Pedestrian Report Card Assessment (PRCA) Dashboard

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PLOS Study Purpose

- Create a performance monitoring tool
- Assess pedestrian suitability
    - Intersections
    - Roadway segments

Pedestrian Report Card Assessment

- Pedestrian suitability grading categories
  - Safety
  - System Preservation
  - Capacity Management and Mobility
  - Economic Vitality

- Prioritization
  - Transportation Equity

BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Pedestrian Report Card Assessment (PRCA):
Roadway Segment

Roadway Segment Location

Grading Categories	Score	Rating
Safety		
System Preservation		
Capacity Management and Mobility		
Economic Vitality		

Transportation Equity	
High Priority Area	
Moderate Priority Area	
Not a Priority Area	

Category Ratings
Good: Score of 2.3 or more (maximum 3.0)
Fair: Score is between 1.7 and 2.3
Poor: Score is 1.7 or less (minimum 0)

Central Transportation Planning Staff (CTPS) to the Boston Region MPO:
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Grading Categories: Scoring Breakdown
Roadway Segment

Capacity Management and Mobility

Performance Measure	Weight	Rating	Weighted Score
Sidewalk Presence	3		
Crossing Opportunities	2		
Walkway Width	1		
Total	**6**		

Economic Vitality

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Volumes	1		
Adjacent Bicycle Accommodations	1		
Total	**2**		

Safety

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Crashes	3		
Pedestrian-Vehicle Buffer	1		
Vehicle Travel Speed	1		
Total	**5**		

System Preservation

Performance Measure	Rating
Sidewalk Condition	

Transportation Equity Priority

Area Condition	Yes/No
Environmental Justice zone?	
School or college within one-quarter mile?	
More than 8.9% of population older than 75 years?	
More than 27.5% of households do not own a vehicle?	

Category rating = total rating/total weight
Rating Score:
Good = 3
Fair = 2
Poor = 1

Category Ratings
Good: Score of 2.3 or more (maximum 3.0)
Fair: Score is between 1.7 and 2.3
Poor: Score is 1.7 or less (minimum 0)

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Pedestrian Report Card Assessment (PRCA):

Intersection

Intersection Location

Grading Categories	Score	Rating
Safety		
System Preservation		
Capacity Management and Mobility		
Economic Vitality		

Transportation Equity	
High Priority Area	
Moderate Priority Area	
Not a Priority Area	

Category Ratings
Good: Score of 2.3 or more (maximum 3.0)
Fair: Score is between 1.7 and 2.3
Poor: Score is 1.7 or less (minimum 0)

Grading Categories: Scoring Breakdown
Intersection

Capacity Management and Mobility

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Delay	3		
Sidewalk Presence	2		
Curb Ramps	1		
Crossing Opportunities	1		
Total	**7**		

Economic Vitality

Performance Measure	Rating
Pedestrian Volumes	

Safety

Performance Measure	Weight	Rating	Weighted Score
Sufficient Crossing Time (Index)	3		
Pedestrian Crashes	3		
Pedestrian Signal Presence	1		
Vehicle Travel Speed	1		
Total	**8**		

System Preservation

Performance Measure	Rating
Sidewalk Condition	

Transportation Equity Priority

Area Condition	Yes/No
Environmental Justice zone?	
School or college within a one-quarter mile?	
More than 8.9% of population older than 75 years?	
More than 27.5% of households do not own a vehicle?	

Category rating = total rating/total weight
Rating Score:
Good = 3
Fair = 2
Poor = 1

Category Ratings
Good: Score of 2.3 or more (maximum 3.0)
Fair: Score is between 1.7 and 2.3
Poor: Score is 1.7 or less (minimum 0)

Applying the PRCA Tool

Milton, Massachusetts

ROUTE 138

Existing Conditions

Roadway Segment Location		
Route 138 – Milton, MA		

Grading Categories	Score	Rating
Safety	2.4	Good
System Preservation	N/A	Fair
Capacity Management and Mobility	1.5	Poor
Economic Vitality	1.5	Poor

Transportation Equity	
High Priority Area	✓
Moderate Priority Area	
Not a Priority Area	

Impact of Suggested Improvements

Roadway Segment Location		
Route 138 – Milton, MA		

Grading Categories	Score	Rating
Safety	2.8	Good
System Preservation	N/A	Good
Capacity Management and Mobility	2.7	Good
Economic Vitality	2.5	Good

Transportation Equity	
High Priority Area	✓
Moderate Priority Area	
Not a Priority Area	

Existing Conditions

Capacity Management and Mobility

Performance Measure	Weight	Rating	Weighted Score
Sidewalk Presence	3	Fair	6
Crossing Opportunities	2	Poor	2
Walkway Width	1	Poor	1
Total	6		9

Economic Vitality

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Volumes	1	Fair	2
Adjacent Bicycle Accommodations	1	Poor	1
Total	2		3

Impact of Suggested Improvements

Capacity Management and Mobility

Performance Measure	Weight	Rating	Weighted Score
Sidewalk Presence	3	Good	9
Crossing Opportunities	2	Fair	4
Walkway Width	1	Good	3
Total	6		16

Economic Vitality

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Volumes	1	Fair	2
Adjacent Bicycle Accommodations	1	Good	3
Total	2		5

Existing Conditions

Safety

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Crashes	3	Good	9
Pedestrian-Vehicle Buffer	1	Fair	2
Vehicle Travel Speed	1	Poor	1
Total	5		12

System Preservation

Performance Measure	Rating
Sidewalk Condition	Fair

Transportation Equity Priority

Area Condition	Yes/No
Environmental Justice zone?	✓
School or college within one-quarter mile?	✓
More than 8.9% of population older than 75 years?	✓
More than 27.5% of households do not own a vehicle?	

Impact of Suggested Improvements

Safety

Performance Measure	Weight	Rating	Weighted Score
Pedestrian Crashes	3	Good	9
Pedestrian-Vehicle Buffer	1	Good	3
Vehicle Travel Speed	1	Fair	2
Total	5		14

System Preservation

Performance Measure	Rating
Sidewalk Condition	Good

Transportation Equity Priority

Area Condition	Yes/No
Environmental Justice zone?	✓
School or college within one-quarter mile?	✓
More than 8.9% of population older than 75 years?	✓
More than 27.5% of households do not own a vehicle?	

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