

CITY OF AUSTIN



Technology Briefing: Wireless Connectivity in the Parks

*Parks and Recreation Board
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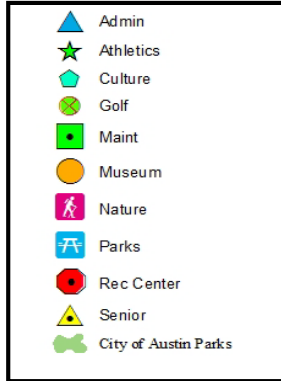
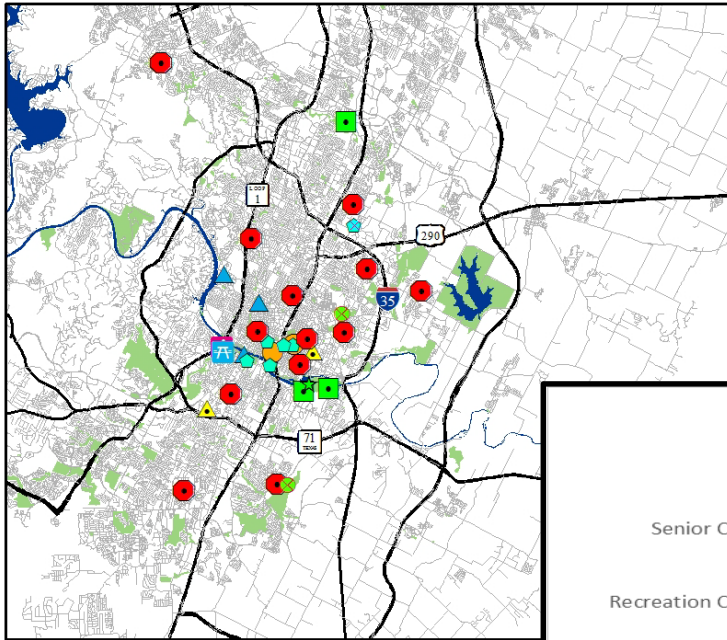


Briefing Purpose

To answer the following questions:

1. What is the current availability of Wi-Fi in our parks and facilities?
2. What are other communities around the country doing?
3. What City-wide initiatives and policy and procedures are there?
4. How is Wi-Fi provided in parks and facilities?
5. Why is outdoor Wi-Fi so important at events?
6. What is PARD's plan?

Availability of Wi-Fi in Parks



Public Wi-Fi

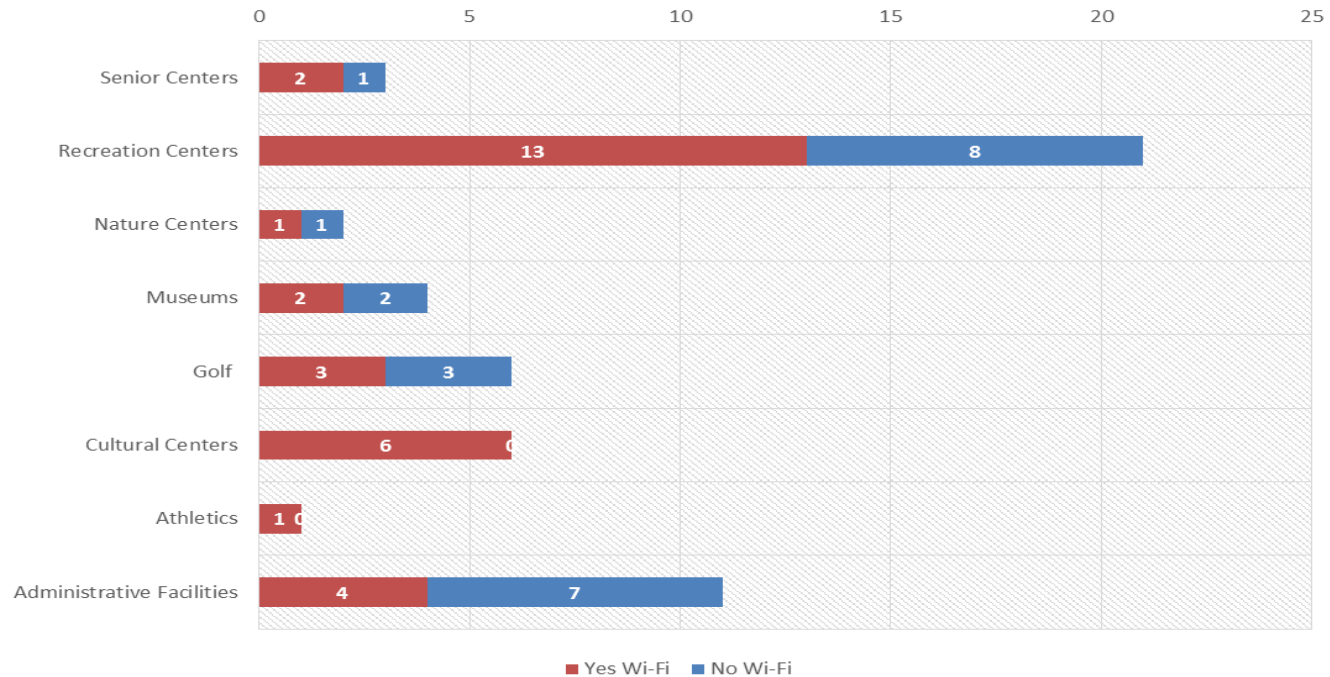
- 100% of PARD cultural centers have public Wi-Fi.
- 14 out of 21 recreation & community centers have public Wi-Fi.
- 2 out of 3 senior centers have public Wi-Fi.
- The PARD main administrative building, annexes, and Mayfield Cottage have Wi-Fi.

Public WiFi in PARD Lands and Facilities

Public Wi-Fi

- 50% of PARD nature centers, museums, and golf club houses have Wi-Fi.
- One park has outdoor Wi-Fi (Zilker).
- No pools have Wi-Fi.

Public Wi-Fi by Facility Category



The Municipal Wi-Fi Experience

Plano:

- **Partners:** Toyota, Time Warner Cable and American Parks Network
- **Scope:** Activate Wi-Fi in major city parks, recreation centers, tennis centers, senior centers, and aquatic facilities.
- **Project Cost:** Not disclosed/No cost to taxpayers
- **Plano Park System:**
 - 5 recreation centers
 - 4,000 acres of parkland
 - 81 parks

Other Examples of City-wide and/or Parks Wi-Fi :

- San Francisco recently unveiled its third attempt (partnership with Google)
- New York has Wi-Fi in selected areas of select parks (partnership with Verizon)
- Minneapolis has downtown area completely covered (provided by private company)

Public Wi-Fi Initiatives - Unsuccessful Results:

- From 2004 – 2007 many cities installed community Wi-Fi
- Cities and partners discovered the cost was prohibitive
- Most community systems have gone dark
- Several states have passed legislation prohibiting municipalities from providing broadband service



“We hear from parks departments from all over the country that the younger families and millennials make decisions based on where they can have connectivity,” he said. “It is no longer considered an amenity or a nicety—they view connectivity as a utility.”

-- Mark Saferstein, *American Park Network's* publisher and editor-in-chief

<https://planoprofile.com/2016/03/14/plano-to-provide-free-wi-fi-at-parks-and-recreation-centers/>

City Initiatives and Policy & Procedures

MESH - Outdoor Public Access to Wi-Fi

- **Installed:** 2006 in partnership with Cisco Systems
- **Parks covered:** Republic, Woolridge, Brush, and others
- **Current status:** Getting old, equipment is end-of-life, it is over \$1 million to upgrade and expand

City of Austin Task Force on Wireless Communications

- **Impaneled** in March of 2016; estimated report delivery date: July, 2016
- **Task:** to develop recommendations for policy and procedures for contracting with cellular providers on City property
- **Until the Task Force report is completed** there is a moratorium on cellular wireless installation on City property
- **Council** to review report and consider a policy

Other Departments Experiences

- **Convention Center -- Multiple Distributed Antennae System (D.A.S.)**



PARD Wireless Communication Priorities

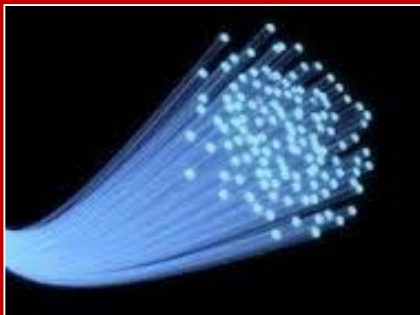
#1 Priority

Fiber Infrastructure

- Reliable, fast internet access, belongs to City
- Required for RecTrac & other business applications
- CTM will foot ½ bill
- Secure
- Provides best indoor Wi-Fi

Goal:

All facilities connected to internet by fiber infrastructure



#2 Priority

Indoor Public Wi-Fi

- No-cost access to Wi-Fi for customers of recreation centers, senior centers and other facilities.
- Supports programming
- Public expectation/Competition

Goal:

Provide public Wi-Fi connectivity at key Department facilities



#3 Priority

Outdoor Public Wi-Fi

- Benefits customers & vendors at events
- Barriers: Legal, aesthetic, contractual
- Brings people into the outdoors
- Public expectation

Goal:

Planning process to vet & prioritize installation of outdoor Wi-Fi



Priority #1: Fiber Network Infrastructure

Fiber Network Infrastructure

- Greater Austin GAATN & COATN relationship
- Alleviate monthly recurring charges from third parties
- Robust & reliable Enterprise voice & data networks
- Supportability & maintenance by City
- COATN fiber infrastructure increases service capabilities i.e. indoor wireless

Estimated cost per linear foot: Variable

Funding: CTM, General Fund

Best Practices: GAATN & COATN

Fiber Infrastructure Planning and Implementation

Short-term Installations	Planning and Initiation	Funding	Implementation	Operations
Clay-Kiser Golf Course ~\$35,000	PARD Telecommunications Plan* Long Range Plan**	Cost Estimates Budget Business Service Needs	Design Construction	Maintenance Upgrades
Summer, 2016	*Fall,/Winter, 2016 **2018	FY2018	TBD	TBD

Priority #2: Indoor Public Wi-Fi

Indoor Public Wi-Fi Infrastructure

- Fiber Infrastructure
- Third Party Internet Service Provider (ISP)
- Hot Spots

Estimated cost per building: \$5,000 – 6,000 (1)

Funding: General Fund

Best Practices: Fiber Infrastructure with Maraki Access Points



Indoor Public Wi-Fi Planning and Implementation

Short-term Installations	Planning and Initiation	Funding	Implementation	Operations
Austin Memorial Park Cemetery \$2,500	PARD Telecommunications Plan* Long Range Plan**	Cost Estimates Budgeting Business Service Needs	Design Construction	Maintenance Upgrades
Summer, 2016	*Fall,/Winter, 2016 **2018	FY 2017	TBD	TBD

(1) For City Installation

Priority #3: Outdoor Public Wi-Fi & Events

Outdoor Public Wi-Fi Infrastructure

- Cellular on Wheels (C.O.W.s)
- Distributed Antenna System (D.A.S.)

Events – Cellular Enhancement and Wi-Fi benefits:

- Communications
- eCommerce
- Public Safety

Priority Installation:

- Parkland that experiences high demand and density
- Parks that experience peak periods of cellular use

Permanent installation of D.A.S. benefit:

- Year round public-facing Wi-Fi
- Potential Revenue stream



D.A.S. Module

Priority #3: Outdoor Public Wi-Fi

D.A.S. Considerations

- Legal
- Contractual
 - Ownership of improvements
 - Wi-Fi value add
- Public purpose vs private benefit
- Aesthetics
- Technology maintenance and obsolescence

Estimated cost: Unknown/No cost to taxpayer for installation

Funding: Partnership, Revenue Contract

Best Practices: Distributed Antenna System (D.A.S.)



Cellular on Wheels

Outdoor Public Wi-Fi Planning and Implementation

Planning and Initiation		Procurement	Implementation	Operations	
Wireless Communications Task Force – Report	Council Policy	Long Range Plan Legal Policy/Procedures Public Input	RFP Negotiations Boards/Council Execution	Design Construction	Service Provided Maintenance
July, 2016	Winter 2016-7	~1.5 years	~1 year	~Six Months	~2019-20

Wi-Fi in the Parks Five Year Outlook

