

Connectivity in Millbrae

Shared Fiber Network and Wifi Proof of Concept

April 25, 2017

Why Connectivity is Important



Backbone for Public Safety – Improved communications

Economic Development – attract and retain residents and companies



Education – Access to the Internet and School Information Systems

Social Equity – Equal rights and access to information



Continuity – disaster readiness and recovery

Ubiquity of Mobile – Proliferation of smartphones and tablets



Enabler for Smart City Initiatives – its about the connectivity

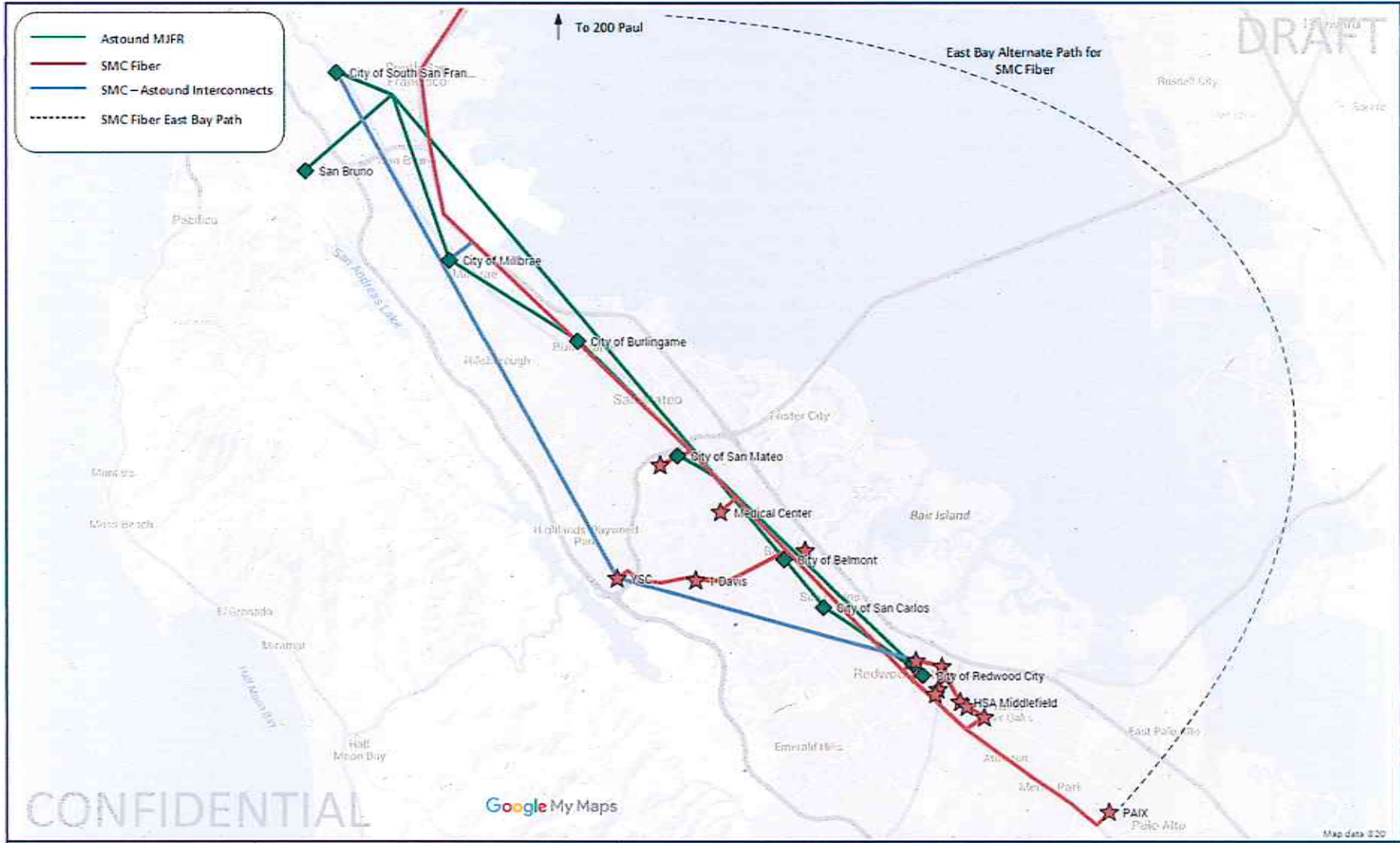
Millbrae's Current Fiber Connectivity

- Part of original SAMCAT network
 - Slow – Millbrae's bandwidth is approximately .04 Gbps
 - Operating on end-of-life equipment
- One of the sites for the Shared Fiber Network (SFN)
 - 10Gbps proof of concept has been completed
 - Production site will be 40Gbps, scalable to 100Gbps and more
 - Modern equipment, highly secure, open standards
 - Equipment and installation paid for by San Mateo County, no cost to Millbrae
 - Should be in production in next 2-3 months
- SFN will allow connectivity to the County fiber network, and major Internet providers in the Bay Area

Shared Fiber Network Map



SFN and County Fiber Network



Wifi Proof Of Concept Overview

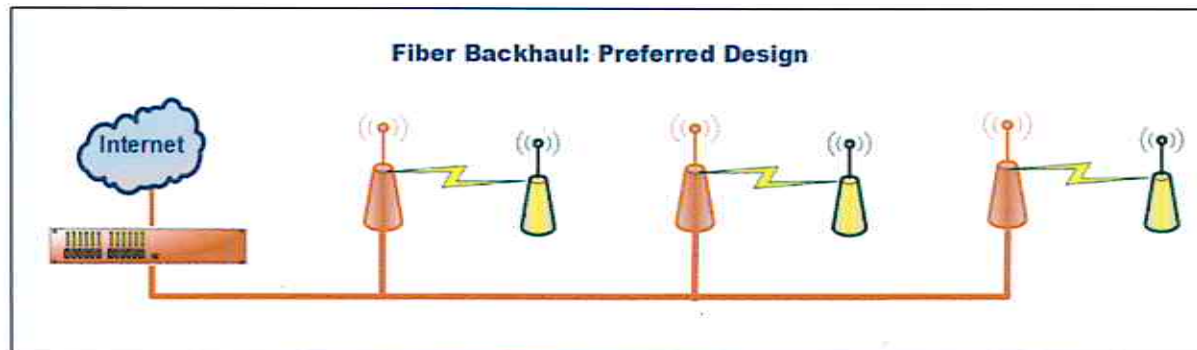
Locations Being Considered

- Will likely be a multi phase effort
 - Broadway Corridor
 - Along El Camino Real
 - Connect City Hall and potentially the Library
- Update wifi at City Hall to provide improved public wifi and secure staff wifi
- City Hall and POC should be consistent to support future connectivity



Wifi Proof Of Concept Design

- Current Plan is to use fiber for backhaul as it is the fastest and most reliable option
- There is existing conduit along Broadway and El Camino Real
- How to connect the two is being researched
- There is conduit that connects Broadway to City Hall



Wifi Proof Of Concept Overview

- The County has agreed to provide the following:
 - Design support, including potential inclusion as a Super Cluster site
 - Providing the equipment and installation services (approximately \$75k)
 - One year of maintenance
- The County's financial support for this project is required
- Millbrae is responsible for:
 - Providing any fiber connectivity and location for the equipment, such as a pedestal
 - Appropriate access and approvals
 - Maintenance of the network after the initial year (budget is being developed)
- Plan for improved wifi at City Hall will be developed in parallel

Next Steps

- Work with SAMCAT and San Mateo County on getting the Shared Fiber Network into production
- Release RFP to install a pedestal and fiber in existing conduit along Broadway
- Investigate conduit to connect Broadway and El Camino Real
- Coordinate with San Mateo County to ensure project funding and installation of the wifi equipment
- Investigate integrating public wifi in City Hall to larger public wifi effort

Thank you!



Any Questions?