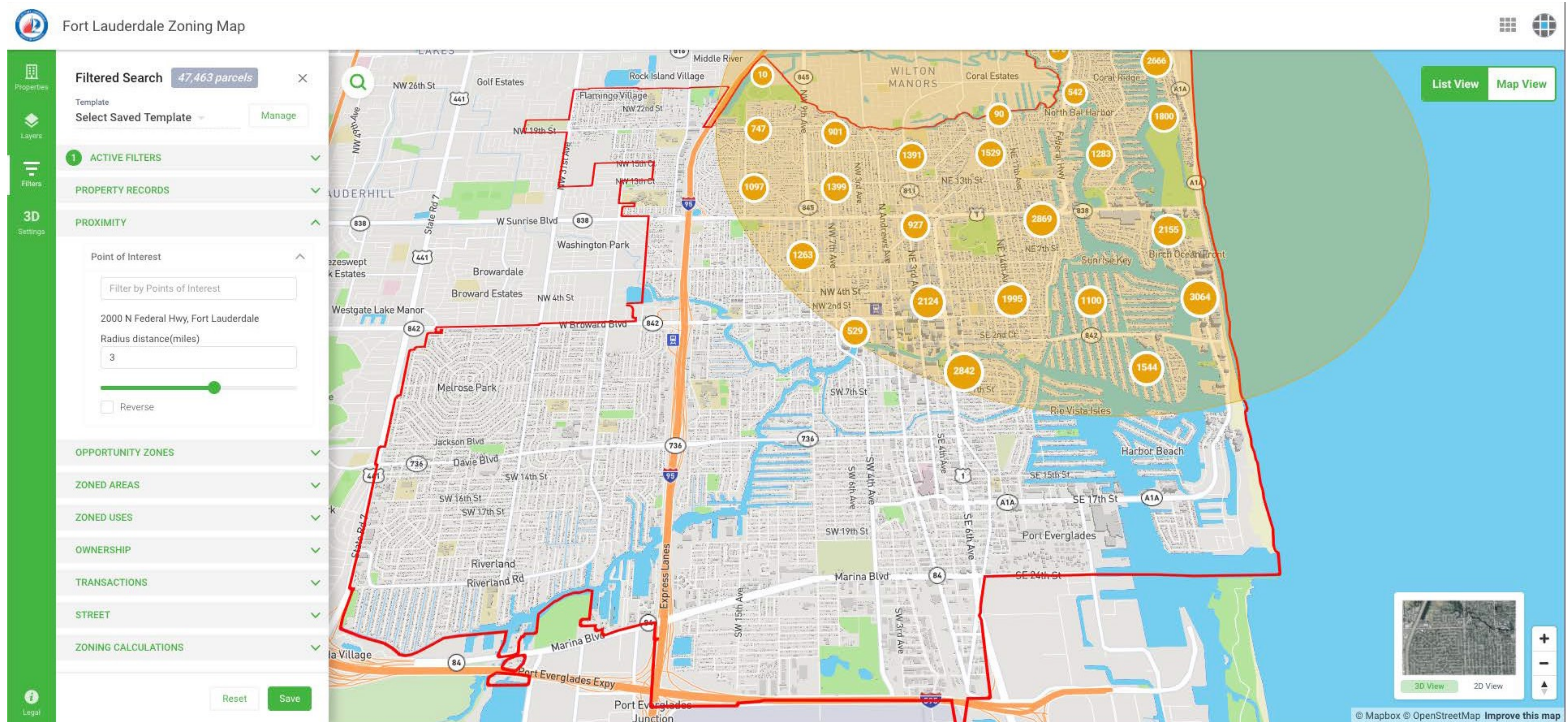
© Mapbox © OpenStreetMap Improve this map

<https://fortlauderdale.gridics.com>

**Gridics**

# Property Search Filters

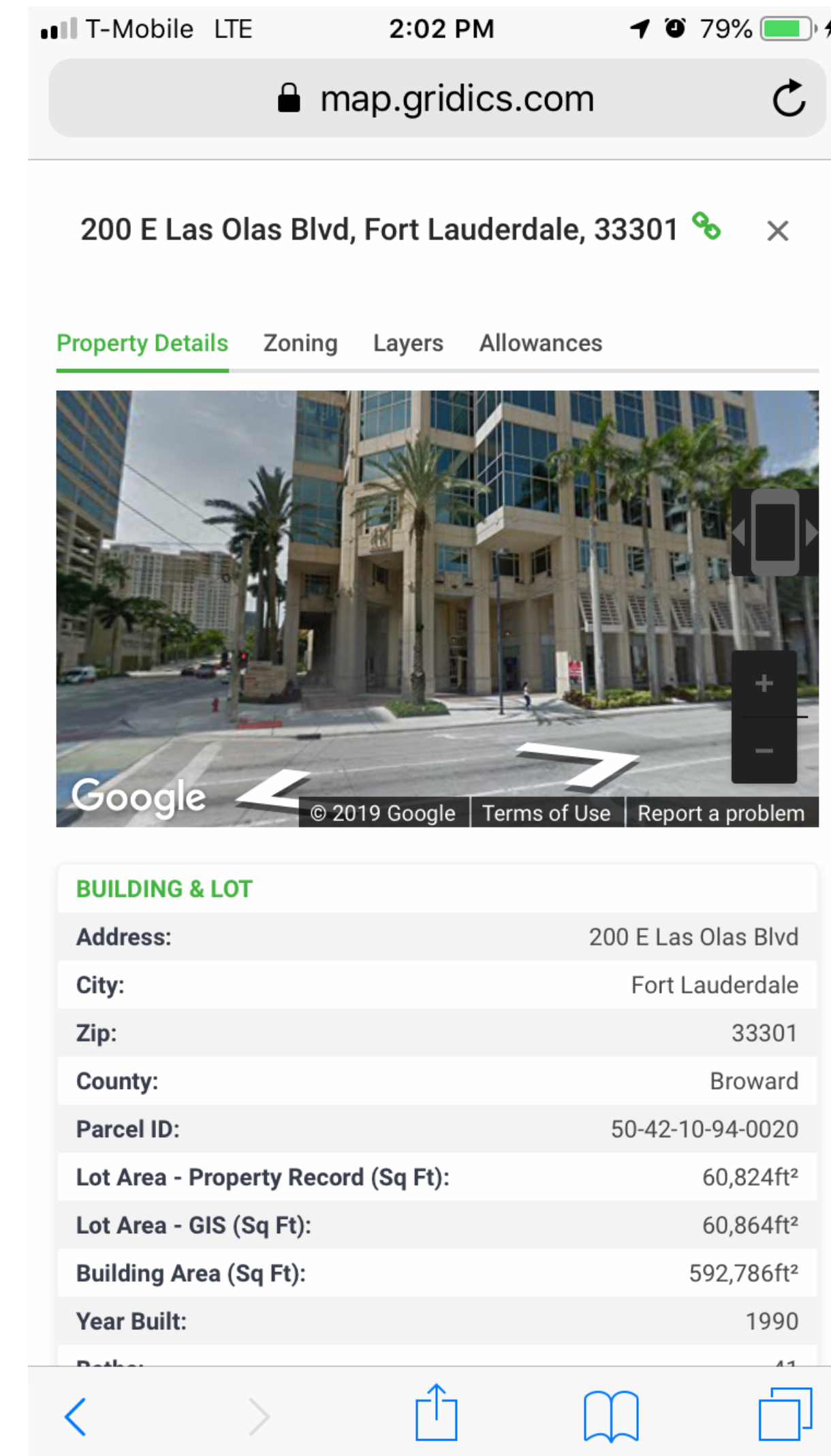
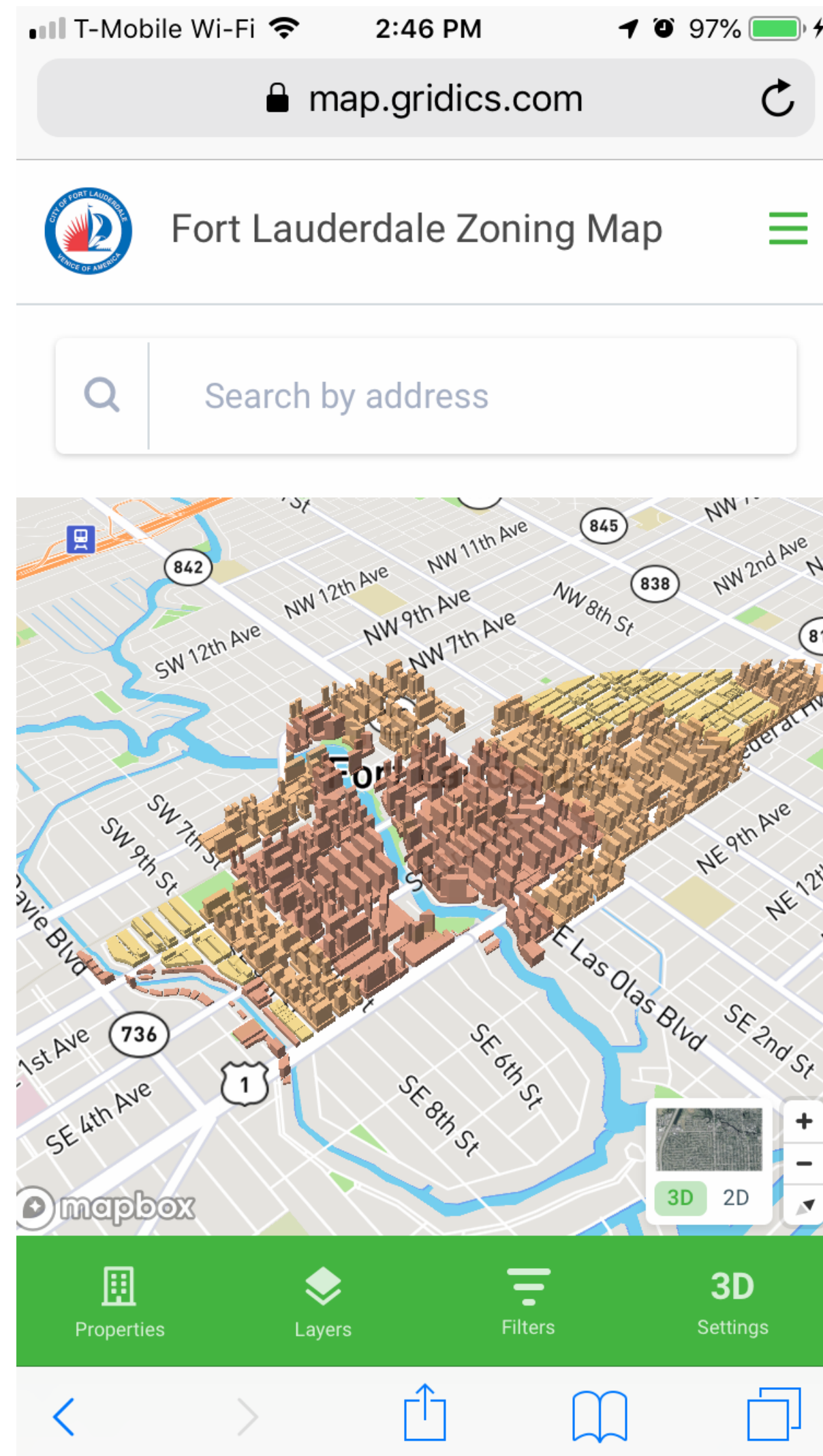
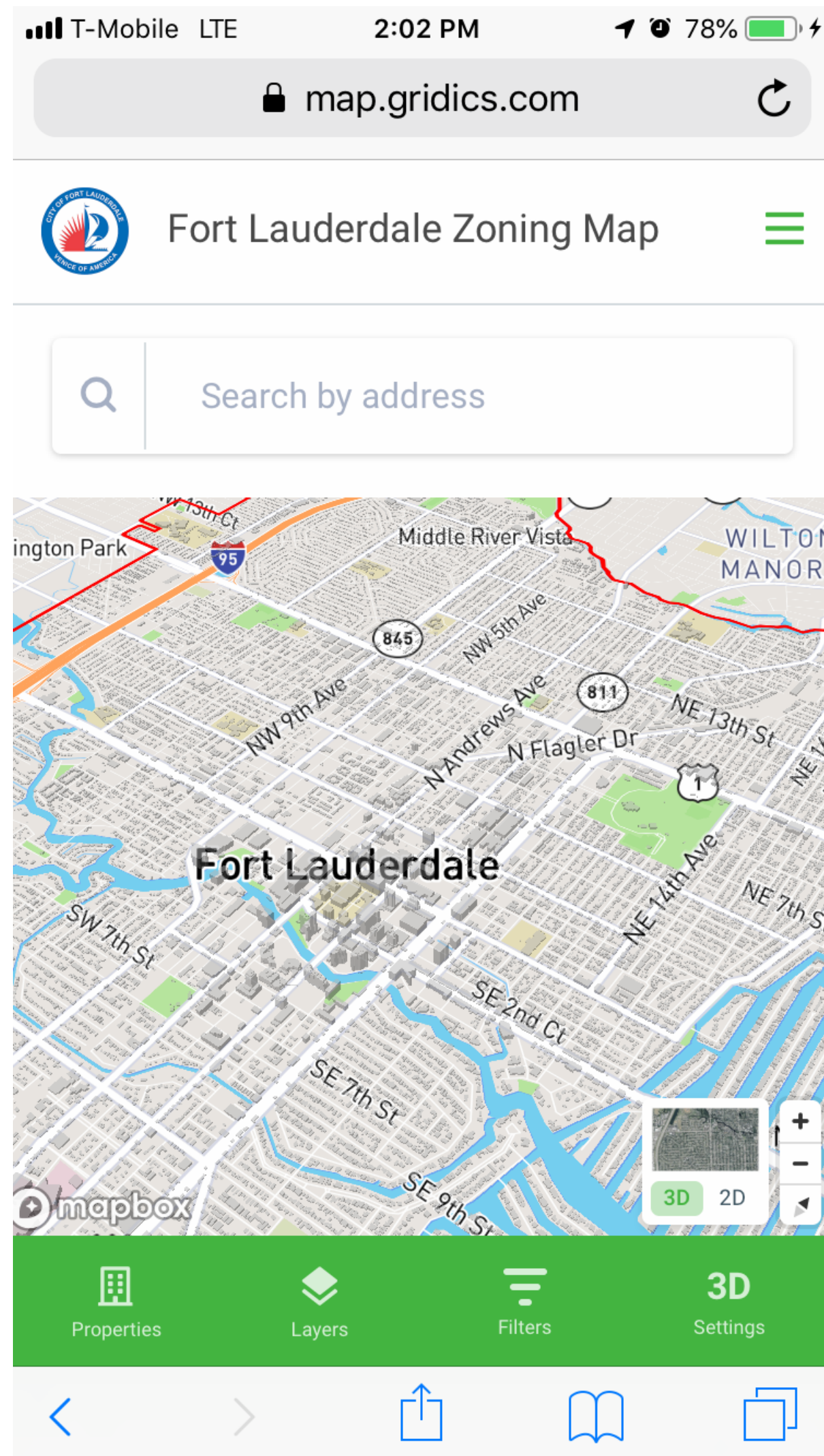
- Identify economic development opportunities.
- Search use-specific properties, proximity.



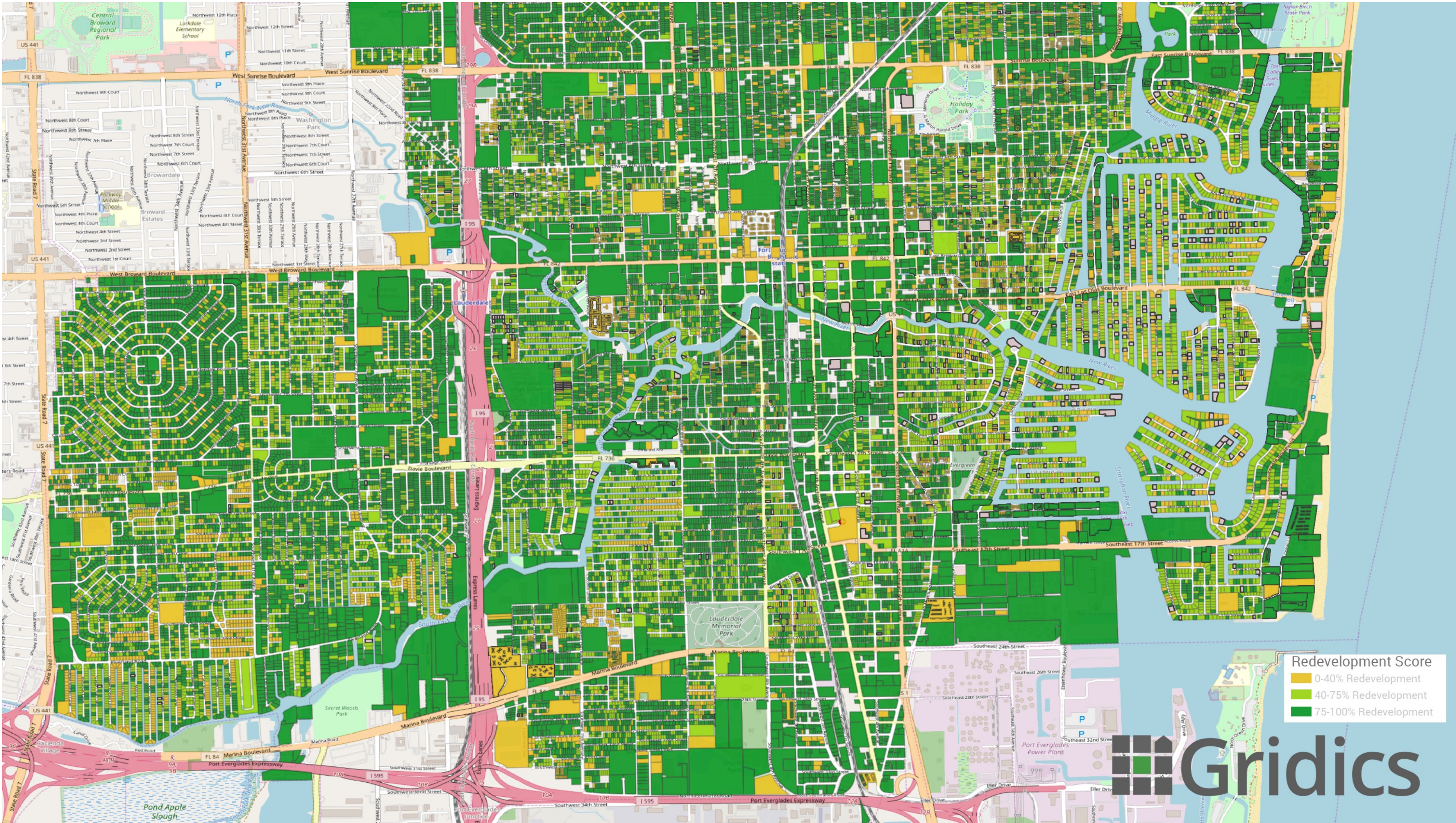
<https://fortlauderdale.gridics.com>

# Mobile Friendly

- Arm your staff with valuable zoning & property details in the field.
- Provide neighbors with on-hand information about development projects.
- Make your city more investor friendly.



# Underlying Data Analysis



# Fort Lauderdale Leading the Way!

Fort Lauderdale Zoning Map



The City of Fort Lauderdale  
is the first ever city to have  
a 3D Zoning Map

Gridics is proud to partner with the City of Fort Lauderdale to help you drive municipal innovation and leadership.

Thank You For Your Time Today



## WASTEWATER

### Sec. 28-76 Rates and Charges

#### (b)(1) \*Note

Note 1: By April 30th of each year, the city manager shall determine if as of September 30th of the year prior whether projected revenues based on adjusted rates exceed the following five (5) criteria: 1) annual revenues exceed annual expenses, 2) net revenue is at or above two (2.0) times annual debt service expenses, 3) there is an operating reserve at least equal to one hundred twenty (120) days of operating costs, 4) there is an unrestricted capital reserve of at least ten million dollars (\$10,000,000.00), and 5) there is replacement and repair funding of at least ten million dollars (\$10,000,000.00). If there is projected revenue that exceeds these five (5) criteria, the current customers shall receive a proportionate rebate of the excess funds on their water/wastewater bill in the same fiscal year. For purposes of this note, revenue, expenses, and net revenue are as defined in City Commission Resolution No. 03-29.

### Sec. 28-143 – Water rates

(a)(1) The water rate charts refer to the note on the wastewater rate chart for the rebate criteria.

## Note from the Chair (2 pages)

*Hello Members of the ITF,*

*Below are some suggested examples of ITF Comments on the Proposed Comp Plan to the P&Z and City Commission. I send this on to you to start the discussion about how we could comment on the Comp Plan Update. I probably left out some of your comments over the last two meetings and I apologize.*

*Marilyn*

1. In the Infrastructure Element there are at least 13 references to evaluation methods as “Record of” referencing anything from reuse alternatives, participation in, improvements to, etc. (see attached list). There is no indication of who is being reported to, on what schedule, and what standards or goals we are trying to reach. This happens in other Elements as well.
2. Incorporate the recommendations of the ITF in the appropriate sections as policies regarding:
  - a. Devote a consistent % of the City’s general revenue to capital construction (Transportation).
  - b. Prohibit transfer of enterprise funds for storm, water, or sewer fees (Capital Spending).
  - c. Update and review all impact fees on a biannual basis (Infrastructure).
  - d. Continue to adjust water storm and sewer rates for equity and conservation as well as bonding capacity (Infrastructure).
3. Recommend that the City increase the level of service for parks/open space beyond the current 5 acres per 1000 residents. The policy would be: (See Fred’s email)
  - a. Include the tourist and seasonal population in calculating the LOS.
  - b. No reduction in existing parks or open space.
  - c. No sale of city owned land for private development without an equivalent or better open space.
  - d. Identify and purchase any existing open space that would be appropriate for park development in the future.
  - e. Increase the open space requirements for all new high-density developments.
  - f. Other.
4. Recommend that the City review LOS for traffic based on context. The policies would be: (see Peter’s email)
  - a. Recalculate LOS based on mobility not car counts.
  - b. Establish LOS for streets based on the adjacent land use not desired throughput.
5. Other member’s emails and comments to be included (including discussion at the June 3, 2019 meeting).

# **Excerpts from the Infrastructure Element 2020 Advance Fort Lauderdale Comp Plan (Proposed)**

## **Evaluation Measures**

Record of the City achieving and maintaining levels of service standards established for the City and the Central Wastewater Region.

Record of planned and funding sources for expansions to wastewater collection and treatment facilities and services to meet projected 2035 ows.

Record of conversions from septic tanks to connections to the wastewater collection system.

Record of City participation in intergovernmental coordination programs for wastewater treatment facilities and services.

Record of the City providing potable water service to meet the demands at adopted levels of service.

Record of City participation in interlocal agreements for potable water services.

Record of City annual average daily demand showing continued reduction in per capita water use.

Record of City including water reuse alternatives in future utility system master planning.  
2. Instances of private developers incorporating water reuse projects into new development.

Record of service extensions to areas experiencing redevelopment.

Record of City designation of Conservation Areas on the City's Future Land Use Map (Series). 2. Record of review of site plans by the City's Stormwater Operations Section of the Utilities Division.

Record of participation in Federal Emergency Management Administration (FEMA) program.

Record of participation in the NPDES program.

Record of improvements to drainage facilities necessary to meet the drainage needs and increase in drainage capacity as identified in the Broward County Drainage Assessment.

**Infrastructure Task Force Memorandum**

**May 31, 2019**

I have a particular interest in the Parks and Recreation Element of what the Planning Department has presented and would like to have the ITF read my notes from the various City sources so that we might be prepared to further discuss what the ITF's recommendations might be to the City Commission.

Fred Stresau  
May 31, 2019

**Infrastructure Task Force June 3, 2019 meeting**

**The most critical decision that must be discussed and an advisory position forwarded to the City Commission by the ITF is whether or not to submit the Comprehensive Plan – Parks Element- with the level of Service listed at 3.0 acres/1000 residents(Broward County requirement) or to increase that area to 5.0 which has been presented as a future goal of the City by the Planning Department in the revised Parks Element.**

It is important at this time to understand that Ordinance C-06-14 establishing the Park Impact Fee authorizes the expenditure of collected funds for a multitude of things as well as the acquisition of park lands. More vital to the ITF's understanding for this Ordinance is the Policy 1.2.2 sets the standard for the issuance of a site plan approval.....as long as the City ensures that Parks can meet the level of service established by the Comp Plan.

**In order to meet the future Open Space requirements beyond the 2025 date the City will need to lower the Loss of service to 3.0 acres/1000 residents, or lacking that adjustment, acquire more park land and or identify all of the City Open Space.**

At last month's ITF meeting, May 3<sup>rd</sup> the general discussion on the Parks Element of the Comprehensive Plan centered on several questions and lasted some 35 minutes.

Staff was requested to provide answers to questions from the committee and we should review those before we go on to the principal objective and that is to review the Parks and Recreation Element of the Comprehensive Plan and work towards our ultimate goal of advising the City Commission on any policy changes we feel worthy of considering.

**The questions and staff responses** have been distributed prior to this meeting and they are as follows:

**What comprises the 950 acres currently listed in the Parks and Recreation Master Plan?**

Includes community parks, special use parks, large urban parks, neighborhood parks, school parks, and urban open space

**Where does the ratio of 5 acres per 1,000 residents come from.**

Based upon an analysis of our current population of 182,000, the city is providing 5.26 acres of parks per 1,000 people. The goal set forth in the Parks Element is to maintain the existing level of service 5 acres of park and open space per 1,000 residents. The adopted comprehensive plan level of service is 3 acres per 1000 residents.

**Is the ratio based on a safety or health fact**

Parks and open spaces play a role in contributing to economic development and revitalization, healthy outcomes for city residents, and green infrastructure solutions for managing stormwater.

**How does the seasonal population figure in?**

The level of service analysis uses the city's permanent population. The Parks Master Plan recommends that in addition to the focus on the full-time residents of Fort Lauderdale, with significant number of seasonal residents and tourists in the community, future programming should address these two markets as well. When assessing needs and priorities, the city will need to "attempting to serve from the occasional visitor or tourist who is looking for something unique or special, to the seasonal resident who desires special activities and facilities, to the full-time resident who may have more traditional needs. Added to this is the need to serve the special needs segment of the community in an effective manner which is often through partnerships with other organizations."

### **Discern the difference between “open space” and “parks”**

The City provides other areas of open space that contribute to the aesthetic enhancement and overall livability of the community and thus many of these properties can be legitimately considered in the open space category.

**Joe** - Open space is land that is undeveloped that has no buildings and is accessible to the public.

**Joe** -A park is an area of land, usually in a largely natural state, for the enjoyment of the public, having facilities for rest and recreation.

### **Fred** -From the **Park Systems Plan**

#### **Urban Open Space**

*Description:* Areas of developed City property of a minimum of 0.1 acre. These areas have varied uses and purposes. They could be enhancements of the immediate surrounding streetscapes or neighborhoods, entranceway dedicated by the developer for parkland, water tower or other utility sites, oversized rights-of-way or medians. Typical development may include turf, trees, shrubs, irrigation, benches, trash receptacles, picnic tables, vehicular barriers, paved parking or walkways, signage and lighting. A 1/4-mile service radius is typical. Table 3

### **How will parks and/or open space be handled with new development?**

Park impact fees will continue to be collected for building permits for each new dwelling unit and hotel/motel room. With the codification of the Downtown Master Plan into the unified land development regulations (ULDR), code language will be developed to support a continuous network of public and private spaces that collectively contribute to the public realm.

The most significant response and one that will influence our discussion today is the definition of Open Space.

#### **From the Parks Element – page 1-**

*For the purpose of this element, open space will be addressed both in terms of its association with recreation and its aesthetic value within the urban environment.*

There are several statements in the Parks Element that I wish to have the ITF review and be aware of simply because I believe that the Parks Department is more focused on the management and maintenance of the park system than where the requirements of the City demand.

**From the Parks Element – page 1**

- *The Fort Lauderdale Parks and Recreation Department has the responsibility for the management, programming and maintenance of over one hundred different facilities and parks.*
- *The City is concerned about preserving, upgrading and retrofitting its park facilities to keep pace with the redevelopment.*

**From the Parks Element – page2**

- ***There are likely to be very limited opportunities for the acquisition of new parklands and innovative methods will have to be utilized towards expanding the park system.***
- ***Concerns will be for the ongoing modernization and enhancement of existing facilities.***

**Let's talk population increase.**

The Parks Element outlines that the City currently provides a bit more than 5 acres/1000 residents.

The Parks Element outlines that by 2015 the Level of Service (LOS) will just barely meet that requirement and that by 2045 the City will have a shortfall of some 235 acres of Park and Open Space. Staff has commented that these figures may not be correct but the recent article in the May 21 Sun-Sentinel article by Johnson @FAU- on population growth in South Fla. from the US Census projects of 15-16% in the next 10 years. From the Parks Element the projected LOS in 2020 is for 180,000 residents @ 5.31. The ten year (2030) population projection from the Parks Element is for 223,000 @ 4.29 where as using Mr. Johnsons numbers, the population might be about 209,000. Johnson's number was for South Florida and it is likely that with the City's Downtown growth the number in the Parks Element is closer to being correct.

It is to that specific fact that I believe that the ITF needs to focus and consider recommended changes to the Parks and Recreation Element.

The Planning Staff suggested at the May 2019 meeting that perhaps another planning avenue might be considered for the development of Open Space, that of open air restaurants .....

That thought is reflected in the final Parks Element

**From the Parks Element – page2**

- ***Aesthetic enhancement and continuity well need to command a greater priority in both private and public development.***

In reviewing the past and current construction in our urban core the one design element that jumps out is that **the private development** for the most part has optimized the site coverage at the expense of little or no public open space. Developer greed and the result of no zoning requirements for increased street setbacks, wider sidewalks, plazas or other desired open space were never included in the ULDR.

**Photos added to the May meeting images the illustrate Urban Open Space.**

City Hall, Federal Courthouse, City Park

The exceptions for open space seem to all be from the public facilities.

Photographs.

110 Tower, Sun-Sentinel, Stiles new project, Waverly-(Not Yet Included)

It is important at this time to understand that the Ordinance establishing the Park Impact Fee authorizes the expenditure of collected funds for a multitude of things as well as the acquisition of park lands. More vital to the ITF's understanding for this Ordinance is the Policy 1.2.2 sets the standard for the issuance of a site plan approval.....as long as the City ensures that Parks can meet the level of service established by the Comp Plan.

**In order to meet the future Open Space requirements beyond the 2025 date the city will need to lower the Loss of service to 3.0 acres/1000 residents, or lacking that adjustment, acquire more park land and or identify all of the City Open Space.**

**HOW DO WE IDENTIFY OPEN SPACE**

Accordingly, there are several avenues that can be explored. every possible alternatives for identifying existing Open Space should be made in order to bank acreage against the possible future needs.

**Existing Open Space not already identified.**

**From the Parks Element – page 21**

There are approximately 124.5 acres devoted to Streetscapes

**Streetscapes**- While these areas of greenery are largely intended to serve as aesthetic enhancements, many are of such width that the area should clearly be identified as pedestrian or bicycle paths. Listed below are just 2 typical area calculations

- **Dixie Highway** between Sunrise and Andrews Ave. Approximately 2500 ft in length and averaging 24 ft in width. The estimated total area would be 60,000 SF or 1.3 acres – see photo
- **Ponce de Leon** between US #1 and the Huizinga Circle – there is approximately 3,700 ft in length and at 25' in width the total estimated area would be 92,500 sf or 2.1 acres- see photo

**Waterways - Open Space as adjacent to Street ends** –Understand that the current Parks list contains some street ends already.

- **Cordova Road** between SE 11<sup>th</sup> Ct. and SE 7<sup>th</sup> St.  
New seawall construction may provide a narrow area of some 14 ft by 2,200 linear feet of greenery. The area would be approximately 30,000 sf or .7 of an acre
- **Las Olas Blvd.** Not much is available except to the area adjacent o the canal ends but according to the Open Space description these should count.

**ULDR requirements for Open Space**

**Interdistrict Corridors** This zoning ordinance, passed in 1997 requires a developer to devote the first 20 ft. of the site to promote an environment supportive of pedestrian and sufficient landscape area to support proper shade tree growth. These certain corridors are intended to accommodate, intensive pedestrian traffic and major vehicular entryways, or major gateways into the city.

Any area contributions to the Open Space calculations would require extensive work but these areas might in my opinion, be considered as no different that urban plazas.

- **North Federal Highway**—between Sunrise Boulevard and the northern city limits.
- **East Sunrise Boulevard**—between Federal Highway and one hundred (100) feet east of Bayview Drive.
- **S.E. 17th Street**—between Federal Highway and Eisenhower Boulevard.
- 

**GAA and AIP districts. - Sec. 47-14.21. - Dimensional requirements**

the City has established a 100 foot easement along many of the major thoroughfares in these districts. Cypress Creek

**FUNDING AND THE PARKS BOND**

In 2006 the City recognized that future developments should become more responsible for funding park development and a City ordinance for establishing a Park Impact Fee was passed: # C-06-14. This ordinance imposed a graduated fee scale on all residential and hotel construction. Based on a per unit contribution of approximately \$2,400, the fund has collected over \$20 million dollars since 2013.

**The Parks Impact Fees collected are as follows:**

- 2013 - \$ 3,050,000
- 2014 - \$ 1,900,000
- 2015 - \$ 2,324,000
- 2016 - \$ 1,533,000
- 2017 - \$ 5,202,000
- 2018 - \$ 6,057,000

A copy of the City Managers Memorandum (LF)18-014 for the expenditure of some of these monies for 2018 are included for information but in reviewing his recommendation one will note that of the 8.7 million dollars itemized only 1.2 or less than 15% was to be spent on park land acquisition.

Also provided is a copy of page 72 o the City of Fort Lauderdale Community Investment Plan (CIP) for the FY 2020 – 2024 which defines the Strategic Goals, Objectives and a goal of allocating 6.8 M for land acquisition.

**Comments on the recent Parks Bond - The Parks Department provided these numbers just prior to the Bond Vote in March of 2019. The total expenses for both the Land acquisition and Development is \$72 M dollars of the entire Bond \$200 M for land development for all Districts.**

**PARKS BOND funding re-cap with regard to Land Acquisition and Development**

**LAND ACQUISITION -40 acres                      49M**

**Urban Parks**

District 2    3 acres at 3M per acre

District 4    3 acres at 3M per acre

**Neighborhood Parks**

District 2    7 acres at 1.5M per acre

District 4    7 acres at 1,5M per acre

**Community Parks**

District 1    10 acres at .5M per acre

District 3    10 acres at .5M per acre

**DEVELOPMENT COST-40 Acres                      23M**

**Urban Parks**

District 2    3 acres at 1M per acre

District 4    3 acres at 1M per acre

**Neighborhood Parks**

District 2    7 acres at .5M per acre

District 4    7 acres at .5M per acre

**Community Parks**

District 1    10 acres at .5M per acre

District 3    10 acres at .5M per acre

**The Development cost for Neighborhood Parks is indicated as .5 M per acre. .**

If one considers the cost for these parks for cleanup rather than adding playground equipment – etc.. the minimum cost might be as follows.

Demolition and site clean-up costs	\$100,000
Grass and Irrigation	\$ 50,000
<u>Minimal lighting for security FPL</u>	<u>\$ 50,000</u>
Total	\$ 200,000

With the purchase and minimal development the total cost for these 14 parks would be in the area of \$ 3,000,000 or a saving of about 4 M dollars that could go toward land acquisition from this area only.

**The Development cost for Community Parks is also indicated as .5 M per acre.** Utilizing the identical numbers for demolition, clean-up grass and Irrigation of \$ 200,000 the total cost for development of these 20 acres would be in the area of 4 M dollars or a savings of about 6 M dollars.

**The Development cost for Urban Parks is also indicated as 1 M per acre.** Demolition in the Urban core is a bit more dicey so any saving in this category is questionable as is whatever design might be proposed as any type of plaza or fountain would certainly chew up the number proposed.

**In any event the concept of utilizing the above savings for additional property acquisition might yield another 10-12 million dollars to the 49 M already allocated.**

**The Park Impact fees collected since 2013 total over 20 million dollars ( already partially spent) but should we begin to get the idea that the acquisition of future park and open space acreage is not as impossible as one might think.**

## Fiveash Water Treatment Plant Update

June 3, 2019

### Background:

The Fiveash Water Treatment Plant (WTP) was constructed in 1954 and has a 70 million gallons per day (MGD) design capacity with an annual daily demand of about 35 MGD. Raw water is secured from the Biscayne Aquifer with a permitted daily withdraw of 52.55 MGD. The plant and lime-softening treatment process are operated within established EPA standards and utilizes similar technology as other regional treatment facilities.

### Update:

The Florida Department of Environmental Protection (FDEP) recently approved the City's annual water quality report. A copy of the report can be found at:

<https://www.fortlauderdale.gov/departments/public-works/water-quality-report-online-registration-form>

Since being built there have been a myriad of maintenance and expansion projects at the WTP. Because of its age, most of the equipment is reaching the end of its expected service life. Actions underway by the City now include:

- Granular Activated Carbon (GAC) Pilot Project – an engineering consultant is in the process of setting up a treatment process pilot project and study to determine benefits from alternate treatment processes. If successful, the pilot study will also confirm a recommended treatment process update with design parameters, regulatory requirements along with upfront and ongoing costs.
- WTP Evaluation and Options – the same consultant will use the results of the pilot project, prior studies and reports and planned projects along with their professional inspection and guidance to provide the City with a short- and long-term roadmap for use, reuse and/or potential replacement of the WTP.
- Fiveash WTP Reliability Project – currently there is a project out-to-bid that includes approximately 25 projects at the WTP including storm resistance improvements, flood prevention, safety and overall reliability. The bid opening is scheduled for June 7, 2019 and the project could be awarded in the July/August 2019 timeframe.

### Questions at May Infrastructure Task Force (ITF):

During the public comments at the May ITF meeting, technical questions were raised which were broached with the City's operational staff. The questions included the following:

1. *"How are we increasing the Oxidation Reduction Potential (ORP)?"*
2. *"What is the past and future schedule for increased chloramine in time and quantity?"*
3. *"What level is the chloramine being raised to when the chloramine is increased?"*

The Fiveash WTP utilizes lime softening with filtration and disinfection. ORP is not part of the required audit parameters for drinking water facilities. The City operates the WTP and distribution system in accordance with all regulatory requirements including direct oversight by the FDEP. The chart in the annual water quality report (link above) includes a summary of sampling results confirming compliance. The City's operational staff uses a combination of chemicals and flushing for maintenance of the system and monitors water at the WTP, as it leaves the WTP and within the system to ensure regulatory compliance.