


**iteris**

## Alameda Smart City Master Plan

Proposed Recommendations  
November 17, 2021



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## Smart City Plan Vision



Guide City on how to use new technology to improve community members' lives.

## Smart City Objectives

- Equitable internet (City Council referral)
- Government transparency and cyber security
- Transportation operations
- Safety
- Economic vitality
- Climate goals

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## What's been done

- Existing Conditions Assessment
  - Establishes a baseline of City's assets
- Needs Assessment and Recommendations
  - Meet with and understand needs of various project stakeholders
  - Identify gaps in City's existing assets where needs are not met
  - Recommend improvements to address unmet needs

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## Needs Identification Focus Groups

- AC Transit
- Alameda Municipal Power
- Alameda Unified School District
- Business Groups
- Economic Development
- IT
- Recreation & Parks
- Public Safety
- Public Works
- Transportation Planning
- Equity Priority Communities



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## Summary of Recommendations

No	Recommendation	Timeframe	Approx. Cost
1	Build-Out City Communications Network	Short- to Long-Term (< 3-8+ years)	> \$1 million
2	Deploy Public Wireless Networks (Wi-Fi)	Short- to Long-Term (< 3-8+ years)	\$500k to \$1 million
3	Deploy Citywide Emergency Vehicle Preemption	Short-Term (< 3 years)	\$100k to \$500k
4	Deploy Transit Signal Priority	Short-Term (< 3 years)	\$100k to \$500k
5	Partner with Internet Service Providers (ISPs)	Short-Term (< 3 years)	< \$100k
6	Develop Dig Once and Installation Standards Policies	Short-Term (< 3 years)	< \$100k
7	Implement Centralized Transportation Management	Mid-Term (3-8 years)	\$ 100k to \$500k
8	Interconnect Emergency Operations Center and City Facilities	Mid- to Long-Term (3-8+ years)	> \$1 million
9	Implement Transportation Data Analytics	Mid- to Long-Term (3-8+ years)	\$500k to \$1 million
10	Deploy Traffic Monitoring Camera Network	Long-Term (8+ years)	\$500k to \$1 million

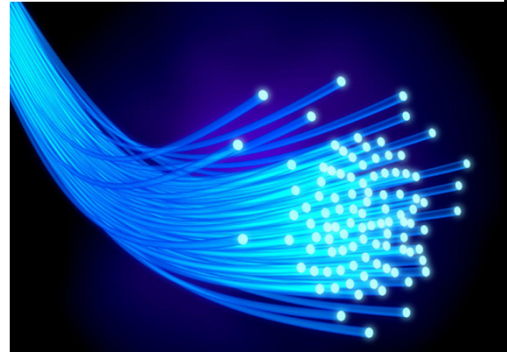
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# Recommendation 1

## Build Out City Communications Network

- Foundation for Smart City initiatives
- Required to support other initiatives
- Fiber optics and wireless solutions
- Interconnects City facilities and systems
- Resilient and redundant
- Reduce dependency on AMP infrastructure
- Regional interconnectivity



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# Recommendation 1

## Build Out City Communications Network



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## Recommendation 2

### Deploy Wi-Fi in Public Spaces

- Provide free internet access through public Wi-Fi facilities
- Enhance internet availability, decrease digital divide
- Will use existing commercial ISPs for internet service
- Attract business and commerce to key business districts
- Locations will be focused within the public right-of-way
  - Public buildings
  - Parks
  - Streets (such as at bus stops)
  - Commercial and business districts
  - Equity Priority neighborhoods



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## Recommendation 2

### Deploy Public Wi-Fi



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Recommendation  
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## Deploy Citywide Emergency Vehicle Preemption

- Improve public safety
- Improve emergency response times



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Recommendation  
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## Deploy Transit Signal Priority

- Reduce bus delay citywide
- Enhance transportation equity and options
- Enable AC Transit to improve service in Alameda

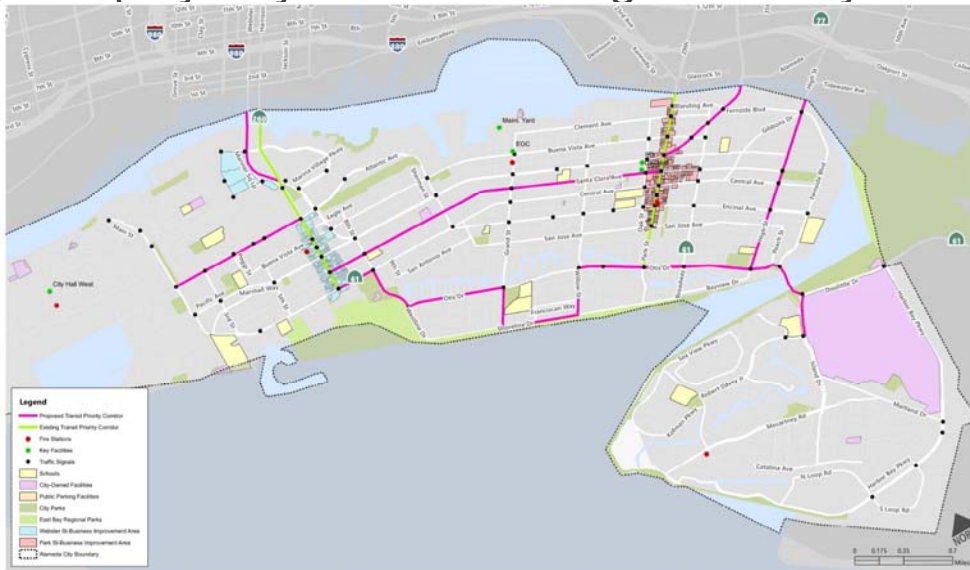


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## Recommendation 4

### Deploy Citywide Transit Signal Priority



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## Recommendation 5

### Partner with ISPs



- Enhance internet availability and bandwidth for all
- Lower internet costs on the island
- Mitigate predatory pricing tactics

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## Recommendation 6

### Develop Dig Once & Installation Standards Policies

- Protect City's infrastructure
- Proactively build-out City's infrastructure needs
- Inform private developments of their responsibilities when building new developments on Alameda
- Improve joint trenching opportunities with utility companies



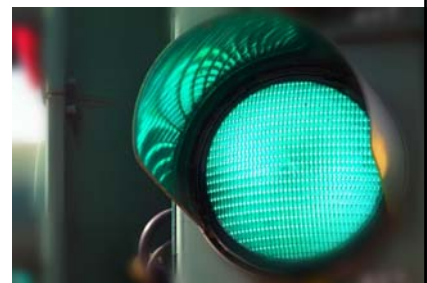
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## Recommendation 7

### Implement Centralized Transportation Management

- Enable City's ability for real-time traffic management and incident response
- Provide a dashboard for signal performance measurement and management
- Assist with emergency response
- Reduce signal maintenance effort



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## Recommendation 8

### Interconnect EOC & City Facilities

- Establish a central location for City services management
- Enhance IT support and maintenance across City facilities
- Reduce dependency on AMP infrastructure
- Empower cyber security implementation



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## Recommendation 9

### Implement Transportation Data Analytics



- Enable high-resolution data collection and abiding by the city's Data Privacy policies
- Support deployment of Signal Performance Measures (SPM)
- Bring current hardware up to current standards
- Improve planning, operations and management
- Reduce delay and carbon emissions

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Recommendation  
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## Deploy Traffic Monitoring Camera Network



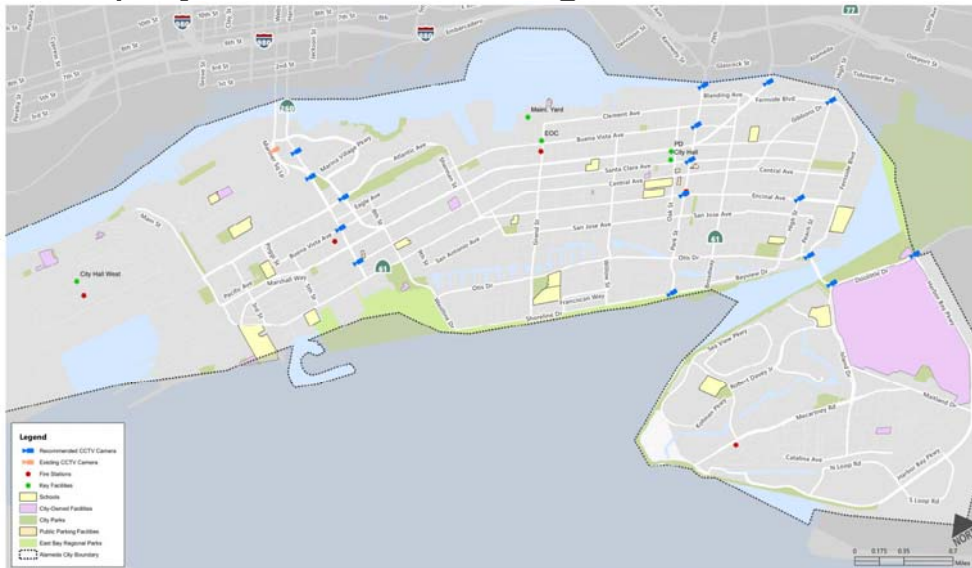
- Improve real-time traffic management and incident response
- Enhance incident detection and emergency response
- Enable bridge monitoring for emergency route planning
- Locations are focused at:
  - Entry/exit points to Alameda
  - Commercial corridors

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Recommendation  
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## Deploy Traffic Monitoring Camera Network



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## Potential Funding Sources

- Smart City Master Plan & Broadband proposed project for \$6 million to be funded from the \$28.68 million in American Rescue Plan Act (ARPA)
- This will build out a fiber network to improve connectivity across a core area of Alameda
  - Provide the fiber network needed to implement the Top Ten recommendations including public Wi-Fi to business districts and equity priority community members

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## Next Steps

- Finalize Recommendations
- Complete Master Plan Document
  - Collate all existing conditions and needs assessment data
  - Identify all potential funding sources
  - Enhance Smart City documentation and strategy recommendations
- Come back to Transportation Commission and City Council for final approval

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Questions?