Meeting Agenda:

» Draft Recommendations
» Discussion
» Next Steps
Study Overview:

» Stakeholder and Public Outreach
» Background data collection and analysis
» Municipal-wide inventory and assessment
» Improvement concepts and recommendations
  » “4 E” Approach

» Final Report and Implementation Matrix
Study Recap:

» Stakeholder and Public Outreach Summary
  » SAC Meeting #1 – 7/19/2017
  » National Night Out – 8/1/2017
  » Blue Bishop – 8/19/2017
  » Business Focus Group – 9/13/2018
  » Advocate Focus Group – 9/28/2018
  » SAC Meeting #2 – 1/18/2018
  » Wikimap
Draft Recommendations

Plan for Walking and Biking
Comprehensive Program: 4 E’s

» Education
» Encouragement
» Enforcement
» Engineering
Education

Information Distribution
» Safe walking and biking tips
» Rules of the road
» Health benefits
» School outreach programs
» Planning and Design Guidance

NEW JERSEY Safe Routes to School

Plan for Walking and Biking
Education

Bike Training
» Local Partnerships

Bike Training
» Town Staff
» Policy Implementation

Plan for Walking and Biking
Encouragement

- Support advocacy groups such as APCSC
- Cyclist events
- Bike & Walk to school events
- Highlight bike/ped project success stories
Encouragement

» Bicycle parking requirements
» Covered parking
» Bicycle corrals
Enforcement

» Pedestrian safety enforcement program

» Utilize ITS to raise awareness of speeding

Source: SFMTA
Plan for Walking and Biking

» Targeted Pedestrian Improvements
» Enhance existing bicycle network
» Improve connections to major destinations
» Improve bicycle and pedestrian access to schools
» Develop network of Complete Streets, one project at a time
Engineering

Recommendation Categories

» Pedestrian Improvement Concepts
  • Priority Intersections

» Bicycle Network
  • Corridors
  • Bicycle Network Map
Pedestrian Design Elements
Enhanced Pedestrian Crossings

» Signage and beacons
Enhanced Pedestrian Crossings

» High visibility crosswalk striping
Enhanced Pedestrian Crossings
Enhanced Pedestrian Crossings
Enhanced Pedestrian Crossings

» Intersection daylighting
Traffic Calming

- Neighborhood Roundabout
- Chicane
- Curb Extensions
- Speed Hump
- Speed Table
- Raised Crosswalk
- Speed Cushion
Traffic Calming

» **Target key corridors**
  » Asbury Avenue
  » Sunset Avenue
  » Memorial Drive

» **Support**
  » Pedestrian crossings
  » Bicycle boulevards
  » Shared-lane markings
Median Islands
Speed Humps
Raised Intersections
Priority Intersection Improvement Concepts
Sidewalk Network Expansion

Pedestrian Infrastructure

New Sidewalk
Priority Intersections

- Memorial Dr at 4th Ave
- Deal Lake Dr at Park Ave
- Asbury Ave at Pine/Church Street
- Ridge Ave at 3rd St
- Prospect Ave at Bangs Ave
- Grand Ave at 4th Ave
Memorial Dr at 4th Ave

- Construct curb-extensions
- Complete sidewalk network gaps, install ADA-curb ramps, and stripe high visibility crosswalks
- Install bike lanes
- Install "Yield to Pedestrians within Crosswalk" sign
- Install protected two-way separated bike lanes, retain parking
- Define curb extents and construct curb-cuts for driveway

Potential Improvements:
- Install ADA Curb Ramp
- Stripe Crosswalk
- Install Curb Extensions
- Install Sidewalk
- Install Bike Lanes
Deal Lake Dr at Park Ave
Deal Lake Dr at Park Ave

- Stripe high visibility crosswalks and install ADA-curb ramps
- Install parking protected bike lanes
- Implement road-diet along Deal Lake Dr
- Construct curb-extensions at all four corners of the intersection
- Extend the existing multi-use path along the banks of Deal Lake and continue it across Park Ave
- Install shared-lane markings
- Install bike lanes

Potential Improvements:
- Install ADA Curb Ramp
- Stripe Crosswalk
- Install Curb Extensions
- Install Sidewalk
- Install Bike Lanes
Asbury Ave at Church St/Pine St

- Stripe high visibility crosswalks and install ADA-curb ramps
- Install pedestrian signal heads across Asbury Ave crosswalks
- Construct curb-extensions at all four corners of the intersection
- Stripe shared-lane markings

Potential Improvements:
- Install ADA Curb Ramp
- Stripe Crosswalk
- Install Curb Extensions
Plan for Walking and Biking

Ridge Ave at 3rd Ave

- Construct curb-extensions at three corners of the intersection
- Re-align intersection approaches to improve visibility
- Install bicycle lanes
- Install bicycle boulevard
- Stripe high visibility crosswalks and install ADA-curb ramps

Potential Improvements:
- Install ADA Curb Ramp
- Stripe Crosswalk
- Install Curb Extensions
- Install Bike Lanes
- Stripe Sharrows
Plan for Walking and Biking

Prospect Ave at Bangs Ave

- Construct curb-extensions at all four corners of the intersection
- Install advisory bike lanes
- Stripe high visibility crosswalks and install ADA-curb ramps
- Re-align intersection approaches to improve visibility
- Install bicycle boulevard

Potential Improvements:
- Install ADA Curb Ramp
- Stripe Crosswalk
- Install Curb Extensions
- Install Advisory Bike Lanes
- Stripe Sharrows
Grand Ave at 4\textsuperscript{th} Ave
Draft Bicycle Network

Plan for Walking and Biking
Facility Types | Buffered Bicycle Lane
Facility Types | Separated Bicycle Lane
Facility Types | Two-Way Separated Bicycle Lane
Facility Types | Shared Lane Marking
Roadway Width Considerations

» Shared streets have no minimum width requirements
» Shared-lane markings are not appropriate on multi-lane streets
» Shared-lane markings not recommended above 25 mph
Roadway Width Considerations

- Standard Bike Lane
  - 5’ min (4’ without curb)

- Buffered Bike Lane
  - 1.5’ min 5’ min
  - 3’ preferred (4’ without curb)

- Separated Bike Lane
  - 1.5’ min 5’ min
  - 3’ preferred (4’ without curb)
  - 7’ min from curb

- Two-Way Separated Bike Lane
  - 1.5’ min 10’ min
  - 3’ preferred (12’ preferred)

- Off-Road Path
  - 10’ min
  - 12’+ preferred

- General purpose travel lanes for motor vehicles in most contexts: 10-11’
- Typical parking lane: 8’ (7.5’ Minimum)
Recent and Future Bike Improvements

» 4th Ave bike lanes + sharrows
» Sunset Ave bike lanes
» Heck St shared-lane markings
» Main St/ Deal Lake Dr Road Diet
Sunset Ave at Comstock St
Proposed Bicycle Network (Draft)
Proposed Bicycle Network (Draft)
Proposed Bicycle Network (Draft)
Proposed Bicycle Network (Draft)
Kingsley St & Ocean Ave One-way Pair Conversion

Construct shared-use path to connect both segments of Ocean Ave
Convert Kingsley St & Ocean Ave into one-way pair
Retain two-way access to surface parking lot
Ocean Ave: Existing

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 58 ft
- AADT: 2,036
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on west, angled on east
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Ocean Ave: Proposed

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Carriageway Width: 58 ft
- AADT: 2,036
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on west, angled on east
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking

[Diagram showing proposed layout with parking, travel lanes, bicycle lanes, and buffers]
Kingsley St: Existing

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on both sides
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Kingsley St: Proposed: Asbury Ave to 7th Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on both sides
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Kingsley St: Proposed: 7th Ave to Lake Dr

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on both sides
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Asbury Ave
Existing: Kingsley St to Ocean Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked center line)
- Parking: angled in WB direction, no parking in EB direction
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Asbury Ave
Proposed: Kingsley St to Ocean Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked center line)
- Parking: angled in WB direction, no parking in EB direction
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Asbury Ave
Existing: Heck St to Pine St

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- AADT: 7,416
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel in both directions
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking

Asbury Park
Asbury Ave
Proposed: Heck St to Pine St

Existing Roadway Characteristics
Speed Limit: 25 mph
Typical Cartway Width: 50 ft
AADT: 7,416
Travel Lanes: 2 (with marked centerline)
Parking: parallel in both directions
Existing LTS: 2
Proposed LTS: 1

Plan for Walking and Biking
Memorial Dr: Existing: Monroe Ave to 6th Ave

Existing Roadway Characteristics
- Speed Limit: 30 mph
- Typical Cartway Width: 48 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on west, none on east
- Existing LTS: 3
- Proposed LTS: 1

Plan for Walking and Biking

Asbury Park
Memorial Dr: Proposed: Monroe Ave to 6th Ave

Existing Roadway Characteristics
Speed Limit: 30 mph
Typical Carriageway Width: 48 ft
Travel Lanes: 2 (with marked centerline)
Parking: parallel on west, none on east
Existing LTS: 3
Proposed LTS: 1

Plan for Walking and Biking
Memorial Dr: Existing: Boston Way to Monroe Ave

Existing Roadway Characteristics
- Speed Limit: 30 mph
- Typical Cartway Width: 46 ft
- Travel Lanes: 2 (One center turn lane)
- Parking: none
- Existing LTS: 3
- Proposed LTS: 1

Plan for Walking and Biking
Memorial Dr: Proposed: Boston Way to Monroe Ave

Existing Roadway Characteristics
- Speed Limit: 30 mph
- Typical Cartway Width: 46 ft
- Travel Lanes: 2 (One center turn lane)
- Parking: none
- Existing LTS: 3
- Proposed LTS: 1

Plan for Walking and Biking
Sunset Ave: Existing: Memorial Dr to Webb St

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on both sides
- Existing LTS: 2
- Proposed LTS: 2

Plan for Walking and Biking
Sunset Ave: Proposed: Memorial Dr to Webb St

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked centerline)
- Parking: parallel on both sides
- Existing LTS: 2
- Proposed LTS: 2

Plan for Walking and Biking
Prospect Ave:
Existing: Springwood Ave to Asbury Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 32-38 ft
- Travel Lanes: 2 (no centerline)
- Parking: parallel on both
- Existing LTS: 1
- Proposed LTS: 1

Plan for Walking and Biking
Prospect Ave: Proposed: Springwood Ave to Asbury Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 32-38 ft
- Travel Lanes: 2 (no centerline)
- Parking: parallel on both
- Existing LTS: 1
- Proposed LTS: 1

Plan for Walking and Biking

Asbury Park

3'-4' Advisory Bicycle Lane
10' Shared Travel Lane
8'-9' Parking Lane

32'-38'
Springwood Ave: Existing: Prospect Ave to Atkins Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 36 ft
- Travel Lanes: 2 (with marked center line)
- Parking: none
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking
Springwood Ave: Proposed: Prospect Ave to Atkins Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 36 ft
- Travel Lanes: 2 (with marked center line)
- Parking: none
- Existing LTS: 2
- Proposed LTS: 1
Deal Lake Dr
Existing: Park Ave
to Ocean Ave

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 50 ft
- Travel Lanes: 2 (with marked center line)
- Parking: parallel on both
- Existing LTS: 2
- Proposed LTS: 1

Plan for Walking and Biking

Asbury Park
Deal Lake Dr
Proposed: Park Ave to Ocean Ave

Existing Roadway Characteristics
Speed Limit: 25 mph
Typical Cartway Width: 50 ft
Travel Lanes: 2 (with marked center line)
Parking: parallel on both
Existing LTS: 2
Proposed LTS: 1

Plan for Walking and Biking

Asbury Park
Plan for Walking and Biking

Existing Roadway Characteristics:
- Speed Limit: 25 mph
- Typical Carriageway Width: 48 ft
- Travel Lanes: 2 (no constant centerline)
- Parking: parallel on both
- Existing LTS: 1-2
- Proposed LTS: 1

Existing:

Asbury Park Avenue

4th Ave

Plan for Walking and Biking
Plan for Walking and Biking

Existing Roadway Characteristics
- Speed Limit: 25 mph
- Typical Cartway Width: 48 ft
- Travel Lanes: 2 (no constant centerline)
- Parking: parallel on both
- Existing LTS: 1-2
- Proposed LTS: 1
Proposed: Plan for Walking and Biking

Existing Roadway Characteristics
- Speed Limit: 25 mph (Drop to 20 mph)
- Typical Cartway Width: variable
- Travel Lanes: 2 (without marked center line)
- Parking: variable
- Existing LTS: 1-2
- Proposed LTS: 1-2

Variable Parking Lanes
Variable Width Travel Lanes without centerline, with Bicycle Blvd Signage
Speed Limit 20 MPH and Install Bicycle Blvd Signage

Asbury Park
Plan for Walking and Biking
Bicycle LTS - Existing

Plan for Walking and Biking

Level of Stress 1
Level of Stress 2
Level of Stress 3
Level of Stress 4
Bicycle Penalty – LTS 1 Existing

Plan for Walking and Biking
Bicycle Penalty – LTS 1 Proposed

Plan for Walking and Biking
Plan for Walking and Biking

Bicycle Penalty - Existing

Bicycle Penalty

- ≤ 12.5%
- ≤ 25%
- ≤ 37.5%
- ≤ 50%
- ≤ 62.5%
- ≤ 75%
- ≤ 87.5%
- ≤ 99.9%
- Not Accessible
Bicycle Penalty - Proposed

Bicycle Penalty

- $\leq 12.5$
- $\leq 25$
- $\leq 37.5$
- $\leq 50$
- $\leq 62.5$
- $\leq 75$
- $\leq 87.5$
- $\leq 99.9$
- Not Accessible

Plan for Walking and Biking
Discussion

Plan for Walking and Biking
Next Steps

» Incorporate Feedback
» Draft Recommendations Report
» Public Open House
» Final Report
» Implementation