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NEWARK PEDESTRIAN & BICYCLE MASTER PLAN

CITY COUNCIL MEETING

FEHR & PEERS

February 23, 2017

Agenda

- Overall Purpose of Master Plan
- Primary Goals; Policy Context
- Community Outreach Summary
- Types of Bicyclists and Bikeways
- Types of Pedestrians
- Existing Conditions
- Recommended Bicycle and Pedestrian Projects
- Funding and Implementation
- Questions and Comments

Purpose.

- **Define walking and biking networks and improvements**
- **Respond to community needs**
- **Provide a consistent approach to future improvements**
- **Use the plan to secure funding**

Goals

1. **Create a connected bicycle and pedestrian network**
2. **Increase the number of people walking and biking**
3. **Improve safety for pedestrians and bicyclists**
4. **Develop a comprehensive *Safe Routes to School* program and supporting infrastructure plan**
5. **Establish citywide design guidelines for bicycle and pedestrian facilities**

Plan Elements & Policy Context

- **Newark Pedestrian and Bicycle Master Plan addresses all requirements of :**
  - **Alameda County Transportation Commission Bicycle Master Plan Guidelines**
  - **Caltrans Active Transportation Program Guidelines**

- **Applicable Related Planning Documents:**
  - **Newark General Plan**
  - **Newark Complete Streets Policy**
  - **Alameda Countywide Pedestrian & Bicycle Master Plans**
  - **Alameda Countywide Multimodal Arterial Plan**
  - **City of Fremont Bicycle Master Plan**

Community Outreach Summary

- **Multiple Community Workshops and BPAC Meetings**
- ***Phase 1*** **- Data gathering; needs analysis; existing conditions; vision statement development**
- ***Phase 2*** **- Development of walking and biking networks; Refined goals, policies; established criteria for prioritization; developed support programs**
- ***Phase 3*** **– Initial review of draft master plan with current 8-chapter format**
- ***Phase 4*** **– Review of revised master plan addressing various issues raised by BPAC and community; Final recommended approval of draft master plan by BPAC**

Bicyclists.

Strong and Fearless

<1%

Riding is a strong part of my identity, and I am undeterred by traffic speed, volume, or other roadway conditions.

Enthused and Confident

7%

I am comfortable sharing the road with motor vehicles, but given a choice, I prefer to use bike lanes and bike boulevards.

Interested but Concerned

60%

I like riding a bike, but I don't ride much. I would like to feel safer when I do ride, with less traffic and slower speeds.

No Way No How

33%

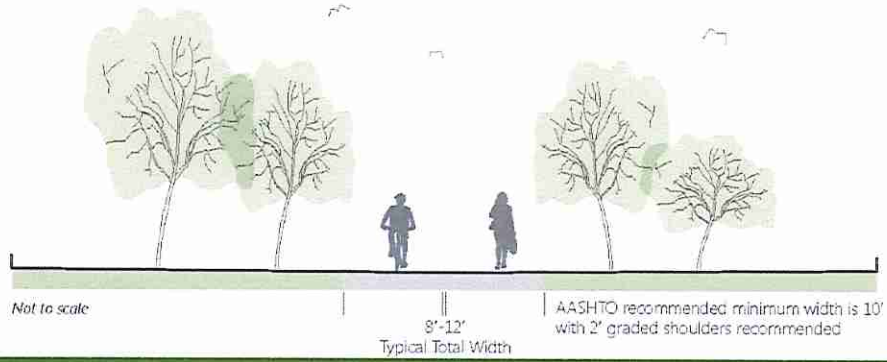
I don't bike at all due to inability, fear for my safety, or simply a complete and utter lack of interest.

Bikeway Types.

Fully Protected Bikeways: Paths & Separated Bikeways ("Cycle Tracks")

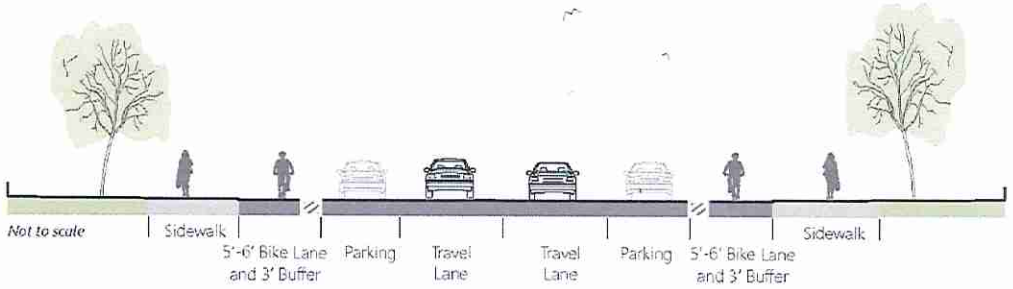
SHARED-USE PATH (CLASS I PATH)

Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow minimized.



CYCLETRACK

Provides a physically separated bicycle lane for increased comfort and protection of bicyclists. Can be physically separated by a barrier, such as planters or on-street parking, or grade-separation from the roadway.



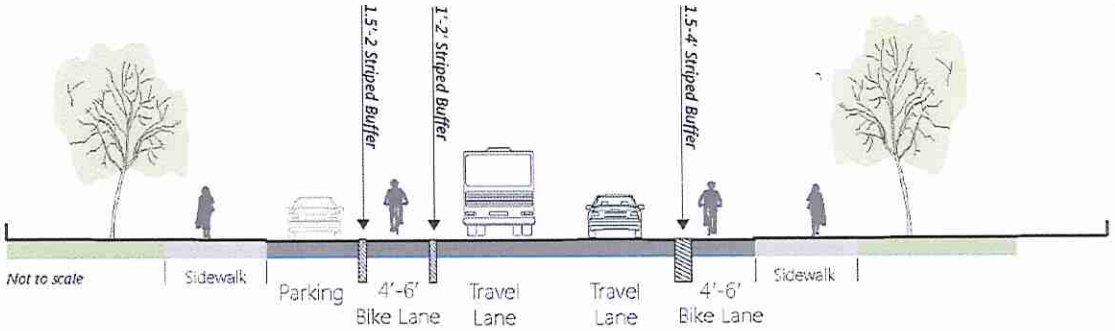
Bikeway Types.

Dedicated Bikeways – Striped Lanes, Sometimes with "Buffers"

BUFFERED BICYCLE LANE

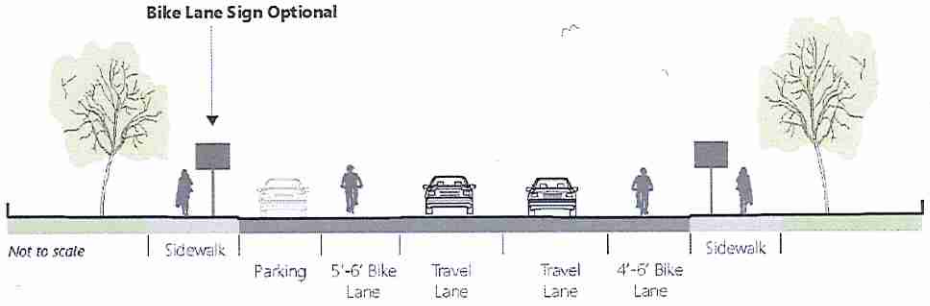
Note: Chevrons should be used instead of diagonal hatching where striped buffers are over 3 feet in width. Buffers can either be located on either both sides of the bicycle lane or only one side.

Modified on-street bike lane with vehicle and/or parking-side buffer for addional comfort and safety on higher speed or volume roadways



BICYCLE LANES

Provides a striped lane for one-way bike travel on a street or highway.



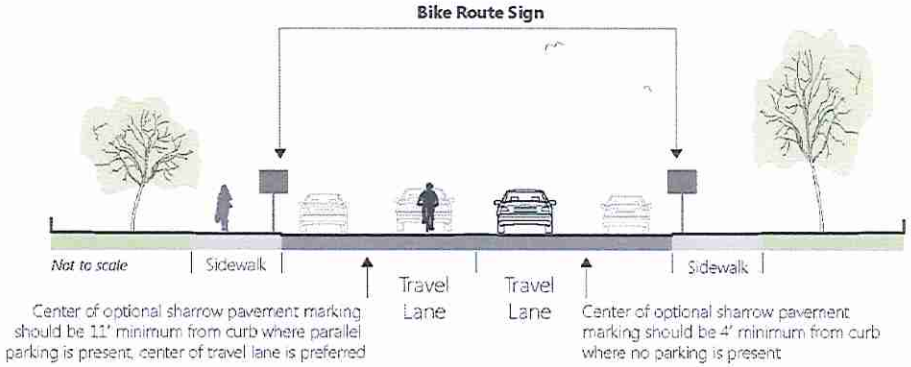
Bikeway Types.

Auto/Bike Shared Lanes

BICYCLE ROUTE WITH SHARROWS

Provides for shared use with motor vehicle traffic.

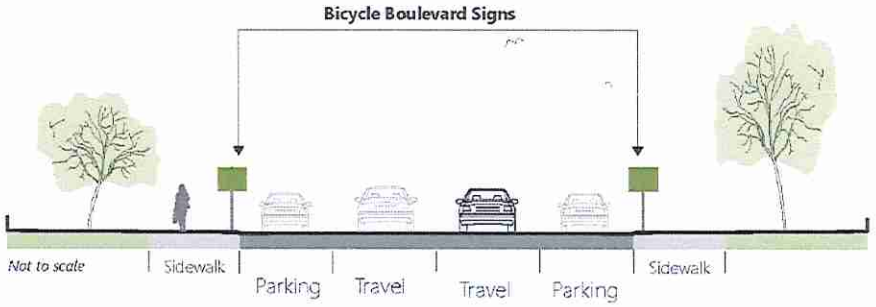
Note: Additional traffic devices such as speed tables, chicanes, medians, wayfinding signs, and pavement markings are also included.



BICYCLE BOULEVARD

Shared on-street facility with improvements to manage vehicle speed and volume and prioritize bicycle traffic.

Note: Additional traffic devices such as speed tables, chicanes, medians, wayfinding signs, and pavement markings are also included.



Pedestrians.

OF ALL AGES AND ABILITIES

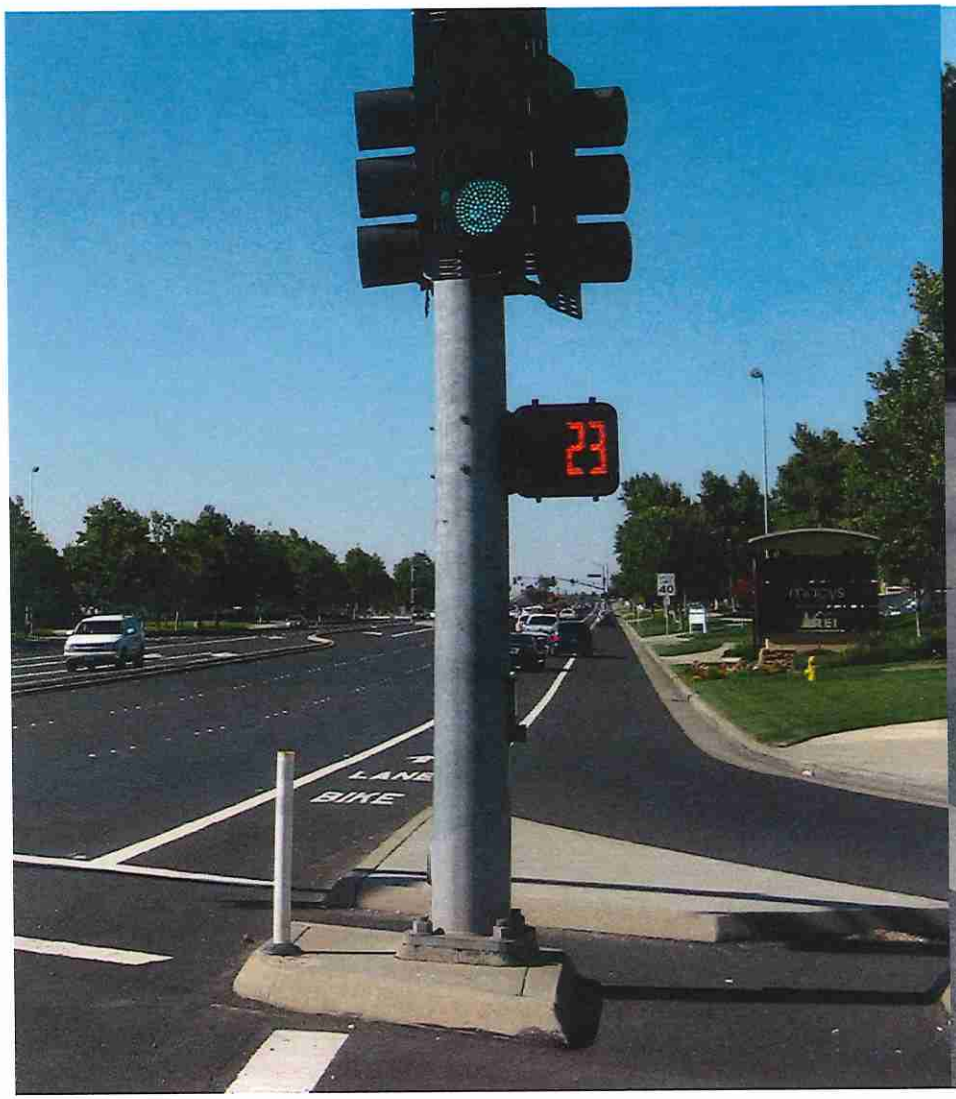
Photos (all): Dan Burden, Walkable and Livable Communities Institute

Pedestrian Tools.

CROSSWALK ENHANCEMENTS: RAPID RECTANGULAR FLASHING BEACONS

Pedestrian Tools

CROSSWALK ENHANCEMENTS: COUNTDOWN SIGNALS & APS



Existing Bicycling Conditions

- Newark built around automobile use
- Want to accommodate riders with varying skills, confidence
- Concerns: Busy arterial streets and intersections, I-880/SR84 , access to destinations

- Positive traits: flat terrain, low-volume streets
- Bicycle Network:
  - 365 feet of Class I Bicycle Paths
  - 15 miles of Class II Bicycle Lanes
  - 13 miles of Class III Bicycle Routes

Bicycle Projects.

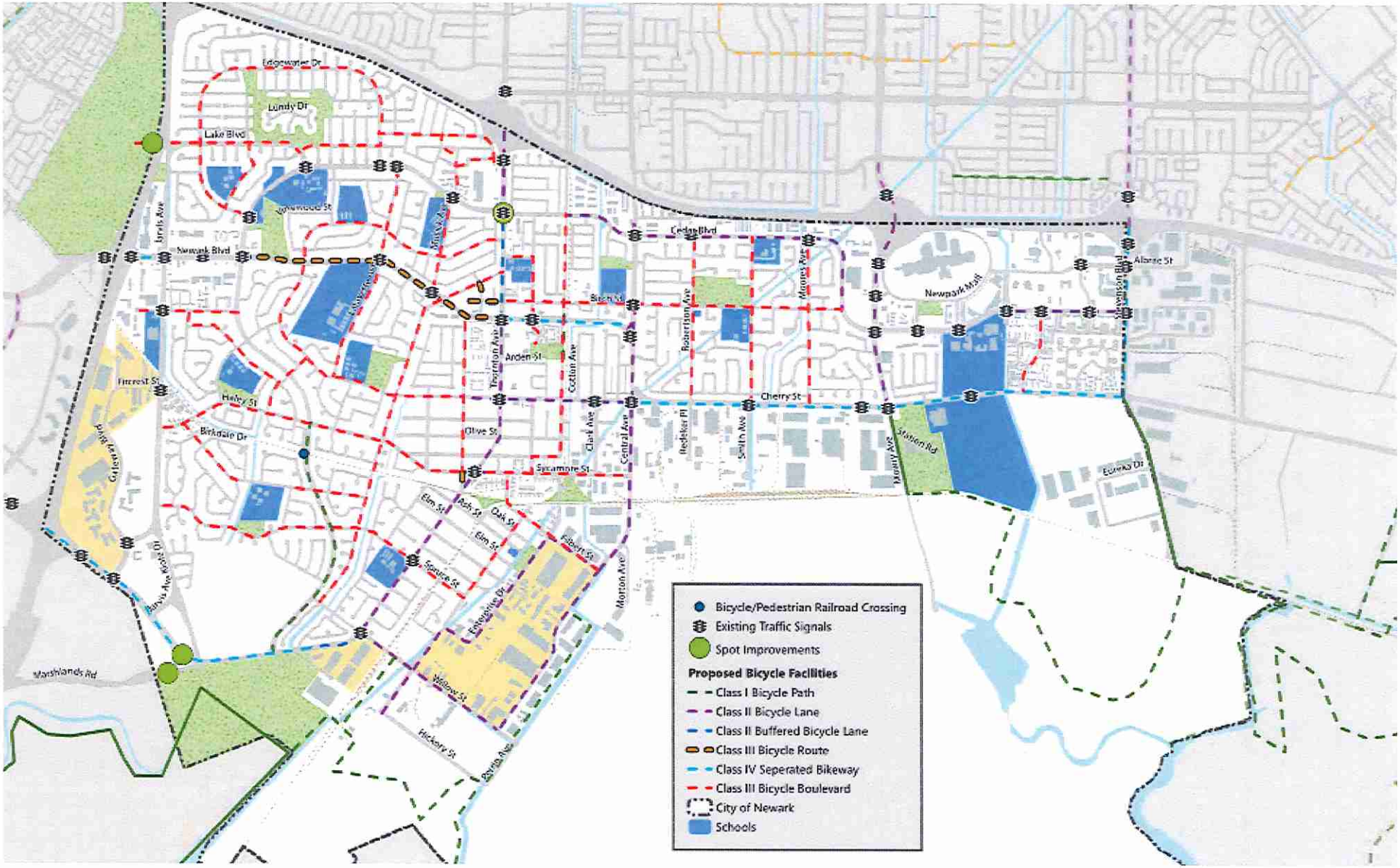
Prioritization Criteria

- **Anticipated Level of Use**
- **Connectivity**
- **Regional Access**
- **Safety Improvements**
- **Relative Ability to Implement**

Top Five Priority Projects:

- **Thornton Avenue between Willow Street and SR 84 (Class II Bicycle Lanes, Class IV Separated Bikeway)**
- **Newark Boulevard from SR 84 to Jarvis Avenue (Class IV Separated Bikeway)**
- **Thornton Avenue, between I-88-0 and Mayhews Landing Road (Class II Buffered Bicycle Lanes)**
- **Thornton Avenue, between Willow Street and Mayhews Landing Road (Class II Bicycle Lanes)**
- **Cherry Street, between Central Avenue and Stevenson Boulevard (Class IV Bicycle Lane)**

Proposed Bikeway Facilities



Bicycle Projects

High Priority Citywide Projects:

- **Traffic signal detection improvements and increased signal time**
- **Bicycle parking (short-term and long-term)**
- **Wayfinding sign program**
- **Maintenance**

Total Cost of Bicycle Improvements:

$28.4 M

Existing Walking Conditions

- **Pedestrian Network:**
  - **43 traffic signal controlled crosswalks**
  - **41 uncontrolled crosswalks**
  - **87 bus stops in need of shelter/bench improvements**
  - **31 missing sidewalk segments**
  - **Ongoing maintenance of obstructions: $300,000+ per year**

Pedestrian Projects

Prioritization Criteria:

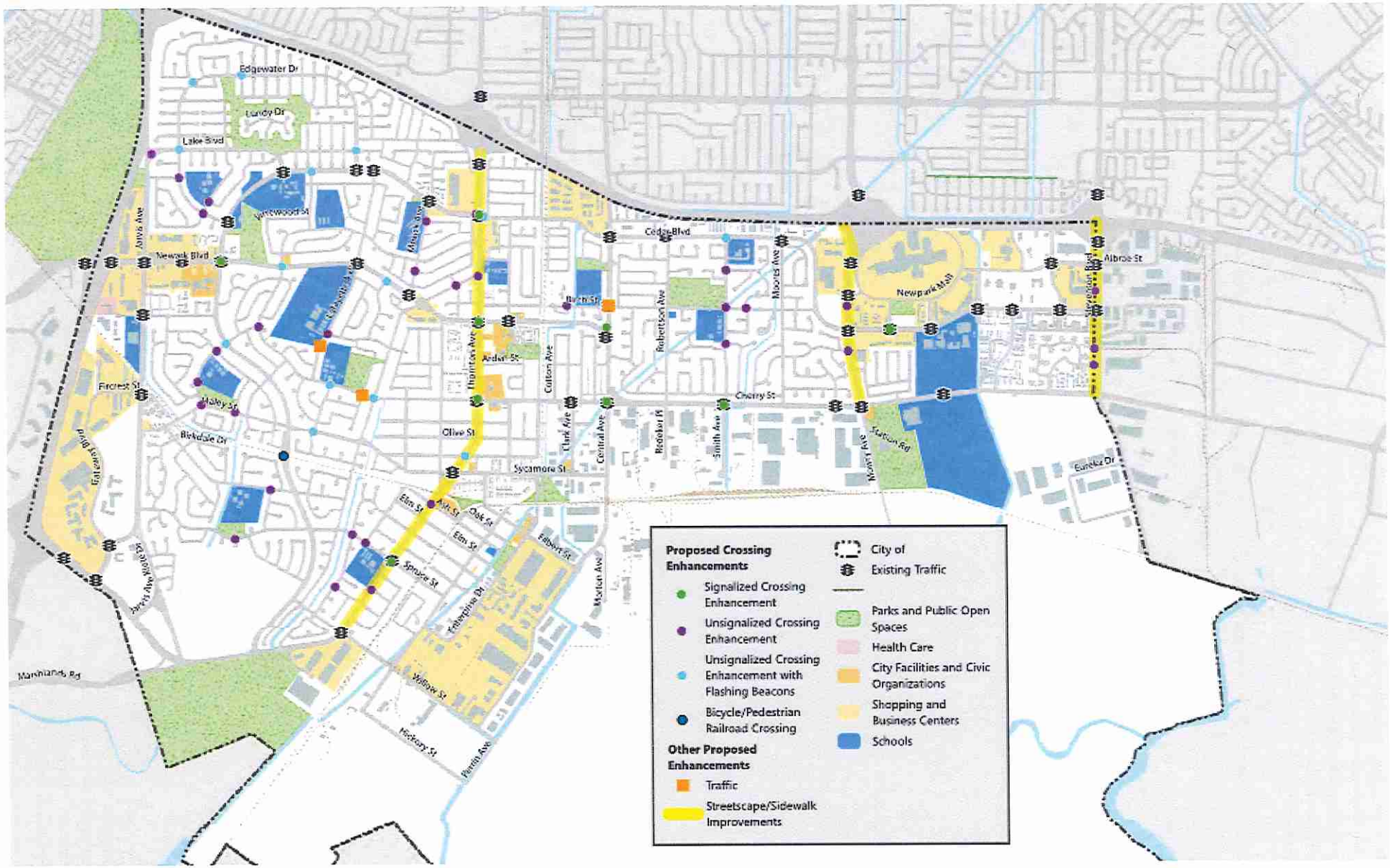
- Proximity to pedestrian priority areas
- Community connectivity
- Safety
- Relative ease of implementation

Top Five Priority Projects:

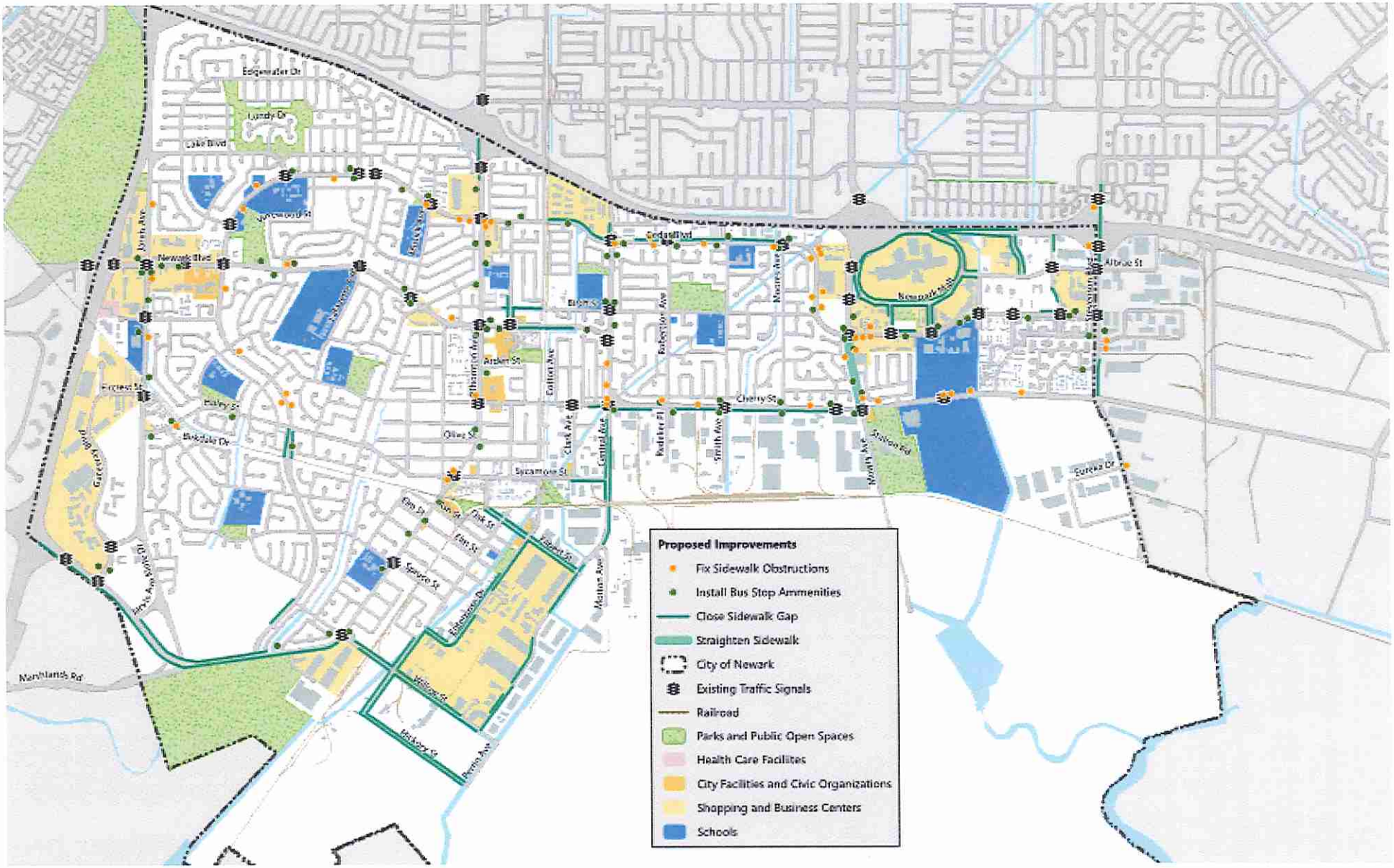
- Newark Junior High School Safe Routes to School Improvements
- Thornton Avenue between Willow Street and I-880 Streetscape Improvements
- Cedar Boulevard at Milani Avenue, uncontrolled multi-lane crosswalk enhancements
- Milani Campus of the Birch Grove Elementary Safe Routes to School Improvements
- Thornton Avenue at Ash Street, crosswalk marking

Total Cost of Pedestrian Projects: $46.7M

Pedestrian Projects.

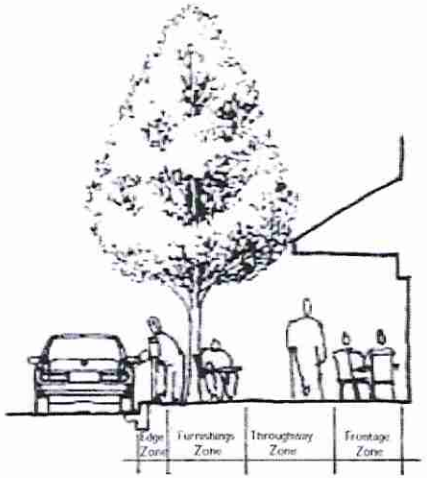


Pedestrian Projects.



Funding and Implementation

- **Understand Current and Past Expenditures**
  - **$ 4.3 M over last 10 years**
- **Identify Available Funding Sources**
  - **Federal, State, Regional, County, Local**
- **Prioritize Projects Based on Key Criteria**
- **Estimate Cost of New Bicycle/Pedestrian Facilities: $75M**
- **Pursue funding options; coordination with other stakeholders**
- **Track progress of implementation**
- **Plan update in 5 years**



Acknowledgements

Newark BPAC Members

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Fehr & Peers Transportation Consultants

Questions and Comments