Pedestrian Master Plan
Infrastructure Committee Meeting
August 20, 2019

Background

• Consultant - Toole Design Group
• 2018 Public Engagement
  • Outreach events
  • Online survey and mapping
  • 1,200 participants
Draft Plan

• Crafted based on public feedback
• Available on City website for viewing through August 30

The findings and recommendations included in this Plan are intended to be used as tools and resources to guide future policy decisions moving forward. The strategies listed in the Plan illustrate potential solutions used by other communities across the country, and do not necessarily reflect specific policy changes in Cedar Rapids.

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Vision & Goals

- **Vision:** By 2040, walking in Cedar Rapids will be a safe, convenient, accessible and enjoyable activity for people of all ages and abilities.
- **Goal 1:** Develop a connected pedestrian network that links popular destinations year‐round (Chapter 3 & 4).
- **Goal 2:** Create a comprehensive approach that fosters a culture of walking (Chapter 5)
- **Goal 3:** Measure progress toward achieving the Plan’s vision (Chapter 6)

Infrastructure Projects Identified

- Based on community input (lowest ranking)
  - Extent of sidewalk network
  - Ease of crossing busy streets
  - Narrow sidewalks
- Within 10 High Pedestrian Demand Areas
  - 439 sidewalk gap projects
  - 38 pedestrian crossing projects
  - 14 sidewalk buffer projects
Strategy 1: Design and build prioritized subareas of pedestrian infrastructure projects
Project Prioritization

• Demand
• Safety
• Schedule of programmed projects
• Cost
• Street character

Project Prioritization

• Grouped by subarea
  • For evaluation and ranking
  • For construction efficiency
  • To make an impact on walkability
• 33 subareas
  • Ranked on 1 – 5 priority scale
  • Cost estimates ranging from $374,000 to $2,316,000 per subarea
Project Prioritization

- Top 3 subareas
  - D – 1st Avenue to 3rd Avenue SE, 14th Street SE to 16th Street SE
  - B2 – Collins Road and Council Street
  - F – Downtown Core
- Review for inclusion in programmed projects

Ordinances & Policies

- Based on community input (lowest ranking)
  - Extent of sidewalk network
  - Ease of crossing busy streets
  - Winter maintenance
  - Sidewalk smoothness
- Plan provides Strategies, with examples of recommended policies and practices from other walkable communities
Strategies

- Expand the sidewalk network
- Improve condition of existing sidewalks
- Improve crossing conditions
- Improve winter walkway maintenance
- Add more destinations within easy walking distance
- Take short-term actions to kickoff implementation
- Pursue multiple funding sources
Strategy 17: Take short-term actions to kickoff Plan implementation

- 17.1 Designate an official City Pedestrian Program Manager/Coordinator
- 17.2 Further integrate walking into existing City staff roles
- 17.3 Form a Pedestrian Advisory Committee of local residents and City employees

Strategy 18: Pursue multiple funding sources (examples):

- Integrate Plan projects into Paving for Progress
- Set aside 5% (~$900k) of Local Option Sales Tax
- Bond for $3.5 million/year
Pedestrian Master Plan

Recommendation for Council Adoption

Presented by:
Brenna Fall, P.E.
CIP Program Manager
ffall@cedar-rapids.org
319.286.5732

<table>
<thead>
<tr>
<th>Number</th>
<th>Action</th>
<th>Responsible Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Amend subdivision regulations to speed up sidewalk installation</td>
<td>Development Services Community Development</td>
</tr>
<tr>
<td>2.2</td>
<td>Transition to 100% public funding for new sidewalks in high pedestrian infrastructure demand areas</td>
<td>Public Works</td>
</tr>
<tr>
<td>2.3</td>
<td>Amend the minimum sidewalk width from four feet to five feet in the city code</td>
<td>Public Works: Engineering Division</td>
</tr>
<tr>
<td>2.4</td>
<td>Develop context-sensitive pedestrian design guidelines as a supplement to updated regulations</td>
<td>Public Works: Engineering Division</td>
</tr>
</tbody>
</table>
### Strategy 3 Summary: Improve condition of existing sidewalks

<table>
<thead>
<tr>
<th>Number</th>
<th>Action</th>
<th>Responsible Department(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Consider piloting the City-hired sidewalk contractor as the default for sidewalk repairs</td>
<td>Public Works: Engineering Division</td>
</tr>
<tr>
<td>3.2</td>
<td>Develop an annual assessment fee model for certain sidewalk districts</td>
<td>Public Works: Engineering Division</td>
</tr>
<tr>
<td>3.3</td>
<td>Make it easier to locate sidewalk assessment information</td>
<td>Public Works: Engineering Division</td>
</tr>
<tr>
<td>3.4</td>
<td>Amend ordinances to include edging and protrusions standards for ADA compliance</td>
<td>Public Works: Engineering Division</td>
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</tbody>
</table>

### Strategy 4 Summary: Improve crossing conditions

<table>
<thead>
<tr>
<th>Number</th>
<th>Action</th>
<th>Responsible Department(s)</th>
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</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Require high-visibility, protected crossings in high priority areas</td>
<td>Public Works: Traffic Engineering Division</td>
</tr>
<tr>
<td>4.2</td>
<td>Require Leading Pedestrian Intervals at high-conflict crossings</td>
<td>Public Works: Traffic Engineering Division</td>
</tr>
<tr>
<td>4.3</td>
<td>Use automatic pedestrian signal phases in high pedestrian traffic areas</td>
<td>Public Works: Traffic Engineering Division</td>
</tr>
</tbody>
</table>
Routes I’d Like to Walk & Places I Walk to

Pedestrian Infrastructure Demand Map
Field Inventory Areas

Community Input = Project Types

- Location/placement of cycle ramps at intersection: 60%
- Tearing for walking: 56%
- Overhead marking maintenance: 51%
- Bicyclists’ attitude toward protection: 49%
- Scenery/intermittent locations to see while walking: 48%
- Number of destinations within easy walking distance: 39%
- Walkway maintenance of sidewalk, curb ramps, and...: 39%
- Ease of crossing busy streets: 38%
- Smoothness of sidewalks: 35%
- Motorists’ attitude toward pedestrians: 34%
- Extent of sidewalk extension: 34%
Community Input
= Project Types

Field Inventory

Figure 1. The field inventory was completed using the Fulcrum app.

City of Cedar Rapids
### Project Cost

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Number of Projects</th>
<th>Total Length (L.F.)</th>
<th>Total Length (Miles)</th>
<th>Base Cost</th>
<th>Base Cost + Contingency</th>
<th>Base Cost + Contingency + Engineering Design</th>
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<tbody>
<tr>
<td>Sidewalk Gaps</td>
<td>430</td>
<td>229,916</td>
<td>41.99</td>
<td>$19,924,000.00</td>
<td></td>
<td></td>
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<tr>
<td>Sidewalk Buffins</td>
<td>14</td>
<td>3,972</td>
<td>0.72</td>
<td>$301,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian Crossings</td>
<td>30</td>
<td>N/A</td>
<td>N/A</td>
<td>$2,323,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>491</td>
<td></td>
<td></td>
<td><strong>$22,548,000.00</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Project Cost & Prioritization

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Number of Projects</th>
<th>Total Length (L.F.)</th>
<th>Base Cost</th>
<th>Base Cost + Contingency</th>
<th>Base Cost + Contingency + Engineering Design</th>
</tr>
</thead>
<tbody>
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<td>Sidewalk Gaps</td>
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<td>229,916</td>
<td>$19,924,000.00</td>
<td>$20,659,000.00</td>
<td>$31,247,000.00</td>
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<tr>
<td>Sidewalk Buffins</td>
<td>14</td>
<td>3,972</td>
<td>$301,000.00</td>
<td>$304,000.00</td>
<td>$475,000.00</td>
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<tr>
<td>Pedestrian Crossings</td>
<td>30</td>
<td>N/A</td>
<td>$2,323,000.00</td>
<td>$3,037,000.00</td>
<td>$3,633,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>491</td>
<td></td>
<td><strong>$22,548,000.00</strong></td>
<td><strong>$29,924,000.00</strong></td>
<td><strong>$30,358,000.00</strong></td>
</tr>
</tbody>
</table>

#### Table 2. Factors used to rank subareas

<table>
<thead>
<tr>
<th>Factor</th>
<th>Higher Rank with...</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian infrastructure demand map</td>
<td>More demand</td>
<td>10</td>
</tr>
<tr>
<td>Pedestrian-motorist crashes</td>
<td>More crashes</td>
<td>9</td>
</tr>
<tr>
<td>Scheduled road projects</td>
<td>More projects</td>
<td>8</td>
</tr>
<tr>
<td>Cost estimates</td>
<td>Less cost</td>
<td>7</td>
</tr>
<tr>
<td>Busy streets</td>
<td>More busy streets</td>
<td>7</td>
</tr>
</tbody>
</table>
### Ordinances & Policies

#### Figure 1: Percentage of respondents who rated walking conditions as "Excellent" or "Good". Conditions shown in green are addressed in Chapter 4.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location/alignment of curb</td>
<td>60%</td>
</tr>
<tr>
<td>Terrain for walking</td>
<td>56%</td>
</tr>
<tr>
<td>Crosswalk maintenance</td>
<td>51%</td>
</tr>
<tr>
<td>Bicycle lane continuity</td>
<td>49%</td>
</tr>
<tr>
<td>Street/mixing locations to one side walking</td>
<td>48%</td>
</tr>
<tr>
<td>Number of destinations within easy walking distance</td>
<td>39%</td>
</tr>
<tr>
<td>Made maintenance of sidewalk, curbs, and...</td>
<td>37%</td>
</tr>
<tr>
<td>Ease of crossing busy streets</td>
<td>38%</td>
</tr>
<tr>
<td>Smoothness of sidewalks</td>
<td>25%</td>
</tr>
<tr>
<td>Motorists' attitude toward pedestrians</td>
<td>34%</td>
</tr>
<tr>
<td>Extent of sidewalk network</td>
<td>34%</td>
</tr>
</tbody>
</table>

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**Strategy 2:** Expand the Sidewalk Network

**Strategy 3:** Improve condition of existing sidewalks

**Strategy 4:** Improve crossings

**Strategy 5:** Improve winter maintenance

**Strategy 6:** Add more destinations with easy walking distance
<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Related Strategies</th>
<th>Baseline</th>
<th>5-year Goal</th>
<th>Data Collection Frequency</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Usage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian mode share</td>
<td>Track how the share of commuters who walk to work changes as Census data are available each year.</td>
<td>4f (Gather data on pedestrian use)</td>
<td>2012-2010 average 2.38%</td>
<td>3% increase in five-year rolling average</td>
<td>Annual</td>
</tr>
<tr>
<td>Pedestrian counts after developing a baseline count of pedestrian activity, aim for year-over-year increases.</td>
<td>4f (Gather data on pedestrian use)</td>
<td>Establish baseline in 2019</td>
<td>1% annual increases</td>
<td>Annual, plus automatic counters</td>
<td>Corridor MPO pedestrian counts</td>
</tr>
<tr>
<td>Students walking to school</td>
<td>Initiate teacher tallies of students walking to school and conduct semi-annually to monitor changes.</td>
<td>4c (Support SRTS planning and programs)</td>
<td>Establish baseline in 2019</td>
<td>1% annual increases</td>
<td>Semi-annual</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pedestrian-related fatalities and serious injuries</td>
<td>Track the number of pedestrian-related crashes, including the level of severity and if injuries occurred.</td>
<td>4b (Analyze pedestrian crash data)</td>
<td>2013-2017: 75 crashes, 12 fatal or serious injuries</td>
<td>5% reduction</td>
<td>3-year increments</td>
</tr>
<tr>
<td><strong>Infrastructure in High Pedestrian Demand Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feet of sidewalks completed</td>
<td>Track the completion of sidewalks in linear feet each year.</td>
<td>5c (Projects)</td>
<td>8184 feet budgeted in 2018</td>
<td>TBD</td>
<td>Annual</td>
</tr>
<tr>
<td>Number of crossings added/ improved</td>
<td>Track the number and type of pedestrian crossings installed or improved each year.</td>
<td>5c (Projects)</td>
<td>Unknown</td>
<td>TBD</td>
<td>Annual</td>
</tr>
<tr>
<td><strong>Footnotes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Public Opinion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizen satisfaction with the walking network</td>
<td>Monitor citizen satisfaction with walking paths and ease of walking in biennial National Citizen Survey.</td>
<td>4b (Provide opportunities to have a positive experience walking)</td>
<td>Positive ratings in 2016: 61% Paths and walking trails, 61% Ease of walking</td>
<td>10% increase in positive ratings</td>
<td>Every 2 years</td>
</tr>
<tr>
<td>Citizen perception of walking</td>
<td>Conduct surveys before and after communications campaigns to measure changing perceptions of walking.</td>
<td>4b (Provide opportunities to have a positive experience walking)</td>
<td>Establish baseline with survey before campaign</td>
<td>10% increase in positive perceptions of walking</td>
<td>One-time campaign</td>
</tr>
</tbody>
</table>
Trails Update
August 20, 2019

History of MPO Trail Funding

<table>
<thead>
<tr>
<th>Connections 2040 Adopted</th>
<th>80% Trails/20% Roads Policy</th>
<th>80%/20% FFY16-FFY20 $ Allocated</th>
<th>Connections 2040 Update Adopted</th>
<th>50%/30%/20% FFY21-FFY24 $ Allocated</th>
<th>2045 LRTP 47%/30%/18%/5% FFY25-FFY29</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2012</td>
<td>2016</td>
<td>2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2040 Update $6.6 Mil

2040 Update $6.6 Mil

2045 LRTP $6.3 Mil
The Business of Trails

- 150,000 trips were taken on the Cedar Lake loop trail in 2018
- LCTA data

Segment of the CeMar Trail

Status of MPO Funded Trails

Recently Completed

Segments of the CeMar Trail
Status of MPO Funded Trails

Recently Completed

Segments of the Edgewood Road Trail

Status of MPO Funded Trails

Under Construction and In Design

Segments of the Cherokee Trail
Status of MPO Funded Trails

Under Construction

Segments of the Cherokee Trail

Status of MPO Funded Trails

In Design

Segments of the CeMar Trail
Status of MPO Funded Trails

In Design

Segments of the Edgewood Road Trail
Status of MPO Funded Trails

In Design

Segments of the Edgewood Road Trail

Segments of the Lindale Trail
Status of MPO Funded Trails

In Design

Segments of the Lindale Trail

Status of MPO Funded Trails

Future Trails

*Bowling Street Trail Improvements*
- Bike lanes and sidewalks

*Wiley Boulevard Sideway*
- From Williams Blvd to 16th Ave SW
Trail Maintenance

- 29 Trail Miles
- $50,000 maintenance budget
  - Half for seasonal staffing
  - Half for maintenance and repairs

Trail Maintenance

Sac & Fox Trail

Cherokee Trail
Trail Improvements

CIP funding for major repairs
- J Ave NE & 29th St. NE - $150,000 funding FY20

Trail Improvements

Cherry Hill Park
(ADA Trail Improvements)

Noelridge Park
(ADA Trail Improvements)
Trail Improvements

Noelridge Park
(ADA Trail Improvements) – FY21

Thank you

Questions?

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Scott Hock
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