

Telecommunications Engineering Consulting Services & Wireless Telecommunications Infrastructure Master Plan

BOROUGH OF HADDONFIELD
FEBRUARY 8, 2023

CityScape
CONSULTANTS, INC.





Introductions

CityScape Consultants, Inc.

Exclusively Serving Government Clientele Nationwide since 1997



Project Team of Engineering, Legal and Planning Professionals



Experts in Federal Statutory, Decisional and Regulatory Law



Assists Local Governments with the Complexities of Wireless Communications

Wireless Communication Plan Tasks and Deliverables

Preliminary Research

Infrastructure Assessments

Project Initiation Meeting

Inventory Catalog

Engineering Mapping and Analysis

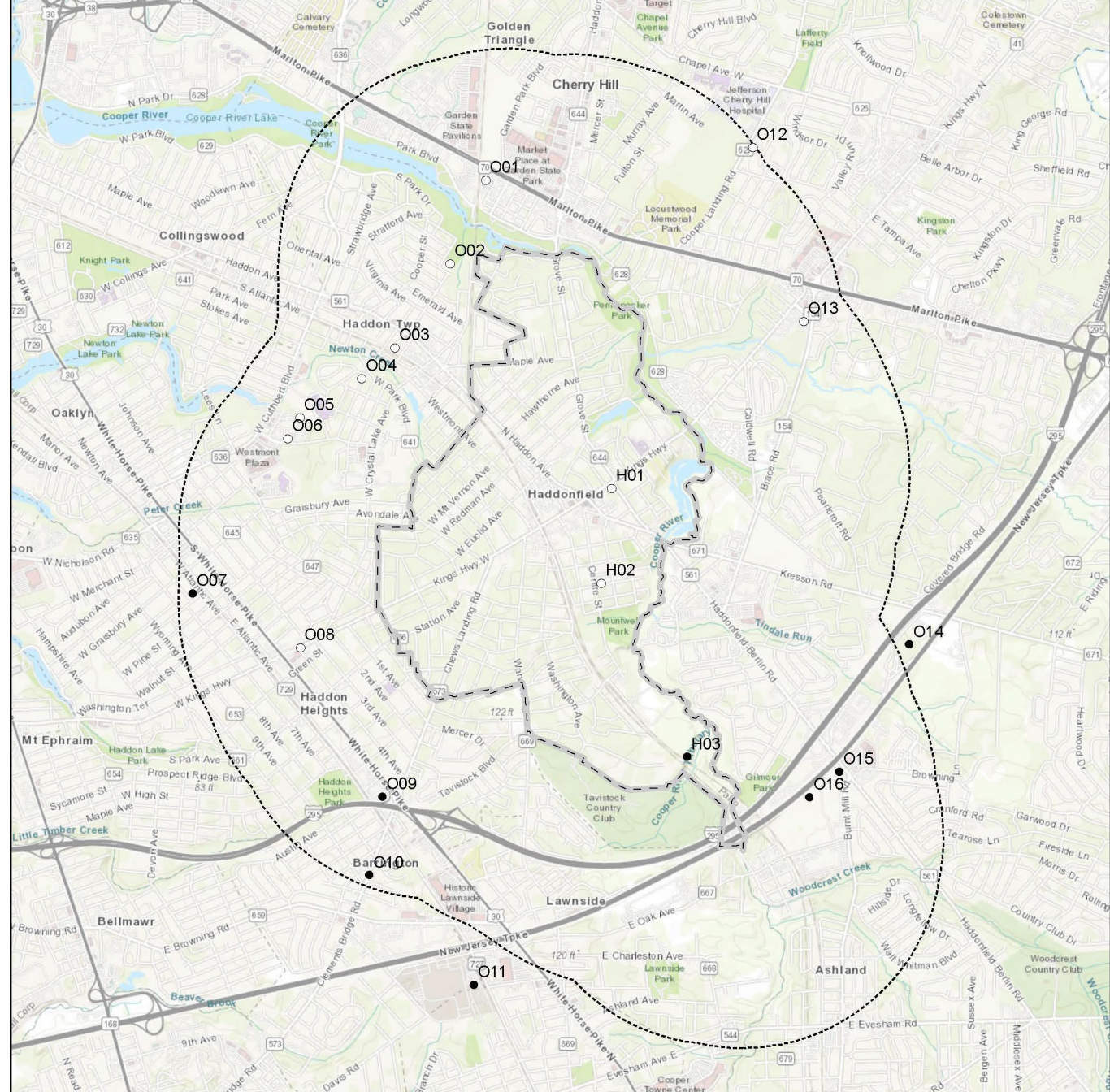
Regulatory Review and Regulations

Draft and Final Master Plan

Task 1: Preliminary Research and Project Initiation Meetings

Community Data Collection of Known Antenna Locations

- Data From Clients
- FCC Registered Site Location
- Tower Owner Data
- Other Web Based Resources



Task 2: Infrastructure Assessments

Site Visits to all Commercial Wireless Facilities

- Find Unknown Sites
- Verify Site Locations
- Collect All Data
- Record Observations





Task 3:

Inventory Catalog

Data from Site Assessments

- Photo of Site
- Vicinity Map
- Data Collected
 - Facility Information
 - Locational Data
 - Site Identification
 - Tower/Base Station Distinction
 - Tenants
 - Site Conditions

| Site #69 | 2601 S Lemay Avenue |
|---------------------|--------------------------|
| LOCATION: | Private Property |
| CATEGORY: | Base Station |
| FACILITY TYPE: | Roof |
| ANTENNA TYPE: | Macro Cell |
| ZONING: | NC |
| SERVICE PROVIDERS: | Verizon |
| LATITUDE/LONGITUDE: | 40.5519896; -105.0586480 |
| FACILITY OWNER/ID: | |
| FACILITY SITE NAME: | Scotch Pines Village |
| FCC ASR: | 1222568 |
| HEIGHT: | 36' |
| NOTES: | |



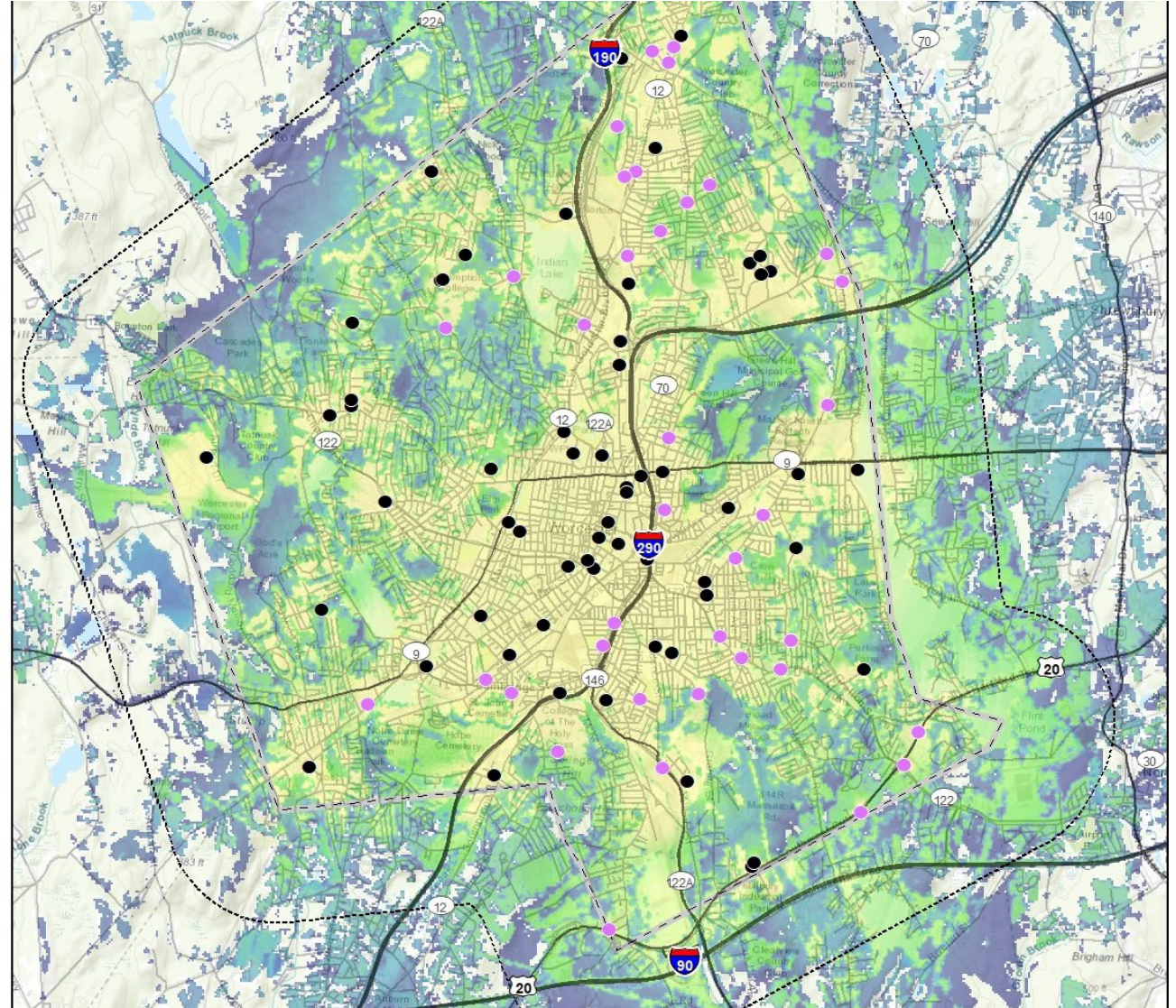
| Site #70 | 2601 S Lemay Avenue |
|---------------------|------------------------------------|
| LOCATION: | Private Property |
| CATEGORY: | Tower |
| FACILITY TYPE: | Unipole |
| ANTENNA TYPE: | Macro Cell |
| ZONING: | NC |
| SERVICE PROVIDERS: | AT&T, T-Mobile |
| LATITUDE/LONGITUDE: | 40.5507504; -105.0600488 |
| FACILITY OWNER/ID: | Crown Castle International, 839481 |
| FACILITY SITE NAME: | South Lemay |
| FCC ASR: | 1250576 |
| HEIGHT: | 80' |
| NOTES: | |

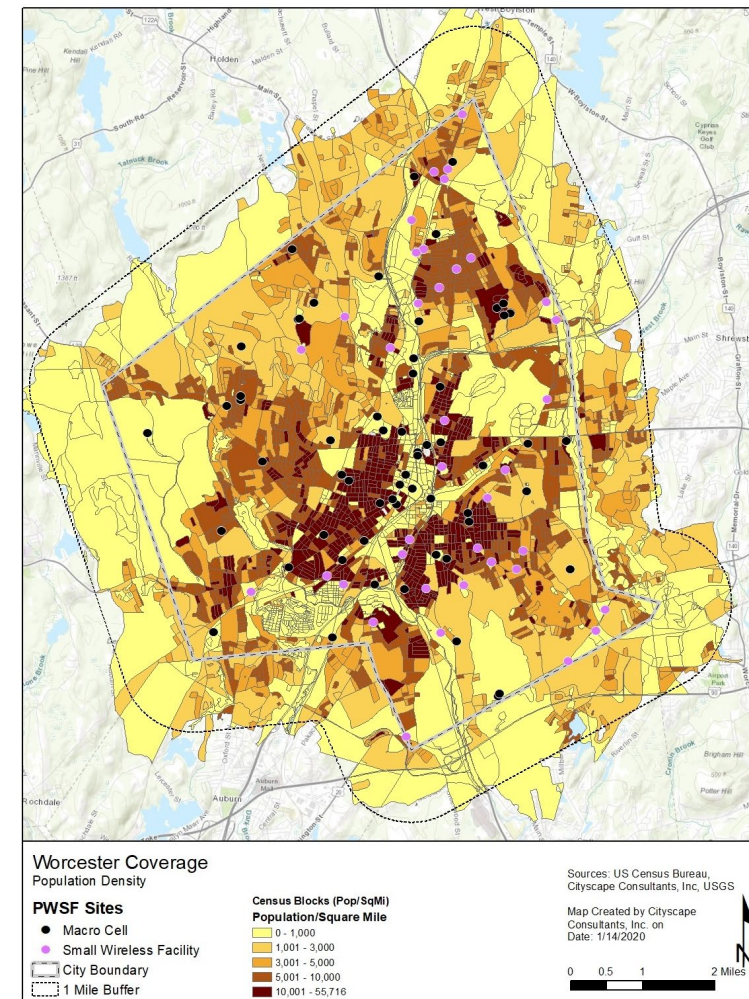
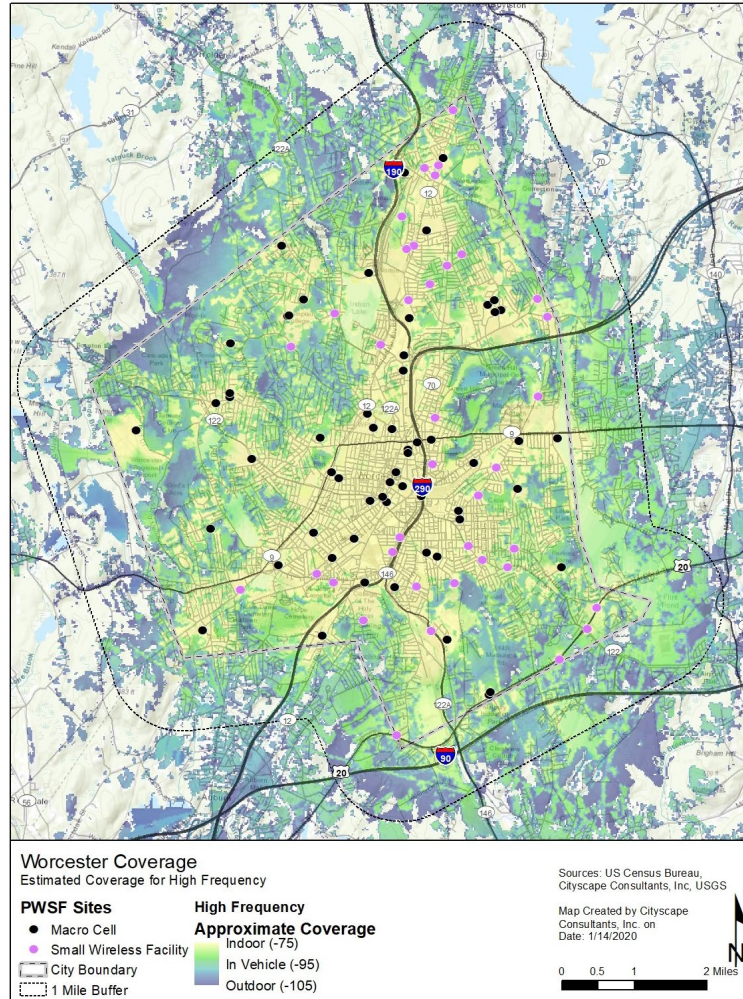
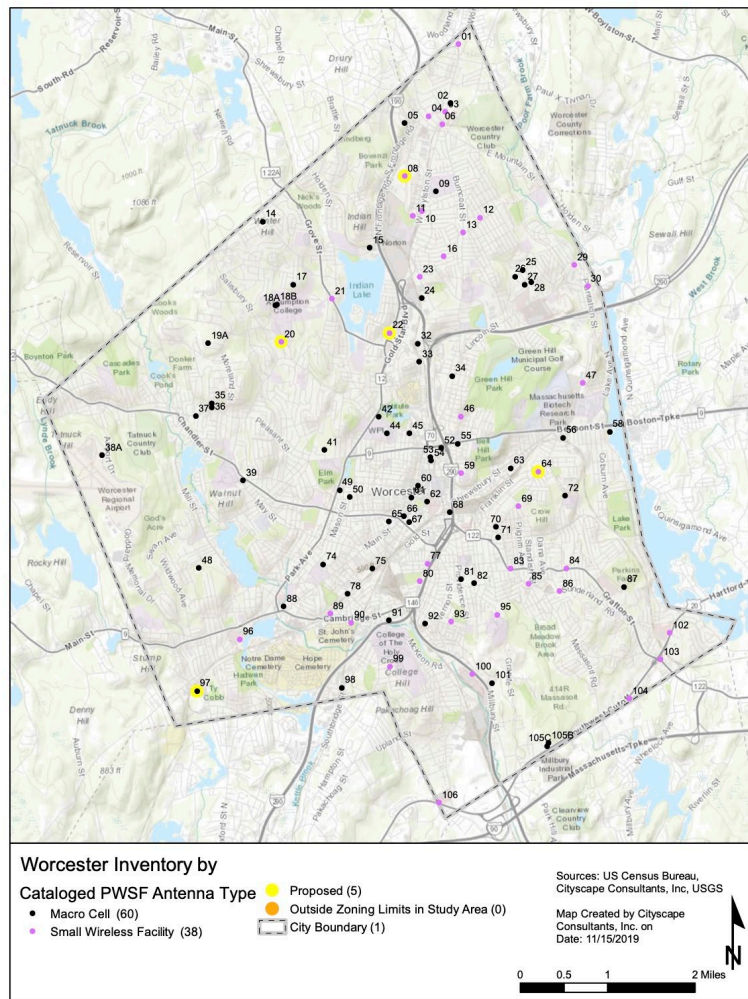


Task 4: Engineering Mapping Analysis

Inventory Mapping

- Four (4) Types of Inventory Maps
 - Terrain
 - Clutter
- Census Data
- Traffic Counts (If Available)
- Gap Analysis





Wireless Infrastructure Study Mapping Examples




Task 5:



Regulatory Review And Recommendations

- Strengths and Weaknesses
- Compliance with Federal Regulations
- Strategies to Control and Prioritize the Location of New Facilities
- Options to Address Visual Impact of New Facilities
- Possible Use Of Public Owned Properties To Fill In Network Gaps
- Application Review Process

George Latimer
Westchester County Executive

Search or jump to



2021 (CURRENT) ▾

CHARTER AND ADMINISTRATIVE CODE OF WESTCHESTER COUNTY

ADDITIONAL HISTORY TABLE

CHARTER

ADMINISTRATION CODE

LOCAL LAWS, ACTS AND ORDINANCES, ETC.

OTHER LOCAL LAWS, ACTS AND ORDINANCES

GENERAL ORDINANCES RELATING TO PROPERTY & FACILITIES

ORDINANCES, RULES & REGULATIONS OF THE DEPT. OF PUBLIC WORKS

RULES & REGULATIONS OF THE

Code of Ordinances

Supplement 37 - 12-31-2020

Online content updated on January 13, 2021

CHARTER AND ADMINISTRATIVE CODE of WESTCHESTER COUNTY, NEW YORK CODE OF LOCAL LAWS, ACTS AND ORDINANCES, ETC.

Local Law No. 21-2020, enacted November 24, 2020. (Supp. No. 37, 12-31-2020)

This Code of Ordinances and/or any other documents that appear on this site may not reflect the most current legislation adopted by the Municipality.

Adopted Ordinances Not Yet Codified

This Code of Ordinances is up to date as indicated by the banner text above. Municipality has received additional legislation, but it has not been posted for interim display and is currently scheduled to be codified.

Local Law No. 23-2020

Adopted 12/8/20

A LOCAL LAW AMENDING CHAPTER 863 OF THE LAWS OF WESTCHESTER COUNTY IN RELATION TO THE FUNCTIONS PERFORMED BY THE DIRECTOR OF CONSUMER AFFAIRS

Tasks 6 and 7:

Draft And Final Wireless Master Plan

- Submission of Draft Document
- Public Meetings and Commentary
- Final Documents
- Project Completion/Adoption by Borough





Introduction to Wireless Telecommunications

INFRASTRUCTURE INITIALLY BUILT FOR CELLULAR PHONES NOW UPGRADED AND
CONSTRUCTED FOR CELLULAR PHONES, TABLETS AND SMART DEVICES

Wireless Telecommunications History



1G



2G & 3G



4G & 5G Enabled

- 1G service provided voice calls only.
- 2G service included voice, texting and data.
- 3G service offered in early 2000's improved data speeds.
 - These services are now obsolete
- 4G 2010 and increased data speeds; included new 700 and 2100 MHz frequencies.
- LTE, 5G and beyond



Non-Concealed Macro Towers



Concealed Macro Towers



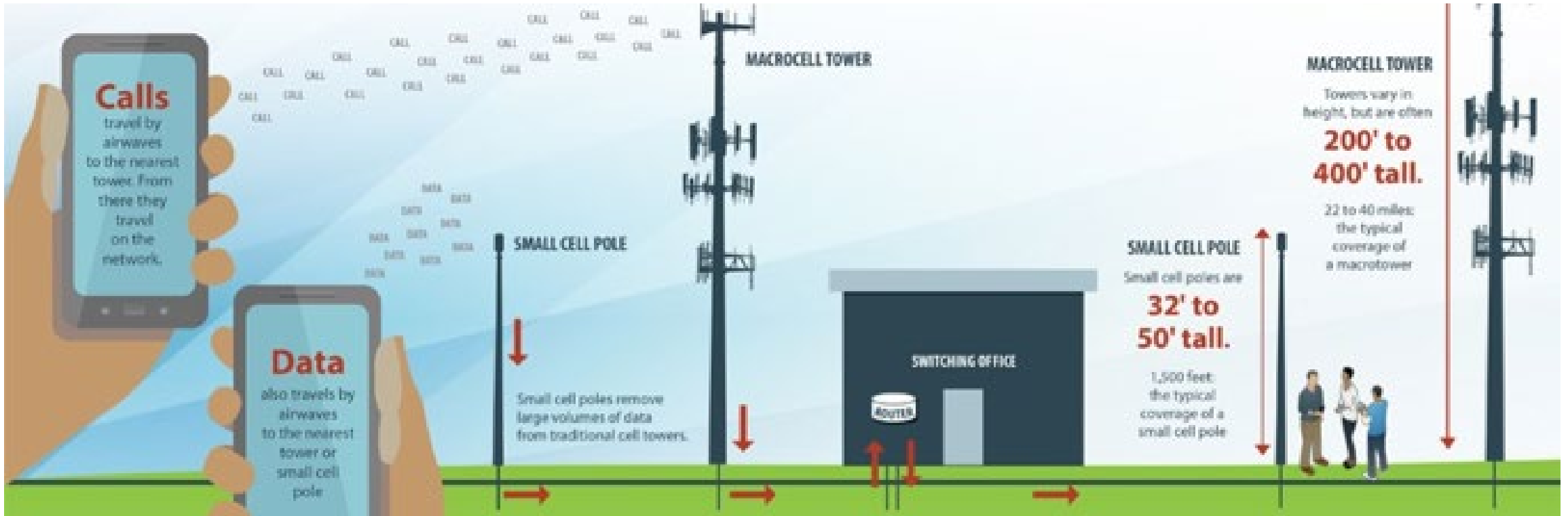
Non-Concealed Macro Base Stations



Concealed and Semi-Concealed Macro Base Stations



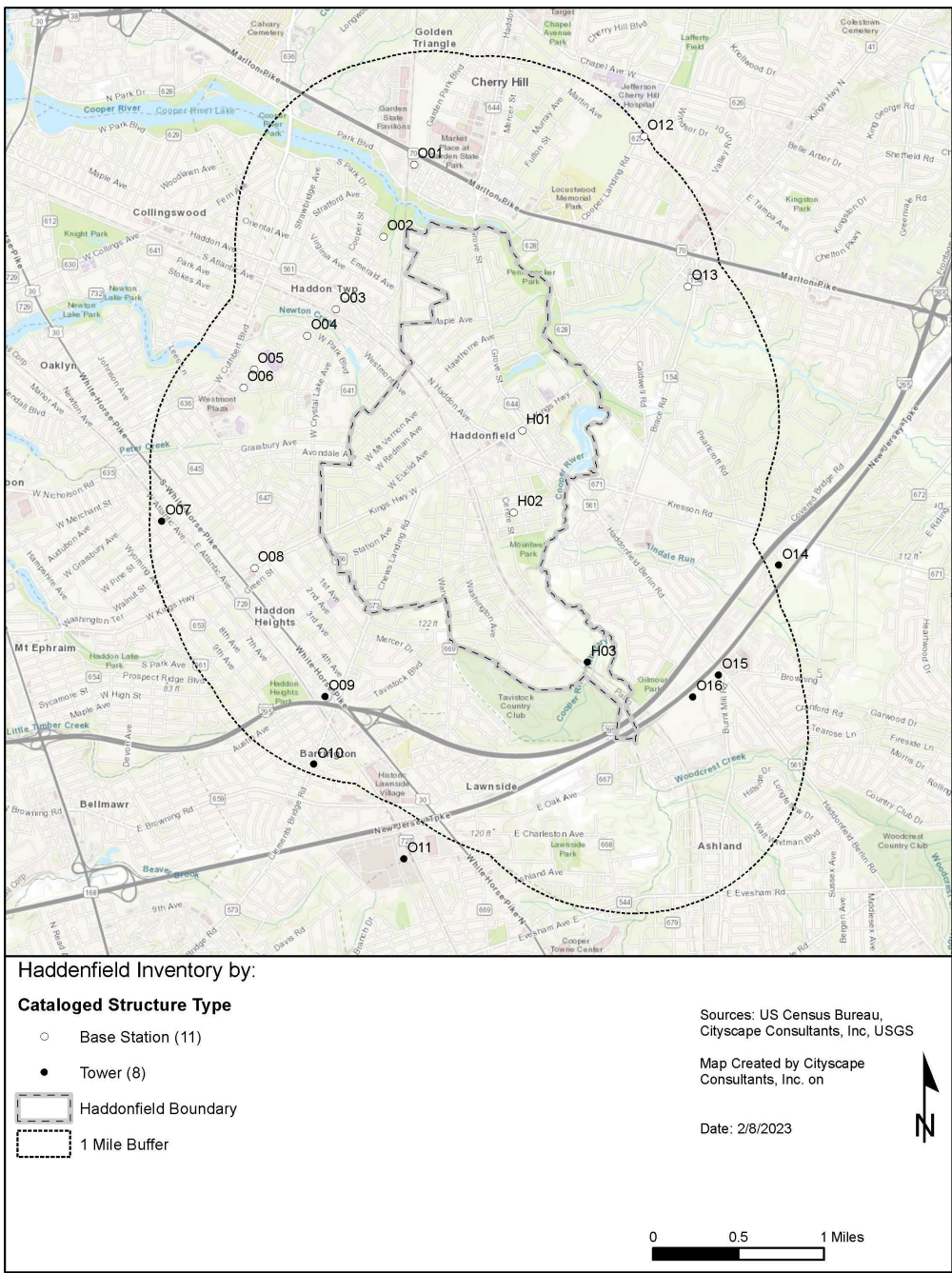
Concealed and Semi-Concealed Small Wireless Facilities



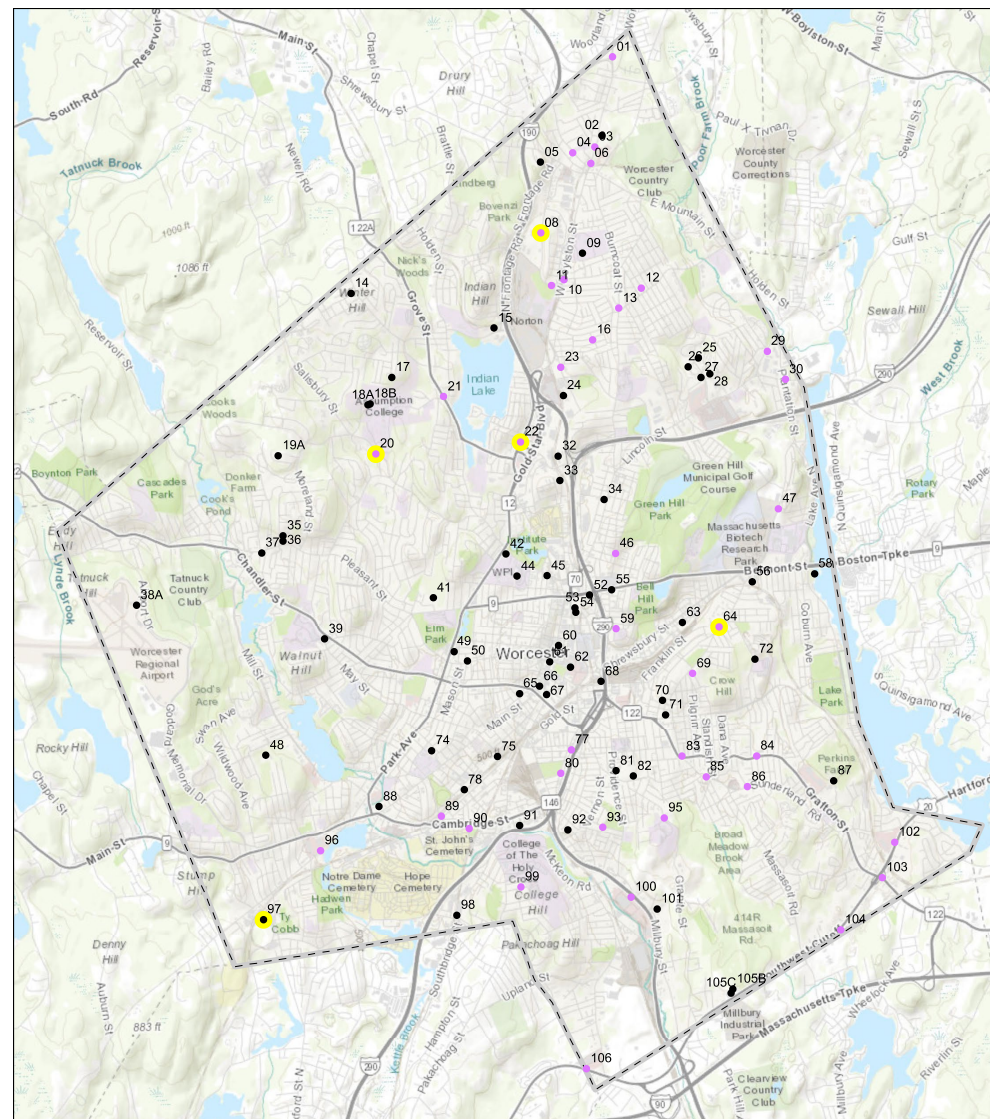
Wireless Network Planning

MACRO AND SMALL WIRELESS FACILITIES

Draft Inventory Structure Type

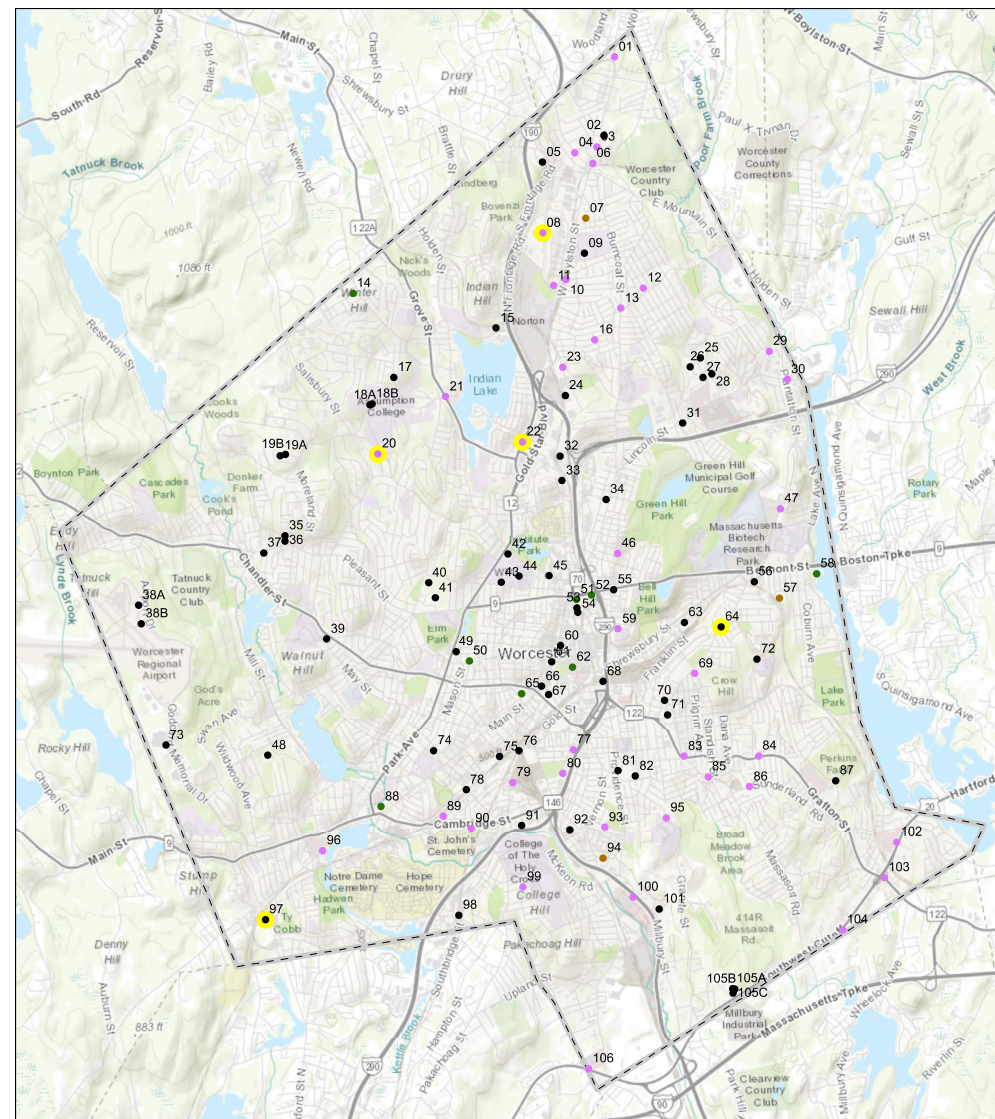


Draft Inventory PWSF Antenna Type



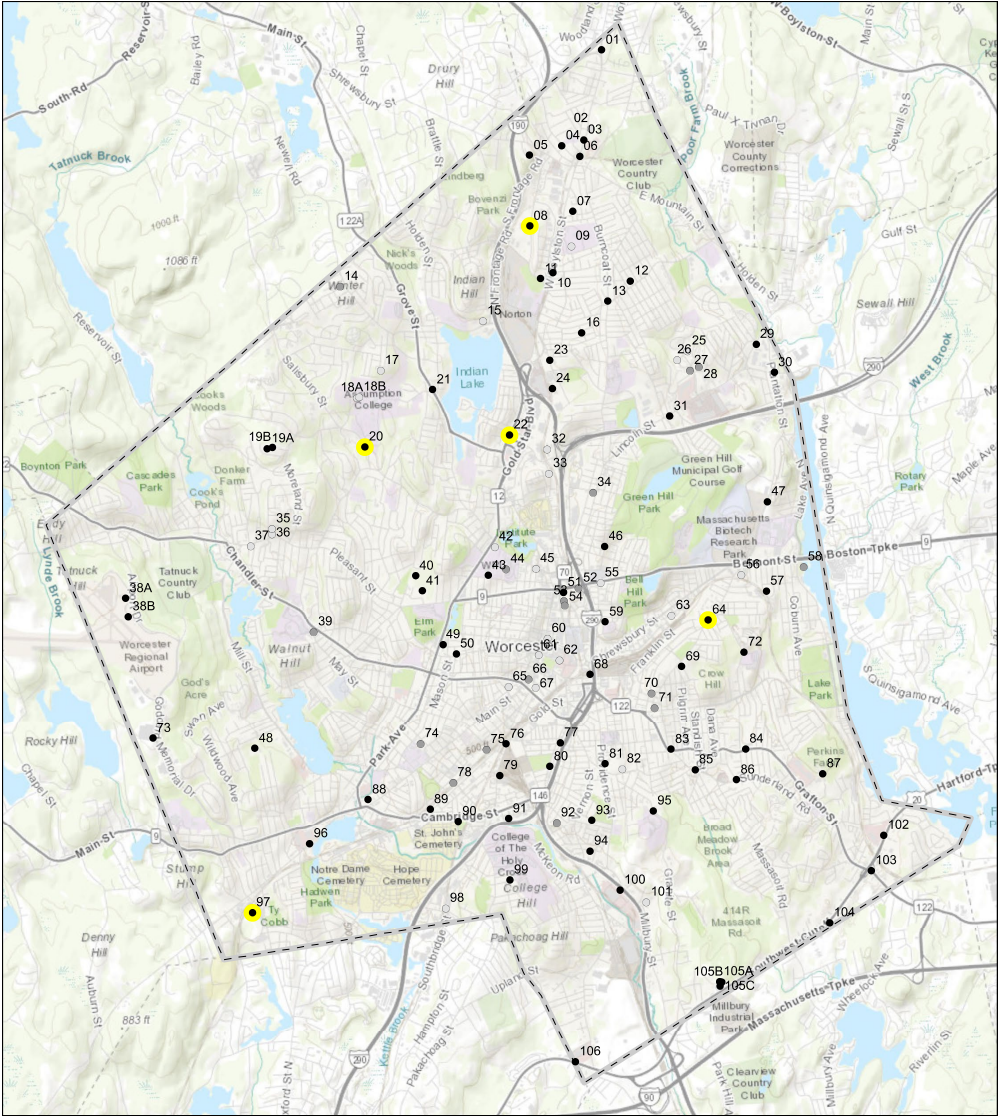
Worcester Inventory by

Draft Inventory Location

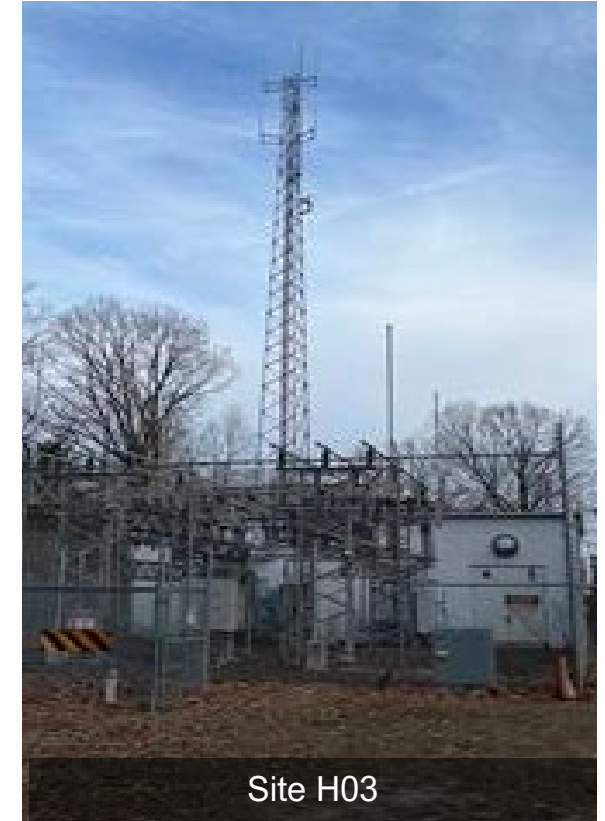


ory by

Draft Inventory Design Type



Worcester Inventory by



Haddonfield Sites



Wireless Telecommunications Regulatory Parameters

47 USC §332(c)(7) (a/k/a Section 704 of the Telecommunications Act of 1996)

Preservation of state and local zoning authority regarding placement, construction and modification of personal wireless service facilities, however the regulations shall **NOT**:

- Unreasonably discriminate among providers of functionally equivalent services
- Prohibit or have the effect of prohibiting the provision of personal wireless services
- Shall act on requests within a reasonable time period
- Provide denials in writing and supported in substantial evidence contained in a written record
- Cannot regulate environmental effects of radio frequency (RF) emission beyond the Commission's regulations concerning such emissions
 - Can require a statement that facility complies with the Commission's regulations concerning such RF emissions

Middle Class Tax Relief and Job Creation Act of 2012, Section 6409A

- Notwithstanding Section 704 of the Telecommunications Act of 1996 or any other provision of law, a State or local government **may not deny, and shall approve** any **eligible** facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station
- **Eligible** facility request means any request for modification on an existing wireless tower or base station that involves:
 - Collocation, removal or replacement of new transmission equipment



H. Rept. 112-399: MIDDLE
CLASS TAX RELIEF AND JOB
CREATION ACT OF 2012

U.S. Congress

Collocations Permitted by Right

Provided Application Does Not Exceed Definition of Substantial Change



Collocation means:

- Mounting or installing equipment on an eligible support structure

Eligible facility request means:

- Any request for modification of an existing tower or base station that does not substantially change the physical dimension of such tower or base station

Eligible support structure means:

- Any tower or base station provided that it is existing at the time the relevant application is filed

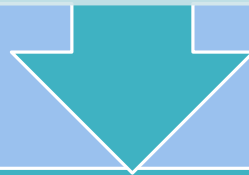
FCC's Report and Order #3

Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment



Unless a written agreement between Applicant and siting authority

10-days to review initial small wireless facility application for completeness; if incomplete, must specify missing documents or information needed for completion; clock re-starts with revised materials. 30-days to review initial macro facility application; clock tolls if complete.



Application review timelines:

60 days for collocating an eligible small wireless facility using an existing structure

90 days for macro to collocate wireless facilities using an existing structure

90 days to deploy a small wireless facility using a new structure

150 days to deploy a non-small wireless facility using a new structure

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