MAYOR AND COUNCIL PUBLIC MEETING NOTICE
SPECIAL MEETING - AUGUST 22, 2023 AT 4:00 PM

CITY OF DOUGLAS

MINUTES

The City of Douglas Mayor and Council met in a Special Meeting on Wednesday, August 22, 2023, at 4:00 p.m., at City Hall Council Chamber, 425 10th Street. The Honorable Mayor Huish called the meeting to order.

1. **CALL TO ORDER. 4:00 p.m.**
2. **ROLL CALL.**

	PRESENT	ABSENT
MAYOR, DONALD C. HUISH	X	
MAYOR PRO TEMPORE, MARGARET MORALES	X	
COUNCILMEMBER, MITCH LINDEMANN	X	
COUNCILMEMBER, DANYA ACOSTA	X (4:28 P.M.)	
COUNCILMEMBER, RAY SHELTON	X	
COUNCILMEMBER, MICHAEL BALDENEGRO	X	
COUNCILMEMBER, JOSE GRIJALVA	X	
CITY MANAGER, ANA URQUIJO	X	
CITY ATTORNEY, TINA VANNUCCI	X	
CITY TREASURER, LUIS PEDROZA	X	
CITY CLERK, ALMA ANDRADE	X	

3. **PERSONS WISHING TO ADDRESS THE COUNCIL IN WRITING OR VERBALLY ON ANY ITEM NOT ON THE AGENDA.**

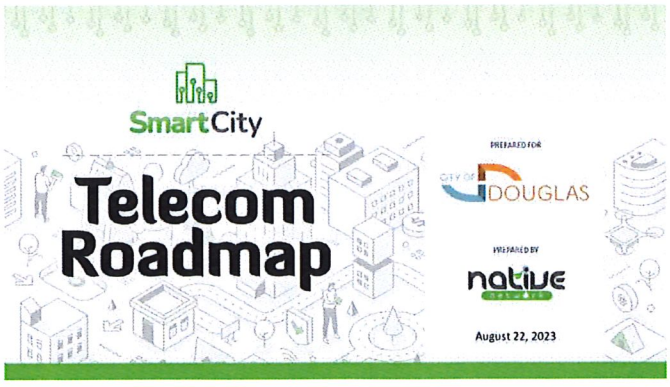
Ms. Andrade stated no public participation forms were submitted.

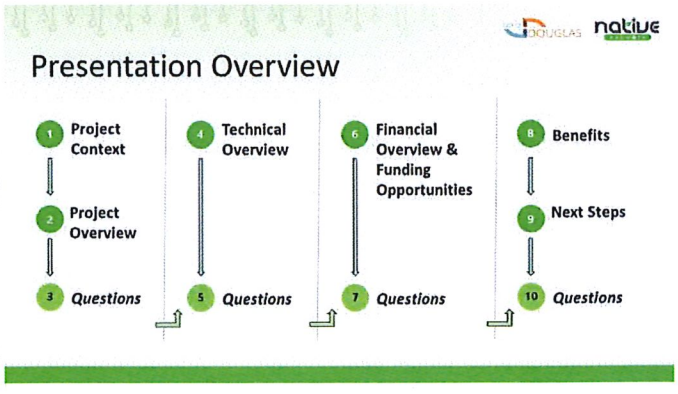
4. **PRESENTATION/DISCUSSION.**

A. **PRESENTATION** by **NATIVE NETWORKS** on **TELECOMMUNICATIONS ROADMAP STUDY.**

Ms. Urquijo presented background.

Andrew Metcalfe and Rebecca Carter presented the Telecommunications Roadmap Study.





Project Context

Native Network

- Founded by telecommunications veteran Andrew Metcalfe in 2015 and works with rural municipalities and Tribes to help them accomplish their telecom priorities.
- Due to its telecommunications activity in the State of Arizona and work with a Native American Tribe in Tucson, Native Network became aware of Douglas's telecommunications goals.

Your Team

- Andrew Metcalfe - *Chief Engineer*
- Jenny Rickel – *Sr. Financial Analyst*
- Carl Patterson – *Graphic Designer*
- Rebecca Carter – *Program Manager*
- Erik Kiosiewski - *Telecom Engineer*
- Dustin Sayre - *Network Engineer*

Project Purpose

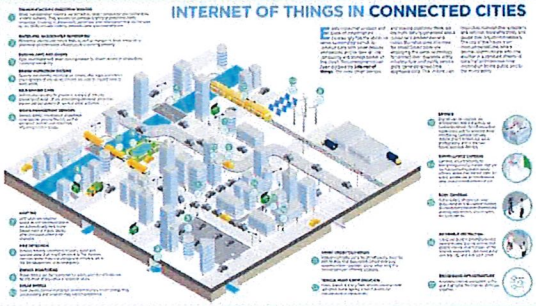
- Goal of the Telecommunications Roadmap
- Smart City Plan

What is a Smart City?

A community sphere that employs digital technologies and data-driven solutions to enhance its residents' life quality, improve sustainability, and optimize resource management. Smart Cities aim to create more connected, efficient, and habitable spaces by integrating various sectors and harnessing innovative technologies.

Key Characteristics:

Smart cities' key characteristics are **infrastructure and connectivity, data-driven decision making, sustainable development, and citizen engagement and participation.**



Project Structure

Information Gathering
- Field Visits
- Stakeholder Interviews
- Data Collection

Data Analysis & Engineering Design
- Infrastructure
- Smart City Applications
- Software

Information Sharing
- Telecommunications Roadmap
- Presentation

Phasing Overview

INFOGRAPHIC

- Infrastructure
- Applications
- Analytics

PHASE 1 PHASE 2 PHASE 3

Phasing Overview

1 Phase 1: Downtown Corridor & SCADA
This includes G Avenue and the main business corridor. This is the most visible portion of the City from a local business perspective and will most quickly have the greatest impact. SCADA affects an area beyond the downtown corridor, however it is included because it is the most critical component to start up the smart city.

2 Phase 2: City-Wide
The city-wide phase includes the remainder of the city limits, including the airport. It incorporates fiber networking, wireless services, and the majority of Smart City applications.

3 Phase 3: Annex-Regional
This phase includes the proposed and potential annex areas as identified by the City's management team. This also covers regional interests that are not necessarily potential annexation targets but important to the area. Examples are the transportation corridor and connectivity between the City and Cochise College.

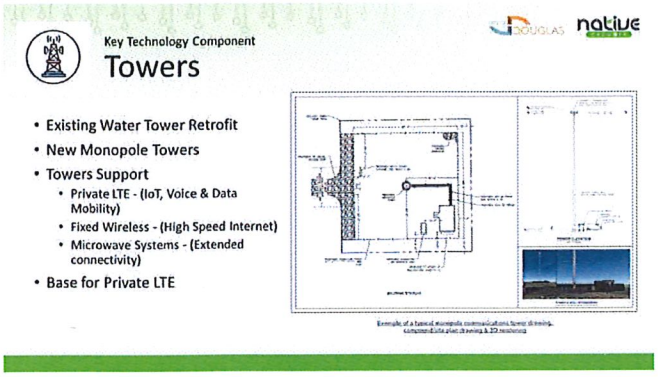
What is SCADA?

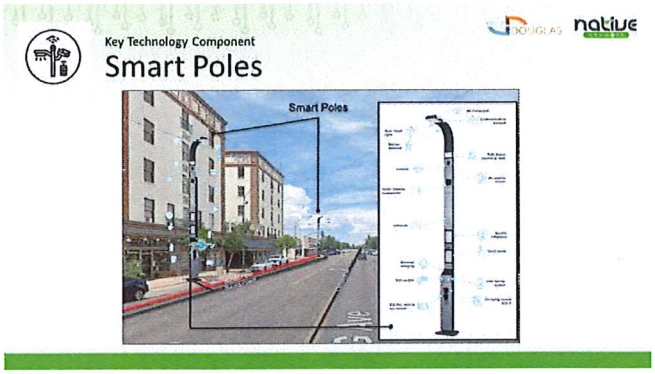
Key Technology Component

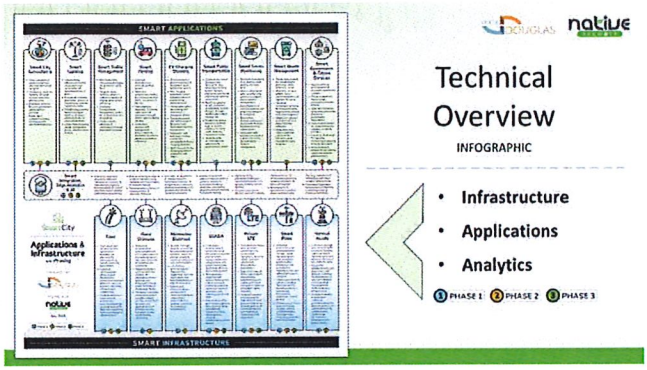
SCADA

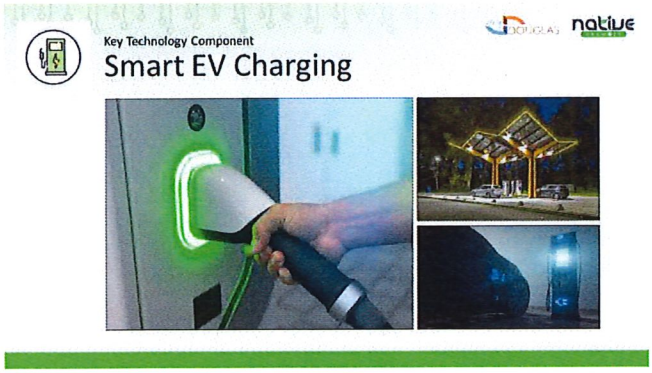
Supervisory Control & Data Acquisition
- Monitor and Manage Critical Infrastructure
  - Water (Potable)
  - Waste water
  - Smart city applications

SCADA is the SmartCity Intelligence
- Aveva Software
- EcoStructure Hardware
- Unified Operations Center
- Artificial Intelligence (AI)









Council Member Lindemann expressed concern of the elderly population that does not have the technology devices needed. He also asked how schools, clinics and hospitals will be integrated to a smart city.

Mr. Metcalfe answered most people have smartphones now and the Wi-Fi systems, LT private and LTE system those can work you can have both your system and their current system and the service could be provided, the monitors in their homes run off the network you can you can offset that cost that is a medical service because the networks there are low cost devices that there is many of them that can sit in the home but the real expensive part of that system is the connectivity.

Ms. Urquijo added that essentially a program within our own notification systems or alert systems to issue phone calls for an evacuation or a fire in your area a phone call that is generated to a landlines.

Council Member Lindemann asked how will this be affected by power outages.

Mr. Metcalfe answered that on a wireless perspective the wireless network has generators that keep those systems running.

Council Member Grijalva asked if discussion has been held with APS on the stress with the power grid.

Mr. Metcalfe answered that they have not met with APS.

Council Member Baldenegro asked if the costs are fixed or expected to increase.

Ms. Carter answered prices change overtime due to inflation.

Council Member Baldenegro asked if the network is vulnerable, how secure is it.

Mr. Metcalfe answered it is a combination of fiber optic cables which are the most secure, buried in the ground and run the towers technology to that, there are vulnerabilities from an infrastructure sense, every system is vulnerable at some point, it depends on how diligent it is being maintained.

Council Member Shelton commented that there is a college, prison and school district here in Douglas.

Mr. Metcalfe commented in reference to the phasing in the Smart City plan they have spoken to college, prison and school system and when you look at the network phase one is the core, phase two is the city limits as the primary goal and the third phase is regional annexed areas.

Ms. Carter commented on the recommendation of a Smart City director position to be the facilitator of all things for this project and bringing everyone together or a third-party consultant filling that role to help inform and advise.

Council Member Acosta asked if this plan covers any upgrades.

Mr. Metcalfe answered that computers refresh faster because they are fast, the private LTE is built in to go from 4G which is similar to 4G to 5G and that is not a huge technological lift from the network side it is a software update. He added that the towers are the key, to have those towers in place and refresh that technology as you go forward.

Mayor Huish called for a 10-minute break.

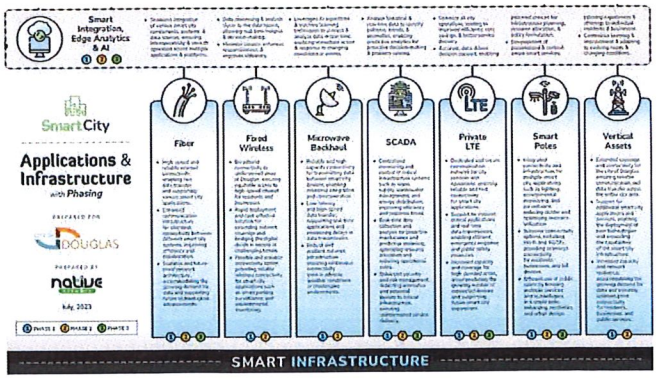
Mayor Huish called the meeting back in session at 5:36 p.m.

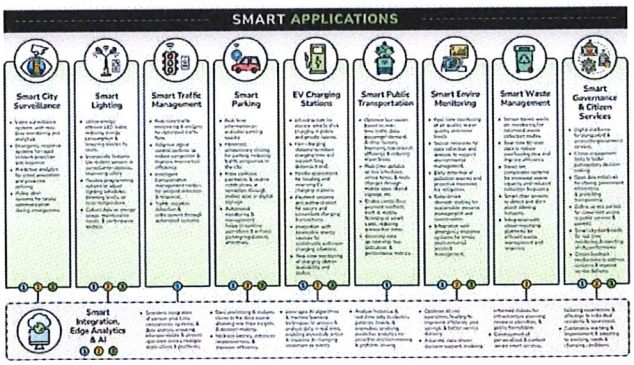
Council Member Morales inquired if they have worked with other cities that have implemented any of the Smart City.

Mr. Metcalfe answered they have worked with Santa Clara water district, and several tribal connections.

Ms. Carter reported that on the telecommunications roadmap document it specifically names and summarizes 10 to 15 cities and what they are doing, their size, there is a comparable cities report and analysis section in the telecommunications roadmap where cities can be looked up and more information if found on what they incorporated from the Smart City plan.

Mr. Metcalfe and Ms. Carter continued with presentation.





Smart City Financial Analysis

10 Year Financial Snapshot

HIGH LEVEL	PHASE 1	PHASE 2	PHASE 3	TOTAL BY TYPE
PHASE TIMELINE	2024-2026	2027-2029	2030-2033	
Capital Expenditure Totals*	$4,596,934	$9,367,172	$8,207,958	$21,823,165
Revenue Totals	$371,800	$941,700	$2,429,600	$3,743,100
Operating Expense Totals	$337,920	$1,456,625	$3,292,128	$5,086,673
NET INCOME:	$33,880	($514,925)	($862,528)	($1,343,573)

* = *Capital expenditures funded by pursued grants and funding.*

The City will work to pursue outside funding sources and make decisions that balance additional phases in the future; those net incomes in the red are impacted by assumptions made in this version of the financial modeling and could change depending on other decisions and cost-savings.

Smart City Foundation Alternative

PHASE ONE ALTERNATIVE PLAN	Foundation (Yr 1)	Optional (Yr 2)	Optional (Yr 3)	Total By Type
SCADA	$1,629,286			$1,629,286
Water Tower Improvements	$182,374	$180,000		$362,374
New Towers				$0
Fiber Network	$261,021			$261,021
Microwave Backhaul		$47,852		$47,852
Fixed Wireless		$195,552		$195,552
Private LTE	$230,338	$85,000		$315,338
Smart Poles	$123,324			$123,324
Public Wi-Fi		$22,667		$22,667
Security Cameras aka City Surveillance			$72,337	$72,337
Smart Lighting		$85,050		$85,050
Traffic Management		$129,375		$129,375
EV Charging			$231,032	$231,032
Smart Bus Transportation System		$72,500		$72,500
Smart Waste Management				$0
Smart Billboards		$348,900		$348,900
Implementation Support	$200,000	$75,000	$48,750	$323,750
Core Hardware/Software	$37,500	$250,612	$86,465	$374,577
Totals	$2,665,843	$1,492,507	$438,584	$4,596,934

Smart City Revenue Opportunities

	Phase 1			Phase 2			Phase 3				TOTALS
YEAR	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	10 Year
REVENUE											
Water Tower Space	$0	$66,400	$66,400	$66,400	$66,400	$66,400	$66,400	$66,400	$66,400	$66,400	$577,600
New Tower Space	$0	$0	$0	$0	$192,000	$192,000	$192,000	$192,000	$192,000	$192,000	$1,152,000
Conduit	$0	$0	$0	$0	$0	$0	$0	$814,000	$0	$0	$814,000
Smart Poles	$0	$0	$0	$0	$0	$0	$26,000	$78,000	$26,000	$26,000	$104,000
Public WiFi	$0	$69,500	$69,500	$69,500	$69,500	$69,500	$69,500	$69,500	$69,500	$69,500	$625,500
EV Charging	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Land Lease (not recommended)	$0	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$270,000
Total Gross Revenue	$0	$165,900	$165,900	$165,900	$377,900	$377,900	$403,900	$1,217,900	$403,900	$403,900	$3,743,100
Total 10 Year Revenue Potential	$3,743,100										

Strategic Management to Maximize Sustainability & Funding Opportunities

- Climate Resilience
- Community resilience

Steps to Resilience Framework

Funding

Organizations that could be potential targets for funding opportunities:	Department of Transportation (DOT)
	Department of Homeland Security (DHS)/FEMA
	Department of Energy (DOE)
	Environmental Protection Agency (EPA)

More comprehensive list located in Roadmap - Page 153

Key Benefits in Phase 1

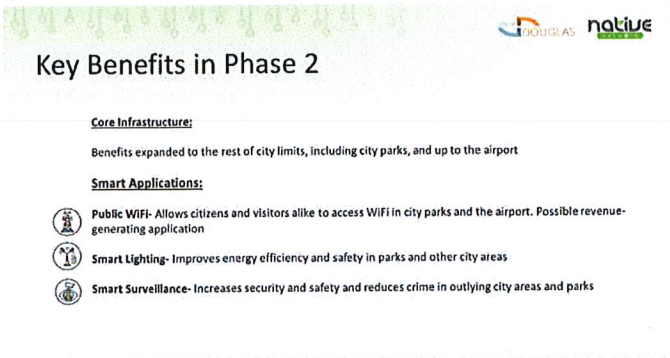
Core Infrastructure:

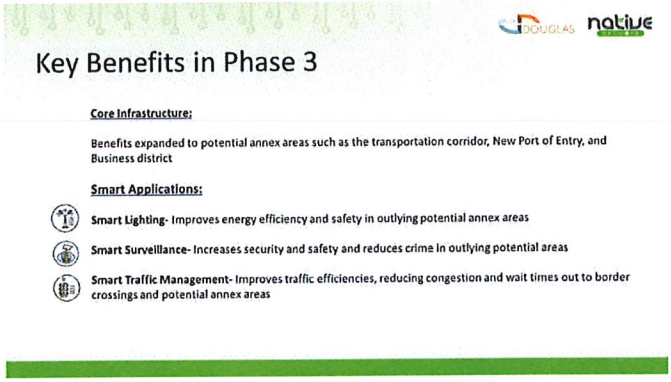
- **SCADA-** Easier monitoring and improved alerting for water and wastewater systems, also provides a platform to integrate Smart City applications. Water management compliance.
- **Water tower upgrades-** Allows water towers to act as vertical assets, adding antennas and connecting with fiber or microwave radio. Improves service coverage, particularly to government buildings. Possible revenue-generating infrastructure
- **Fiber-** Gives fast and reliable fiber connections to G Avenue downtown area
- **Private LTE-** Connects platforms and devices
- **Smart Poles-** Provides opportunities to integrate various Smart City applications

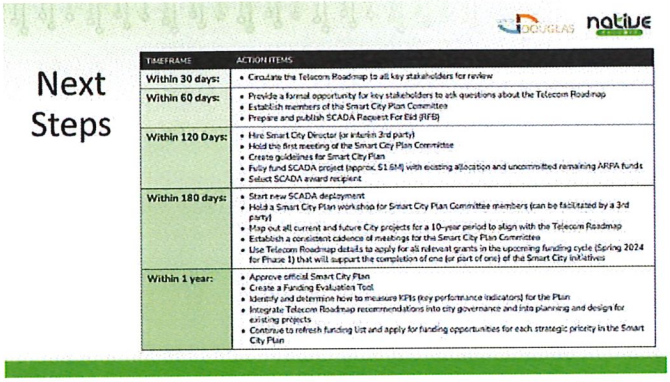
Key Benefits in Phase 1

Smart Applications:

- **Public WiFi-** Allows citizens and visitors alike to access WiFi in the downtown area. Possible revenue-generating application
- **Smart Lighting-** Improves energy efficiency and safety
- **EV Charging-** Supports electric vehicle use
- **Smart Billboards-** Improve communication with citizens and visitors, provides information equity to those who do not utilize technology
- **Smart Waste Management-** Improves waste management and waste fleet management efficiencies, lowering costs for the City
- **Smart Surveillance-** Increases security and safety and reduces crime
- **Smart Traffic Management-** Improves traffic efficiencies, reducing congestion and wait times







Council Member Grijalva asked what the cost for smart city director position be like.

Ms. Carter answered that it depends on the size of the city, but looking at some range around $80,000 to $100,000 range.

Council Member Acosta asked on the reason why a land lease is not recommended.

Mr. Metcalfe answered it is recommended that towers are built instead of leasing the land, if a tower is built revenue opportunities are incremental, if you lease land it is one time.

Council Member Acosta commented that the booklet presented is confidential for internal use only, but it is recommend circulating within 90 days. Ms. Acosta asked if it could be potentially published on the city's website for people to look over.

Mr. Metcalfe answered it is normally added there for protection, it could be reviewed and not release the whole report.

5. ADJOURNMENT.

Motion by Council Member Morales, second by Council Member Shelton to adjourn the meeting at 6:17 p.m.

Prepared by: Cynthia Acuña Robles, Deputy City Clerk