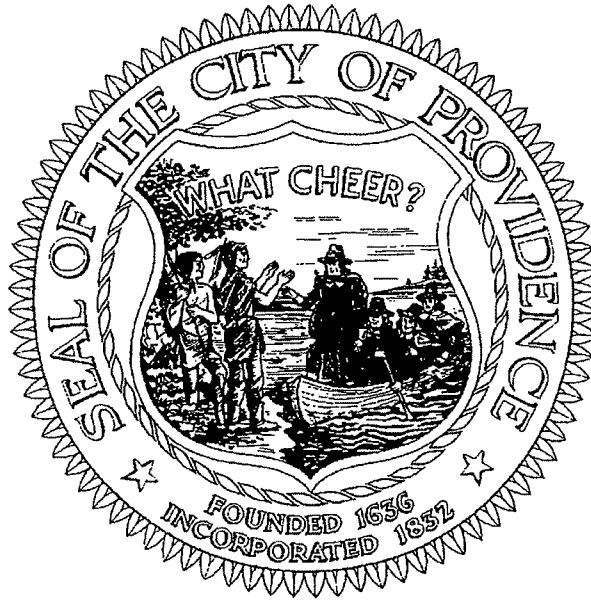


City of Providence

Department of Public Works



A Report to the

Providence City Council

Regarding

Sidewalk Conditions

October 2014

Sidewalk Conditions

INTRODUCTION

A resolution was introduced to the City Council that recognized the need to make repairs to the sidewalks in the City. (A copy of the resolution is appended to this report.) This report attempts to quantify the severity of the problem and outlines methodology to advance a solution.

THE PROBLEM

Providence is a city whose neighborhoods and commercial areas are quite old by most standards. Some of the oldest sections of the City still have sidewalks paved with bricks that allegedly were made in England and used as ballast for ships sailing to the colony. Other sidewalks are a mixture of cement concrete, asphalt or undeveloped. Since the City was developed over time, sidewalks were built with not only different types of materials, but different quality of materials, as well.

The public right of way consists of a roadway and two sidewalks. The proportions are typically 60 percent for the roadway and 20 percent for each sidewalk. While our residential streets predominantly have a width of 40 feet; 24 feet is dedicated to the roadway and each sidewalk is 8 feet wide. Other streets of different widths try to maintain these proportions.

The City has roughly 400 miles of streets. While there is no definitive inventory of all the sidewalks, by observation it would appear that approximately 3/4 of the roads are bound by paved sidewalks. This means we have nearly 600 miles of sidewalks, all in various states of repair.



There are 415,000 trees in the City. The City prides itself on its urban forest. A recent report titled, "**Providence's Urban Forest: Structure, Effects and Values**" states:

Providence's urban forest – the population of public and private trees that grow along city streets and in parks, backyards, institutional property, natural areas, and other places – is vital to the city's environment and quality of life. A healthy tree canopy provides essential ecological functions that can now be quantified. Trees filter the air of pollution; reduce water runoff that affects water quality; moderate urban temperatures in summer; reduce energy consumption and therefore pollution emitted by power plants; and store carbon in their wood. Trees also provide habitat for wildlife, raise the resale value of homes, and help business by making commercial districts attractive and comfortable for shopping. The urban forest also has a structural value, or



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compensatory value, that shows its worth based on its size and composition.

However, as these trees grow and mature, the roots also grow. While our City Forester has identified species of trees more suitable to our urban environment, there are many trees in the City whose roots cause the sidewalks to heave and create a hazard to pedestrians. This is by far the most serious problem facing the maintenance of our sidewalks.



Sidewalks are also impacted by the frost heaves and the freeze-thaw cycle on our New England climate.

THE DATA

The Department of Public Works maintains a computer database of complaints and requests for new sidewalks. Currently there are over 5000 listing in the database, for both *repaired* and *not repaired* sidewalks. Data input tries to capture pertinent information, along with an overall evaluation of the problem, e.g., fair, good.



CITY OF PROVIDENCE | DEPARTMENT OF PUBLIC WORKS
SIDEWALK REPAIR DATABASE

Details

Record id: 105
 Yard: 2
 Street #: 116
 Street: Providence St
 City: Providence
 State: RI
 Comment: [REDACTED]
 Property Owner: [REDACTED]
 Phone #: [REDACTED]
 Request Date: 10/10/2014
 Date: [REDACTED]
 Material: Concrete
 Problem: Cracked and displaced
 Deteriorated: [REDACTED]
 Panels: [REDACTED]
 Number of Panels: 1
 Fault Size: greater than 3
 Area: 210.4
 Status: Not Reported
 Area: [REDACTED]
 Repaired: [REDACTED]
 Date: [REDACTED]
 Breakout Labor: [REDACTED]
 Placement Labor: [REDACTED]
 Cause: [REDACTED]
 Bond #: [REDACTED]
 Funded: [REDACTED]

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The information in the database is by no means complete. It relies on requests received and does not truly reflect the severity of the problem with the sidewalks throughout the City.

The data is as follows:

Ward	repaired	not repaired
Ward 1	27	142
Ward 2	68	370
Ward 3	237	568
Ward 4	52	247
Ward 5	33	363
Ward 6	4	99
Ward 7	8	317
Ward 8	125	216
Ward 9	312	189
Ward 10	234	207
Ward 11	115	96
Ward 12	54	103
Ward 13	96	209
Ward 14	140	157
Ward 15	117	121

