Broadband and Smart City Ad-Hoc Committee Regular Meeting

Agenda

March 3, 2022 @ 9:00 am

welcome

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assistance & appeals

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"If a person decides to appeal any decision made by the Board with respect to any matter considered at this hearing, a record of the proceedings is needed to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based." (F.S. 286.0105).

please note

Times are projected and subject to change.

agenda	time

1. **Call to Order**

2. **Consent Agenda**

   a. Approval of February 17, 2022 meeting minutes. — 1 minute

   b. Approval of February 3, 2022 meeting minutes — 1 minute

3. **Staff Updates**

   a. Update on the RFP process — 30 mins

4. **Public Comments (for items not on the agenda): Three minutes allowed for each speaker**

5. **Non-Action Items**

   a. Technology Discussion with Parks Department — 60 mins

6. **Action Items**

7. **Board Comments**

8. **Adjournment**

Broadband & Smart City Ad Hoc Committee

agenda item

item type Consent Agenda	meeting date March 3, 2022
prepared by Kim Breland	approved by
board approval	
strategic objective	

subject

Approval of February 17, 2022 meeting minutes.

motion / recommendation

background

alternatives / other considerations

fiscal impact

ATTACHMENTS:

Broadband-Smart City Ad-Hoc Committee Meeting Minutes 021722.pdf

Broadband/Smart City Ad-Hoc Committee Regular Meeting Minutes

February 17, 2022 at 9:00 a.m.

Virtual

Present:

Richard James, James Everett, Janelle Zurek, and Paul Conway and Chris Johnson. Absent: Wes Naylor, and Michael Poole.

Also Present:

Director of Information Technology Parsram Rajaram; Fire Chief Dan Hagedorn and Recording Secretary Kim Breland

Call to Order:

Mr. Rajaram called the meeting to order at 9:01 a.m.

Consent Agenda

None

Staff Updates

None.

Public Comments (for items not on Agenda)

There was no public comment.

Non-Action Items

a. Technology discussion with Fire Department

Chief Hagedorn explained that a large part of what FD does revolves around EMS, treating and taking patients to hospitals, which includes handling lot of protected health information. He discussed processes EMS uses to transfer information to the hospitals. He noted that while EMS provides patient information to the hospitals, they receive very little information in return which becomes a challenge when having to bill someone for EMS collections and transport. He stated FD operates within health protected arena and almost all of the information collected by EMS is transferred to a 3rd party collections company.

Chief Hagedorn discussed challenges FD faces with access and sharing of information. He stated that the city does has a robust GIS system that contains a great amount of information collected from building department and Orange County property appraiser site as well as building inspection data (digital and physical) from the Fire Marshall division for inspections, that must be retained for the life of the building. He discussed challenges with having access to information needed when responding to emergency situations. He stated that having technology that could combine the different types of information needed as well as allow responders to communicate freely would benefit the department and gave examples of scenarios of how the information is used in emergency management.

Chief Hagedorn noted that currently there is now system in place that allows the Fire and Police departments to communicate with each other. He stated that there is information that both departments could use in emergency situations and having a common level platform for communication would be ideal.

Chief Hagedorn responded to questions regarding inventory management and discussed current processes for communications between the police and fire departments. He provided emergency response scenarios where a mutual communications system would benefit both departments.

In response to questions, Chief Hagedorn explained that the department uses iPads in the fire trucks and EMS vehicles and stated that the iPads have a 99% operability rate and are long lasting. Discussion followed on connectivity for the devices, experiences with dead spots/outages and how Visio files and maps are used by the department.

Mr. Conway ask Chief Hagedorn what he would like to do for his department if money no object. Chief Hagedorn stated that currently the department is maintaining the highest level of efficiency with the current technology. He stated that connectivity, being able to access information from existing sources, information sharing, and integration with the CAD system would be beneficial. He stated that leaning on those technologies would prevent having to build more fire stations. He discussed challenges with density and traffic in the city and explained how those technologies would help. Discussion followed on traffic challenges.

Mr. Rajaram summarized that based on the discussion it is important to find a solution that takes all of the different data sources and combines them into one platform as well as a platform for communicating protecting information. Mr. Rajaram will reach out to companies he knows of that provide solutions to combine various sources of data into a single platform.

Discussion was held on potential ways to improve the process for transfer of data and feedback for the EMS billing system, cyber security challenges and data protections.

Action Items

a. RFP for Consultant.

The committee reviewed final draft of the RFP (draft RFP attached after minutes) and the following changes were made and agreed to by consensus:

Background

- Add the following verbiage after - Phases 1 and 2 of the recommended approach have been or are currently being completed., *"This activity used a 48-strand optical fiber through a 2-inch conduit for the backbone infrastructure."*
- Remove –
  "The City has also been placing a spare 2-inch conduit for internal use as part of this undergrounding process. We have approximately ???? feet of underground conduit so far. Approximately ??? ft of 48 strand fiber has been installed in these conduits.

The City has also installed an additional 2-inch conduit as part of the utility undergrounding project to be utilized for fiber optic network backbone. This fiber backbone will be instrumental in bringing the City's standard of 1Gpbs of symmetrical bandwidth to the residents and business of Winter Park. Currently the City owns ???? feet of conduit and a total of ???? feet of 48 strands of single mode fiber"

Tasks

- #3
  Remove the verbiage – *"now interconnected by the City Fiber Backbone (completed during phase 1 and 2).*
  Change 5g technology to *"wireless technologies."*
- #4.
  Clarification – The expectation is the consultant will propose a plan.

After discussion, Mr. Rajaram will obtain the RFP schedule from Procurement and provide to the committee.

By consensus, Dr. James and Mr. Conway were selected as committee representatives for the RFP solicitation process.

Brief discussion was held on the committee meeting schedule, the Discussion of meeting dates and response process and format for RFP responses.

The next meeting is scheduled for Thursday, March 3, 2022 at 9:00 a.m.

Board Comments

None.

Adjournment

The meeting adjourned at 10:23 a.m.

Respectfully,

Kim Breland

Recording Secretary

Connectivity Infrastructure Consultant

Statement of Work

In support of the City of Winter Park's Information Technology Department and the current Broadband Ad Hoc Task Force, provide the following services and deliverables to assist in the satisfaction of the requirements of City Ordinance 3210-21 (Attachment A).

Goal:

The City Commission has reaffirmed the goal to facilitate the provision of broadband fiber-to-the-home (FTTH) connectivity for all residents and businesses to enhance the competitiveness of Winter Park within the next five (5) years (as soon as practically possible). The City's definition of "broadband" is 1Gbps, both downstream and upstream, with the capacity to readily expand to 10Gbps, or greater, in the future.

The Commission has also embraced the vision of ensuring Winter Park is the premier regional leader in leveraging Smart City capabilities.

Background:

In 2016, Magellan Advisors delivered the results of their assessment of the City's broadband infrastructure (Attachment B). The ad hoc Fiber Optics Task Force at that time recommended to the City Commission a three-phase approach to implement the recommendations of the Magellan report:

- Phase 1: Expand the current fiber optic network to connect all remaining City facilities and operations over the next year.
- Phase 2: Complete the remaining backbone infrastructure within three (3) years.
- Phase 3: Continue to review and evaluate technologies to facilitate FTTH for residents and businesses.

Phases 1 and 2 of the recommended approach have been or are currently being completed.

In addition, the City Electric Utility has continued to underground the electrical distribution lines throughout the city to residential and commercial customers. While undergrounding the electrical lines, the city has also pulled an additional conduit for future connectivity use by the current area provider Spectrum. To date, Spectrum has made minimal use of the connectivity conduit. In addition, other telecommunication service providers have begun installing proprietary conduit in the City Right-of-Ways (RoW).

The City has also been placing a spare 2 inch conduit for internal use as part of this undergrounding process. We have approximately ???? feet of underground conduit so far. Approximately ??? ft of 48 strand fiber has been installed in these conduits. (can this we re-worded to flow better)

Tasks:

1. Prepare a Connectivity Master Plan describing how the City can satisfy its connectivity goal while capitalizing on the accomplishments of Phases 1, 2, and the connectivity conduit undergrounding activity to date. The Connectivity Master Plan shall contain, at a minimum:
    - an analysis of the current connectivity/communications technology including a forecast of future trends
    - a conceptual architectural design, including technical description, of the connectivity infrastructure that meets the City's goal
    - an analysis of the current implementation of Phases 1 and 2 to identify any gaps or weaknesses including a recommendation on how to minimize
    - description of the methods necessary to address the security and privacy concerns of the City residents
    - approaches for methods to close the "digital divide" within the City
    - approaches to satisfy the connectivity infrastructure needs of City residents and businesses not serviced by the City Electric Utility
    - an estimated cost analysis to implement the connectivity infrastructure
    - a timeline for completing the desired connectivity within the 5-year goal.
2. Prepare a Business Plan including appropriate cost and revenue models for implementing the Connectivity Master Plan. The Business Plan shall include, at a minimum, the following information for each model:
    - capital requirements
    - assumptions
    - risks/benefit analysis
    - financial metrics (positive cash flow, payback, *etc.*)
    - timelines

    The Business Plan shall identify a recommendation of the optimal model for the City with detailed description of the risks and benefits from our residents' viewpoint.

3. Prepare a "Smart City" Initiatives Plan describing the technologies available to improve the operation and performance of the various City Government departments ~~now interconnected by the City Fiber Backbone (completed during Phases 1 and 2).~~ (I

recommend removing this since other connectivity technologies can be used to enable Smart City functionality This Plan shall include at a minimum:

- analysis of the Departmental Needs Assessment
- analysis of current "smart city" technologies including a forecast of future trends
- an architectural design/description of possible non-fiber connectivity technology to satisfy Departmental needs
- approaches to meet the connectivity needs of the City Water/Wastewater Utility assets that are outside the City's boundaries
- analysis of security measures needed to protect City data and assets
- an assessment of the use of ~~5G technology~~ wireless technologies to satisfy City needs

4. Prepare a Community Outreach Plan for obtaining input from City residents and businesses to understand their views and opinions on the drafts of the above-described Connectivity Master Plan, Business Plan, and "Smart City" Initiatives Plan. The Community Outreach Plan shall include description of the outreach approach(es) as well as proposed questionnaires.
   (Are we expecting a plan, or are we expecting the consultant to propose and execute the pan? I know that makes the 6 month time period challenging)
5. Attend, either in-person or virtually, all meetings of the Broadband Ad Hoc Task Force to provide both status of progress as well as discussion participation. As necessary, attend, either in person or virtually, any requested meetings with the City Commission in support of the Broadband Ad Hoc Task Force.
6. Provide and maintain a timeline depicting the current schedule for the deliverables, both drafts and finals, as well as any other critical activities.

The City is expecting these tasks to be completed in a 6 month time frame.

Deliverables:

1. Connectivity Master Plan
2. Business Plan
3. "Smart City" Initiatives Plan
4. Community Outreach Plan
5. Timeline for completion of this Statement of Work

Broadband & Smart City Ad Hoc Committee

agenda item

item type Consent Agenda	meeting date March 3, 2022
prepared by Kim Breland	approved by
board approval	
strategic objective	

subject

Approval of February 3, 2022 meeting minutes

motion / recommendation

background

alternatives / other considerations

fiscal impact

ATTACHMENTS:

Broadband-Smart City Ad-Hoc Committee Meeting Minutes 020322.pdf

Broadband/Smart City Ad-Hoc Committee Regular Meeting Minutes

February 03, 2022 at 9:00 a.m.

City Hall Commission Chambers
401 S. Park Avenue | Winter Park, Florida

Present:

Richard James, James Everett, Janelle Zurek, and Paul Conway (in person) and Wes Naylor, Chris Johnson and Michael Poole (virtual).

Also Present:

Director of Information Technology Parsram Rajaram; GIS Manager Keith Gerhartz and Recording Secretary Kim Breland

Call to Order:

Mr. Rajaram called the meeting to order at 9:00 a.m.

Consent Agenda

a. Approval of the January 7, 2022 regular meeting minutes. Approved by consensus.
b. Approval of the January 20, 2022 regular meeting minutes. Approved by consensus.

Staff Updates

None.

Public Comments (for items not on Agenda)

There was no public comment.

Non-Action Items

a. Technology discussion with GIS Department

Mr. Rajaram explained that the committee is meeting with city departments to understand current technology and processes. He explained that Mr. Gerhartz was present to explain what he has done with GIS, how it has benefited the city and what the department vision is for the future.

Mr. Gerhartz explained provided a background on how he organized the city's data collection process and developed a strategic plan to outline for the city to build its GIS resources. He stated that presently the city's data is housed in a Sql server data with 4 web servers and explained how each server is used. He stated that the GIS field is constantly changing and explained how the one of the servers is used for Electric Utility outage analysis and impacts.

Mr. Gerhartz went on to explain other types of data housed on the servers such as site plans that have been georeferenced with GIS data, strormwater data automated from paper maps, aerial photographs and data collected from the Orange County Property Appraiser. He added that presently, the city has approximately 120 layers of information some maintained internally and some from external sources. He stated that over the past ten years there have been multiple projects aiming automating data such as storm water data automated from paper source maps, field data collection with high accuracy GPS, and accrue attribute data collection tied to the facilities. He discussed department member's individual assignments and stated that there are three members of the GIS department and explained their different assignments. He added that apart from data automation projects, the other major GIS efforts include stormwater, electric, water, sewer, streets, and fiber optics.

Mr. Gerhartz stated that apart from data collection, his largest goal is to create value and discussed how processes have been improved with GIS technology at the city such as the 24/7 application used by WPPD, and the city's internal work orders management system. Discussion followed on the processes for the internal work orders management system, and long term plans for the application. He responded to questions regarding data collection for streets, fiber optics, electric, water and sewer. Mr. Gerhartz noted the importance of completing the stormwater and electric automation projects as well as additional application development, process improvement and public use of GIS technology.

Mr. Gerhartz explained how the current GIS application "@YourRequest" helps residents and internal staff and discussed various ways GIS technology can help the city in the future such as with single use applications that would identify EV charging stations in real time. He discussed how the city's GIS system integrates with Seminole County through the Fire CAD system as well as the city's utility billing and building permitting systems. He explained none of these different databases are in GIS, but integrate with them and pulls data and puts it in a single repository.

With regards to fiber, Mr. Gerhartz stated that there is a fiber geo database the city is looking at as the next phase of implementation for fiber, which will identify which strands belong to which strands. Discussion followed on GIS team member staff tasks and staffing challenges.

Michael Poole left the meeting at 10:32 a.m.

Action Items

a. RFP for Consultant.

In-depth discussion was held on the parameters for the consultant RFP based on feedback from including background, goals, deliverables, timeline, smart city initiatives and including a connectivity master plan to respond to key components of the RFP based on the draft document developed by Dr. James and comments provided by Mr. Johnson (See video for draft RFP review https://winterpark.granicus.com/MediaPlayer.php?view_id=6&clip_id=378).

Mr. Rajaram will work with Procurement to revise the RFP for the committee to review for final edits.

Board Comments

None.

Adjournment

The meeting adjourned at 11:04 a.m.

The next meeting will be held Thursday, February 17, 2022 at 9:00 a.m.

Respectfully,

Kim Breland

Recording Secretary

Broadband & Smart City Ad Hoc Committee

agenda item

item type Staff Updates	meeting date March 3, 2022
prepared by Parsram Rajaram	approved by
board approval	
strategic objective	

subject

Update on the RFP process

motion / recommendation

background

alternatives / other considerations

fiscal impact

Broadband & Smart City Ad Hoc Committee

agenda item

item type Non-Action Items	meeting date March 3, 2022
prepared by Parsram Rajaram	approved by
board approval	
strategic objective	

subject
Technology Discussion with Parks Department

motion / recommendation

background

alternatives / other considerations

fiscal impact