Achieving COMPLETE STREETS through Roadway Resurfacing and Rehabilitation

Renee Espiau, Complete Streets Administrator
City and County of Honolulu
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What are Complete Streets?
Complete Streets Law (Ordinance 12-15)

Every transportation facility or project, whether new construction, reconstruction, or maintenance, provides the opportunity to implement complete streets policy and principles.

1. Improve safety
2. Apply context-sensitive solutions
3. Protect + promote accessibility and mobility for all
4. Balance the needs and comfort of all modes and users
5. Encourage consistent use of national industry best practices
6. Improve energy efficiency in travel and mitigate emissions
7. Encourage opportunities for physical activity
8. Recognize Complete Streets as a long-term investment
9. Build partnerships with stakeholders + organizations statewide
10. Incorporate trees and landscaping
The Context

- Bus + Rail
- Transit-Oriented Development (TOD)
- Bikeshare + Car Share
- Public Health Challenges
- Aging Population
- Affordability
- Impaired Waterways
- Climate Change
Streets are nearly half of City-owned land and 10% of urban O‘ahu
Paving Program Opportunities

- Poor Pavement Quality (PCI)
  - Street Eligible for Rehabilitation of Streets Funding
    - Emergency Pavement Repair (in-house crews)
    - Interim Rehabilitation of Streets (curb to curb)
    - Full ROW Rehabilitation
      - Striping opportunities developed in-house
  - Spot striping/Quick Build opportunities developed in-house (test concepts)
  - Striping and operational changes developed in-house or by project designer
  - Planning process contracted out for critical corridors

- Pavement Preservation
  - Slurry Seal or Seal Coat (residential streets)

- Landscaping
- Sidewalks
- Major lane reconfigurations
- Electrical work – signals, lighting, beacons
Prioritizing Interventions
Complete Streets Core Team

- Jurisdiction for City streets is fractured between multiple departments
  - Transportation Services: transit, planning, operations
  - Facility Maintenance: maintenance, stormwater
  - Design and Construction: capital and rehabilitation projects
  - Planning and Permitting: private development, permitting
  - Parks and Recreation: street trees

- Interdepartmental group meets twice a month to coordinate projects, under the parameters of an MOU signed by the four primary departments

- Overseen by (civil-service) Complete Streets Administrator who reports to all four department Directors that are convened quarterly for strategic decisions

- Improvements are guided by a new Complete Streets Design Manual

- Standardized scope/schedule for CS planning and design
<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Duration</th>
<th>Resource Names</th>
<th>Predecessors</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>CS PROJECT SELECTION</td>
<td>3 wks</td>
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<tr>
<td>2</td>
<td>Identify Priority CS Corridors</td>
<td>3 wks</td>
<td>TPD</td>
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<td>3</td>
<td>Analyze Geodatabase Feature Class from Modal and/or Strategic Plan</td>
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<td>4</td>
<td>Analyze DDC Rehab of Streets List GDB Feature Class</td>
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<td>5</td>
<td>Conduct Suitability Analysis in ArcGIS for CS Program of Projects (POP)</td>
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<td>TPD, CS Core</td>
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<td>Develop CS POP</td>
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<td>7</td>
<td>Update CS Website with POP</td>
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<td>CS Administrator Assigns PM for POP</td>
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<td>9</td>
<td>CS PLANNING + DESIGN PROJECT PROCUREMENT</td>
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<td>10</td>
<td>PM Develops CS Corridor Project Scope and/or Special Ad</td>
<td>2 wks</td>
<td>TPD, TE, CS Admin</td>
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<td>11</td>
<td>PM Completes Groundtruthing and CS Checklist</td>
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<td>Review Scopes and Schedules</td>
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<td>Parking Inventory and Surveys</td>
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<td>Build Synchro Network</td>
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<td>MM Assessment plus Project (2 Alternatives)</td>
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<td>Present Preferred Alternative Concept to Core Team</td>
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<td>Confirm Preferred Alternative Concept</td>
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<td>Public Outreach</td>
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<td>Develop Community Engagement Plan</td>
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<td>Create Webmap for Public Comment</td>
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<td>Prepare for Community Kickoff Meeting</td>
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<td>Final Meeting Preparations</td>
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<td>Compile Outreach Feedback</td>
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<td>PDF Wireframe</td>
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<td>Internal Review of PDF Wireframe</td>
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<td>TE, TPD, TST</td>
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<td>Provide CS Core Team PDF Wireframes for Review + Comment</td>
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<td>Prepare Meeting Materials</td>
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<td>Consultant</td>
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Summary of this Approach

**PROS**

- Efficient use of funding, consultants, and limited staff resources
- Address full corridors/neighborhoods
- Powerful project delivery mechanism (Dept. of Design and Construction)
- Potential to touch all County streets in 10-20 years (developing improved checklist for non-planning corridors)
- Paving program has had significant recent political support ($50-150M per year)

**CONS**

- Not responsive to highest need (based on PCI)
- Dependent on political support for maintenance/repair funding
- Diminishes funding available for paving roadways
- Requires high level of coordination
- Makes paving projects more complex
- Full rehabilitation projects take a long time to deliver
Interim Repaving + Restriping Treatments

- Lane reconfigurations
- Bicycle facilities
- Intersection upgrades
- Crossing upgrades
- Parking treatments
- Low-cost walkways
North King Street

- Consolidated crosswalks
- Pedestrian refuge medians
- Striped “curb extensions”
• Relocated crosswalks
• Pedestrian refuge medians
• Striped "curb extensions"
• Parking treatments

North King Street
Bikeways in Honolulu Urban Core
2019 – 2021

- **New Bikeways**
  - Protected or buffered bike lane
  - Bike lane
  - Bike route (sharrows)

- **Existing Bikeways**
  - Bike path
  - Protected or buffered bike lane
  - Bike lane
  - Bike route (sharrows)
Pedestrian-Motor Vehicle Crashes on King Street - EMS attended Before and After Protected Bike Lane (2014)
Kamehameha IV Road Diet
Total Crashes on Kamehameha IV Road - EMS attended Before and After Road Diet (2016)
Full Right-of-Way Reconstruction

- Higher quality materials for intersection and crossing improvements
- New or upgraded sidewalks
- Landscaping & green infrastructure
- Signal upgrades
Kāneʻohe Complete Streets

- Sidewalk reconstruction
- Pedestrian signals
- Curb extensions
- Bicycle facilities
- Shoulder improvements
- Speed reduction
Kamehameha Highway (Hale‘iwa) Improvements

- Shoulder improvements
- Permeable pavers
- Planters and bollards
University Avenue

- Road diet
- Bus boarding islands
- Shortened pedestrian crossings
- Wider sidewalks + landscaping
- Protected bicycle facilities
- Green infrastructure
MAHALO!
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