



Public Facilities Committee Report

City of Newton **In City Council**

Wednesday December 7, 2016

Present: Councilors Crossley (Chair), Albright, Danberg, Lappin, Brousal-Glaser, Lennon, Laredo

Also Present: Councilors Fuller, Yates

City Staff Present: City Engineer Lou Taverna, Commissioner of Public Works Jim McGonagle, Director of Operations Shane Mark, Associate City Solicitor Alan Mandl, Chief of Staff/CFO Maureen Lemieux

#395-16 Comcast petition for a Grant of Location on Huntington Road

COMCAST petitioning for a grant of location to install 340'± of 1-3" conduit from pole 673/7 on Huntington Road to existing vault in front of 75 Huntington Road. (Ward 7) [11/07/2016 @ 4:33 PM]

Action: Public Facilities Approved 5-0. (Lennon, Danberg not voting)

Note: Manuel Furtado presented the petition to install 340' of conduit in an underground vault in front of 75 Huntington Road. The Public Hearing was opened.

Hong, 75 Huntington Road, asked if equipment was going to be placed in front of her home.

Mr. Furtado confirmed that while there will be equipment in front of 75 Huntington, it will be placed underground, on City property. He noted that a vault cover will be visible in the berm, but flush to grade. He stated that the undergrounding of this conduit will allow for the removal of nearby utility poles.

City Engineer Lou Taverna noted that east of 69 Huntington Road is a private way. Because 75 is in the private way portion, Comcast must receive permission from the homeowners about the location of the vault. Mr. Furtado noted that homeowners are typically contacted individually after Council approval. With no additional public comment, the public hearing was closed.

A Committee member encouraged Commissioner of Public Works, Jim McGonagle to establish a working group to coordinate the undergrounding of conduit with the utility companies. Commissioner McGonagle noted that DPW is currently meeting with utility representatives to underground. Councilor Laredo moved approval of the item which carried 5-0.

#396-16 Comcast petition for a Grant of Location on Winthrop Street

COMCAST petitioning for a grant of location to install 1-3" pipe from existing vault on Putnam Street heading 175'± northwesterly thence turning southwesterly to existing pole on Winthrop Street. (Ward 3) [11/07/2016 @ 12:00 PM]

Action: Public Facilities Approved 5-0. (Lennon, Danberg not voting)

Note: Comcast representative Mr. Furtado presented the petitioner to underground conduit on Winthrop Street in order to remove above ground conduit in the neighborhood. There is an existing pole in the back yard of a house a few blocks away that cannot be removed until all equipment is off the pole. Mr. Furtado noted that where possible, Comcast is attempting to proactively remove equipment to avoid delays in the removal of poles.

Mr. Taverna stated that because Putnam and Winthrop were paved within 5 years, Comcast will be milling and overlaying the road curb to curb. The Public Hearing was opened and closed with no comment. Councilor Brousal Glaser motioned to approve which carried 5-0.

#249-16 Cellco petition for Grant of Location for wireless communication equipment

CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS petitioning for a grant of location to attach wireless communication equipment to existing utility poles at the following locations [(Ward 8) 07/01/2016 @11:17 AM]:

Locations

Dudley Road (near 530 Dudley Road) at Pole #10-7

Hay Road (near 16 Hay Road) at Pole #1368-1

Action: Public Facilities Held 7-0.

Note: The Chair provided a summary of the Council's authority relating to Cellco's attachment of wireless telecommunication equipment based on the work completed during the wireless subcommittee meetings; noting that the petitions before the Committee are subject to a tolling agreement with Verizon Wireless to be voted on prior to the end of the year. The City has existing ordinances related to telecommunication equipment, but they are not applicable to the smaller, wireless equipment. The Chair noted that while the subcommittee is working to draft an ordinance and guidelines to address community impacts; those efforts are in response to increasing requests to locate the wireless telecommunication equipment in the City.

The Chair explained that as regulated by federal law, utility companies can attach equipment in the public right of way and the Council may impose nondiscriminatory and neutral conditions. It was also noted that limiting the wireless telecommunication equipment may conflict with constituents' requests for better service. Conditions that the subcommittee proposes include; no lights blinking lights on equipment, compliance with the noise ordinance, color that blends in with the host structure and that installed equipment does not extend beyond the sidewalk or berm. Additionally, streetlights and signage should not be relocated or affected, the utility should return for additional Council approval prior to the installation of any additional equipment and must comply with electrical safety standards for removal of materials. City ordinances provide for collecting a performance bond up to \$10,000.

The Chair noted that while most of the proposed locations before the Committee are not in front of a resident's house, one pole is. The Law Department has asked for that pole to be relocated. The Chair reiterated the need to create objective conditions that do not preclude the petitioner from locating equipment in the City so as to provide adequate wireless coverage. Also noted

was the importance of explaining the rationale for abstaining from or voting against the petitions for the purpose of the hearing record.

Committee members shared concerns that Verizon Wireless has not clearly demonstrated the need for coverage in the area. Committee members asked specifically why the equipment would need to be located on the pole on Dudley Road, as it is directly in front of a residence.

Attorney Elizabeth Mason representing Verizon Wireless expressed concern that the Committee had additional questions about the need for the small cell wireless attachments. She noted that Verizon Wireless provides the data regarding the need for coverage as Federal Law Requires. She suggested that Mass General Law Chapters 21 and 22 allow for the hiring of a peer reviewer at the expense of petitioner if questions remain. Atty. Mason also noted that Verizon Wireless would like to come to an arrangement with the City, as they do not want to be denied and they are prepared to extend the tolling agreement to allow for additional research on behalf of the City. Atty. Mason also noted that Verizon Wireless is prepared to agree to not treat each pole as a base station as they have agreed to in other communities.

A Verizon wireless engineer explained how poles are selected. Once Verizon has identified where there is capacity overflow, they provide a radius to radio frequency engineers who then determine which poles could accommodate the equipment. Candidate poles must already have fiber and must be approved by Eversource. The Dudley Road pole was selected because of the four candidate poles, three were ruled out because there was either no fiber and Eversource was not willing to allow them.

Eric Gong, Dudley Road, Believes that height is most important for locating the equipment and is confident that there are close, alternative locations.

Larry & Joan Siff, 533 Dudley Road, noted that the area is curvy and equipment has been damaged as vehicles round the corner. Commissioner of Public Works Jim McGonagle confirmed that someone could evaluate the pole. It was determined that this pole is not the pole proposed by the petitioner.

With consensus from Committee members that more information and a peer reviewer is necessary prior to approval and Attorney Mason's agreement to extend the tolling agreement; Councilor Lappin motioned to hold the item which carried 7-0.

#281-16 **Cellco petition for Grant of Location for wireless communication equipment**
CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS petitioning for a grant of location to attach wireless communication equipment to existing Utility Pole #20-20 at Sargent Street (near the Sargent/Centre intersection). (Ward 7) [07/20/2016 @12:21 PM]

Action: **Public Facilities Held 7-0.**

Note: The Public Hearing was Opened and Closed with no comment. With the Committee's agreement to hold the item pending additional information, Councilor Lappin's motion to hold carried 7-0.

#423-16 Verizon Grant of Location petition for wireless communication equipment
CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS petitioning for a grant of location to attach wireless communication equipment to existing utility pole #405/24 adjacent to 93 Sevlund Road. (Ward 8). [11/21/2016 @ 9:44 AM]

Action: Public Facilities Held 7-0.

Note: The Public Hearing was opened.

Jeremy R., 93 Sevlund Road, noted that the pole at Sevlund Road is in front of a property, although across the street. He asked if the radio frequency emissions when overlapped are still within allowable limits.

With the Committee's agreement to hold the item pending additional information, Councilor Lappin's motion to hold carried 7-0.

Chairs Note: *The Department of Public Works presented details to the City's Roads Program.*

#200-15 Update on the strategic plan for street and sidewalk improvements
ALD. LAREDO requesting that the Department of Public Works provide an update on the creation of a strategic plan for the improvement of streets and sidewalks in the City. [08/13/15 @ 11:20 AM]

Action: Public Facilities Held 7-0.

Note: Chief of Staff/CFO Maureen Lemieux presented the Roads program as a long term initiative for the City. When the administration identified the need to improve street conditions, they anticipated that it would be a long time before the City would see an impact due to the poor condition of the roads. Commissioner McGonagle suggested that Street Scan could provide a comprehensive evaluation of the road conditions in the City. Street Scan was hired to conduct a comprehensive assessment of all pavement conditions and create a plan that will bring the City's streets to very good standard in ten years. Ms. Lemieux noted that while the plan to rehabilitate the streets will cost approximately \$9.5 million dollars a year, after ten years the cost will decrease.

Commissioner McGonagle noted that the City's average PCI (measure of road condition 0-100) is 62. 35% of city roads measure a PCI of less than 55 which is the standard for critical repair. Department of Public Works has been collaborating with utility companies and have been able to positively influence the coordination of gas line repair and replacements with road work. They intend to continue to work with the utility companies to ensure continued coordination. He noted that these efforts to coordinate work can delay roadwork on some streets. Commissioner McGonagle hopes to be ready to begin road repair in early Spring 2017 and noted that staying on schedule is essential. While

the City has been reactive in the past, DPW hopes to take a proactive approach with an emphasis on preventative care.

Beta Group Inc., assists in planning asset management and has helped to provide a pavement management plan for the City. Conrad Leger, Beta Group, Inc. representative provided an overview of the plan. His presentation is attached. Mr. Leger showed a diagram of the life of a conventionally repaired road and illustrated where strategic maintenance measures that would extend the life of the roadway could be taken. Mr. Leger reviewed the different types of roadway repairs and rehabilitation, ranging from crack sealing to reclamation, mill & overlay. Details of each can be found in the "Preservation Toolbox" at <http://www.fp2.org/>. Mr. Leger noted that as the type of repair is more extensive, the cost increases as well. A chart highlighting this is shown below:

Treatment Type	Percentage	Cost	Length (FT)	Length (MI)
Concrete Overlay	12%	\$1,080,000	1,600'	0.30
Mill and Overlay	70%	\$6,500,000	54,500'	10.32
Micro/Fog/Cape Seal	16%	\$1,500,000	63,360'	12.00
Crack Sealing	2%	\$200,000	128,000'	24.24
				0.00
Total		\$9,280,000	247,460'	46.87

Mr. Leger emphasized that identifying and applying the correct repair is important to the life of the road and noted that the Street Scan data is used to identify appropriate candidates for each strategy. Commissioner McGonagle noted that DPW is considering the need to extend the moratorium on cutting utility trenches into roads from five to ten years.

Mr. Leger presented a picture of a road shared equally by two towns; Fairfield and Bridgeport, CT. After full reclamation, mill and overlay in 2004, Fairfield continued to maintain the road by using preventive measures like crack sealing. Bridgeport chose not to and is at a point where they will have to mill and overlay the road again in a short period of time. The cost comparison showed how Fairfield's preventive measures were significantly more cost effective. Councilors also noted that the preventive measures avoid the need for total rebuilding and enhance the quality of life for constituents.

Councilors agreed that residents would be supportive of the increased investment in roads, but feel that it should be well managed and should include evaluation of trees, signs, sidewalks and curbs. Commissioner McGonagle confirmed that DPW would evaluate all elements within the public way throughout the process. He noted that while they have established a baseline for streets, they will reevaluate the condition in three years and hope to ultimately bring the average PCI to 72-80. Ms. Lemieux noted that while major rebuilding projects in the first ten years can be bonded, the City will have to pay outright for ongoing maintenance. Councilors added that DPW should set a standard PCI as part of the roads program and ensure that no road is below that standard. Councilors did not think it was appropriate that there are roads below a PCI of 20. Commissioner McGonagle noted that there are

anticipated cost savings as preventive measures become a larger share of the program and those funds could be put towards the repair of additional streets.

The Committee also discussed the need to resolve the coordination of police details during road repairs. Committee members were pleased with the overview of the plan and thankful for the information.

The committee adjourned at 9:50 pm.

Respectfully Submitted,

Deborah J. Crossley



City of Newton, MA Department of Public Works

ACCELERATED PAVEMENT MANAGEMENT PROGRAM

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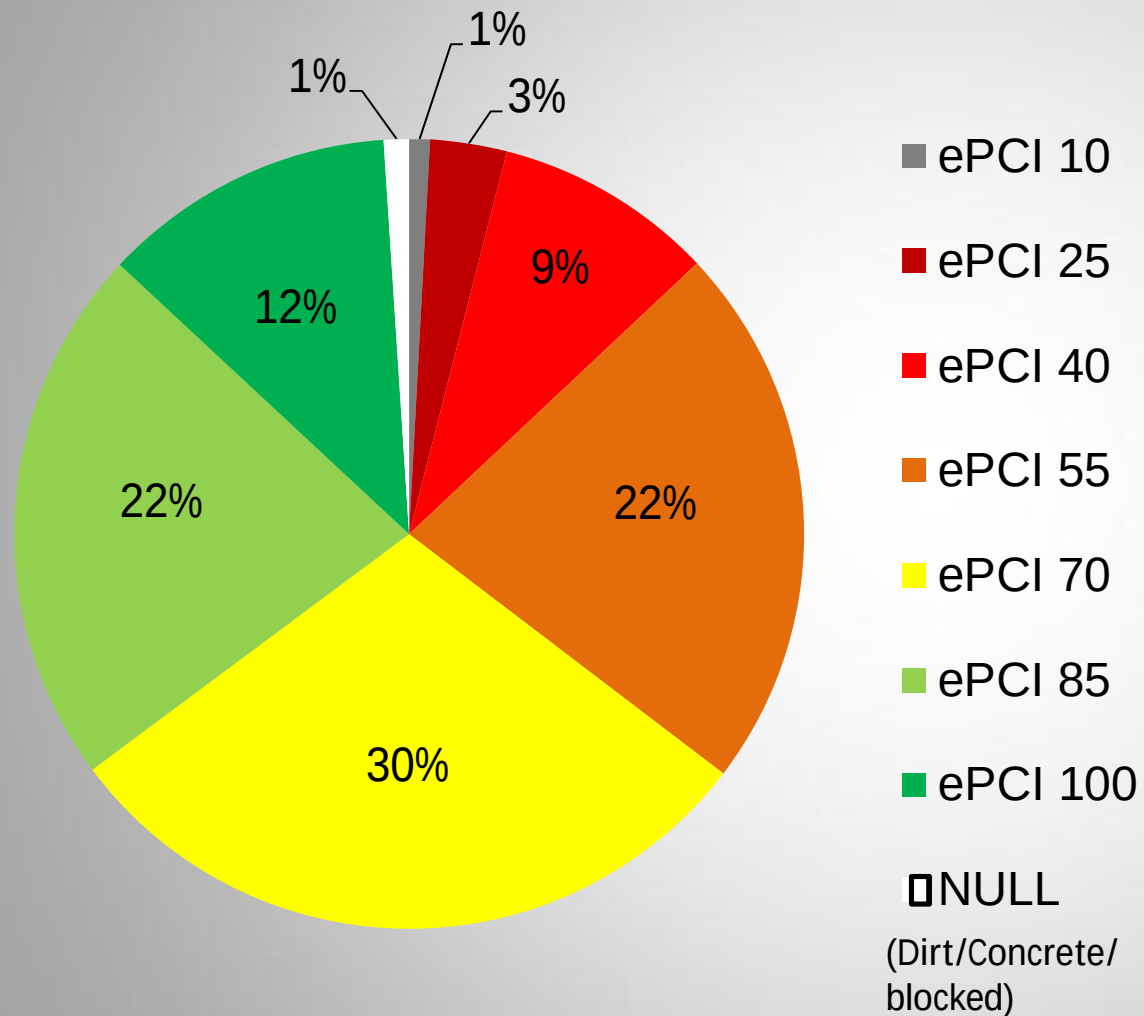
December 7, 2016

CITY OF NEWTON – ROADS PROGRAM

- ž Create a comprehensive pavement management program
- ž Coordination of utility and roadway projects
- ž Communication to the community
- ž Construction Management
- ž Pavement Maintenance



DISTRIBUTION OF PCI



Average PCI	62.5
% < Critical PCI (55)	35%
% > Critical PCI (55)	65%



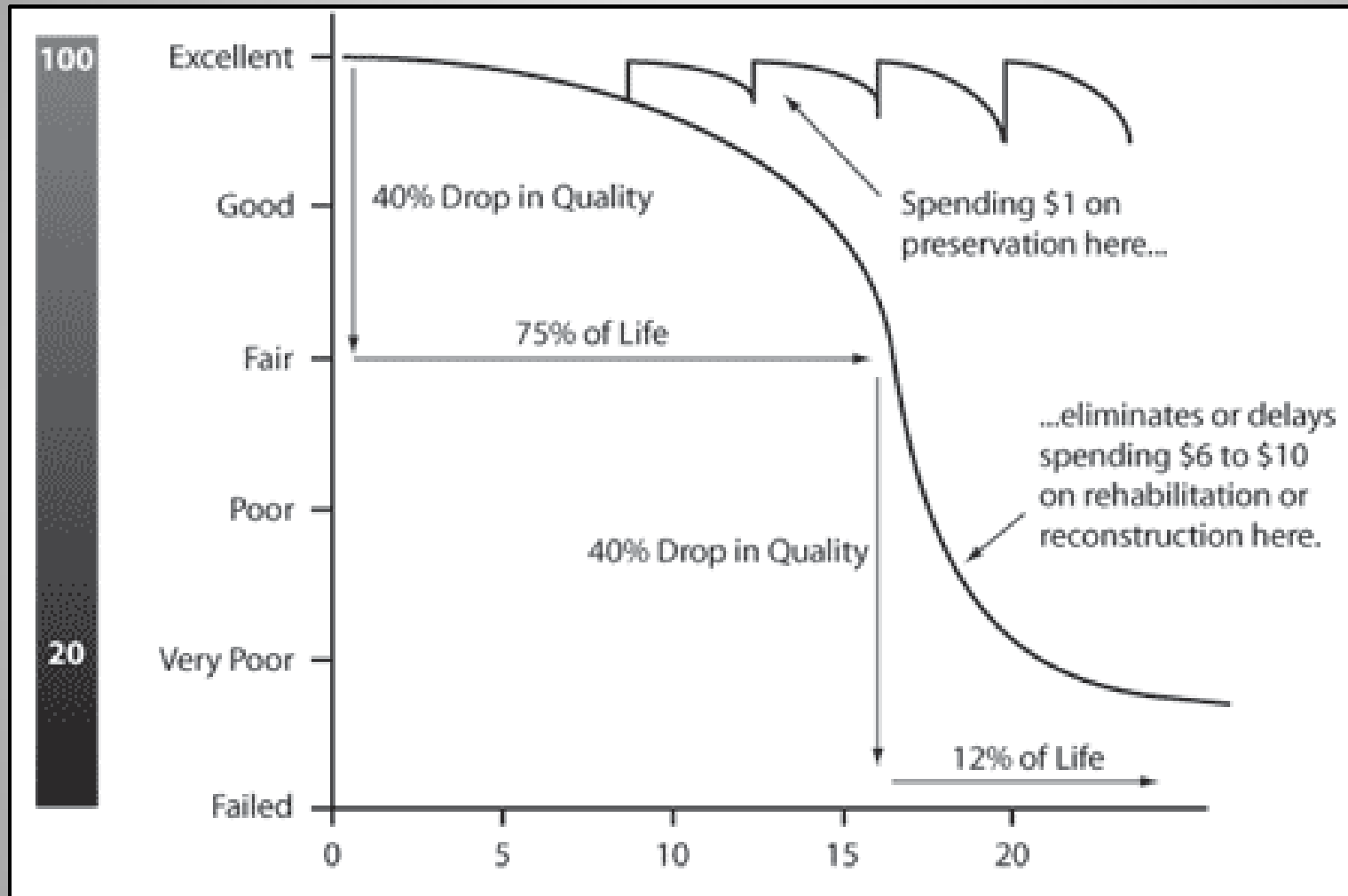
PAVEMENT MANAGEMENT



- i The practice of planning for pavement maintenance and rehabilitation with the goal of maximizing the value and life of a pavement network
- ž *The right repair at the right time!*



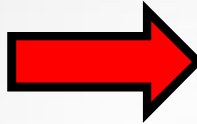
PAVEMENT MANAGEMENT



Source: Federal Highway Administration



PAVEMENT TOOLBOX



Maintenance

- Crack Seal
- Fog Seal
- Patching

Preservation

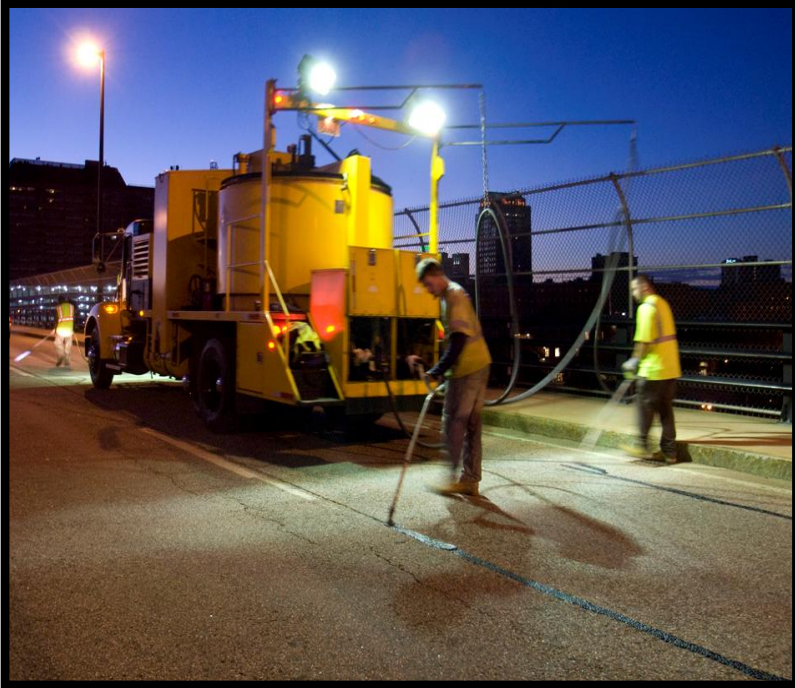
- Microsurfacing
- Cape Seal
- Hot-In-Place

Structural Repair

- Mill and Overlay
- Reclamation
- Reconstruction



PAVEMENT MAINTENANCE



Crack Seal



Fog Seal



PAVEMENT MAINTENANCE



Microsurfacing



Cape Seal



PAVEMENT PRESERVATION

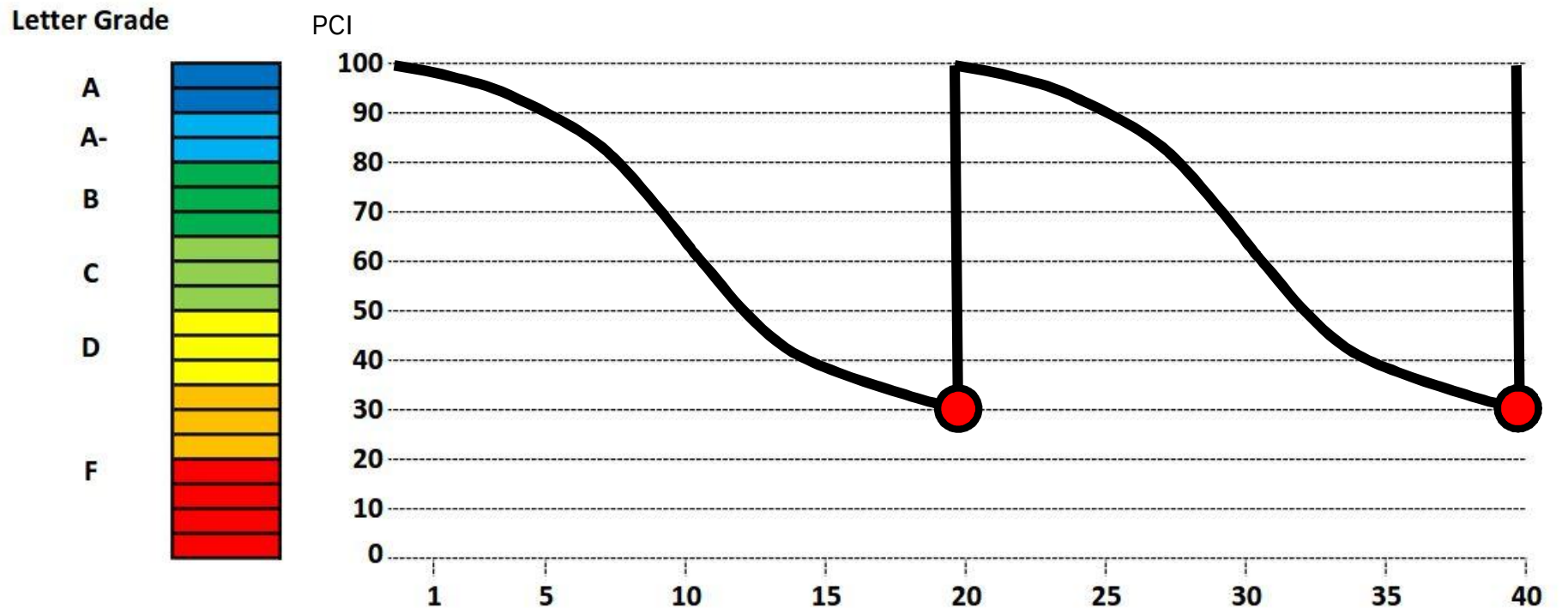
Hot-In-Place Recycling



WHY IS PRESERVATION IMPORTANT?



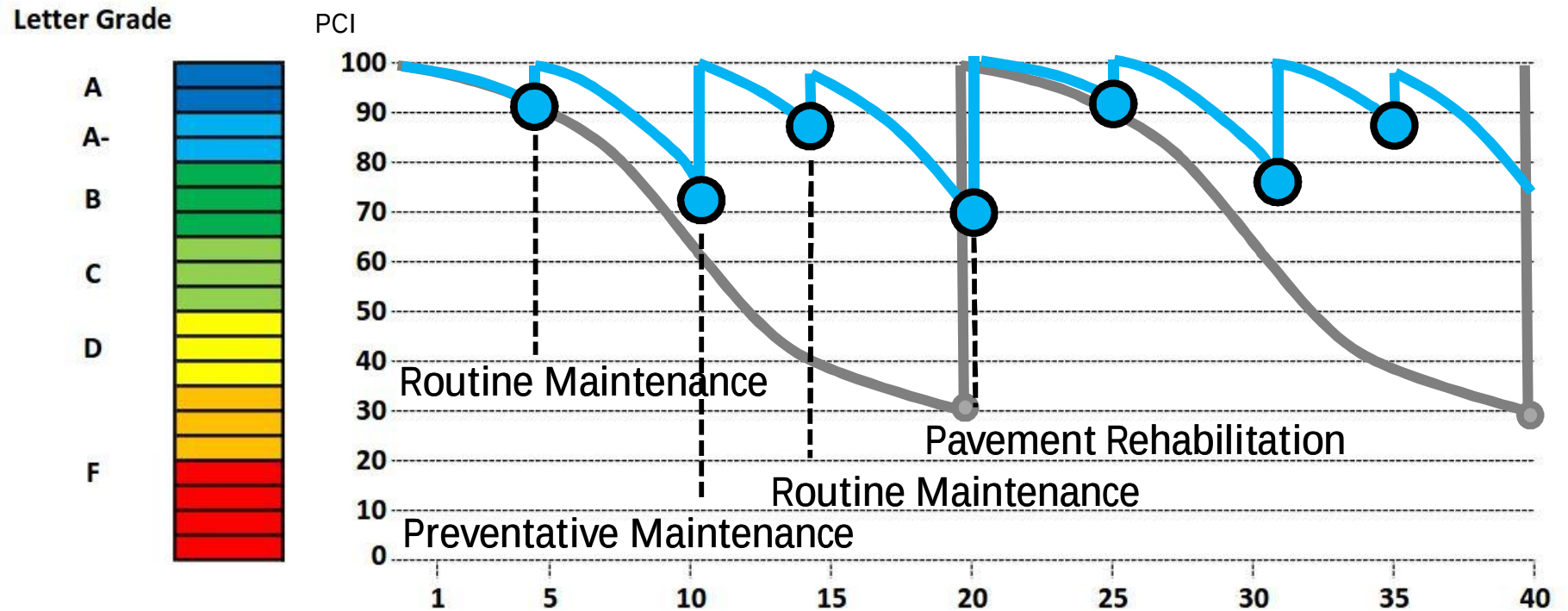
REACTIVE APPROACH



Repairs performed twice over 40 years...
\$64 per square yard or \$1 million over 40 years



PROACTIVE APPROACH



Maintenance and repairs 7 times over 40 years...
\$35 per square yard or \$520,000 over 40 years



Bridgeport, CT

2004: 2" Mill & Fill
\$12 per sy

2017: 2" Mill & Fill
Reclamation

Total: \$24-\$44 per sy

Fairfield, CT

2004: 2" Mill & Fill
\$12 per sy

2010: Crack Sealing &
Microsurfacing
\$4.50 per sy

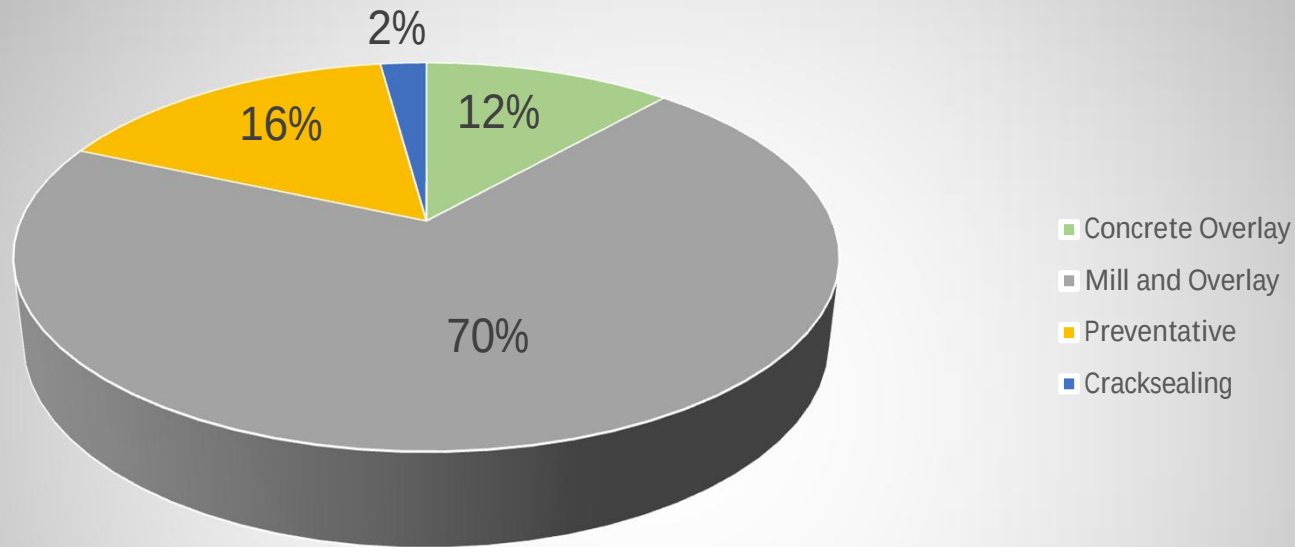
2017: Crack Sealing &
Microsurfacing
\$4.50 per sy

Total: \$21 per sy

Preservation Success!

CITY OF NEWTON – 2017 PROGRAM

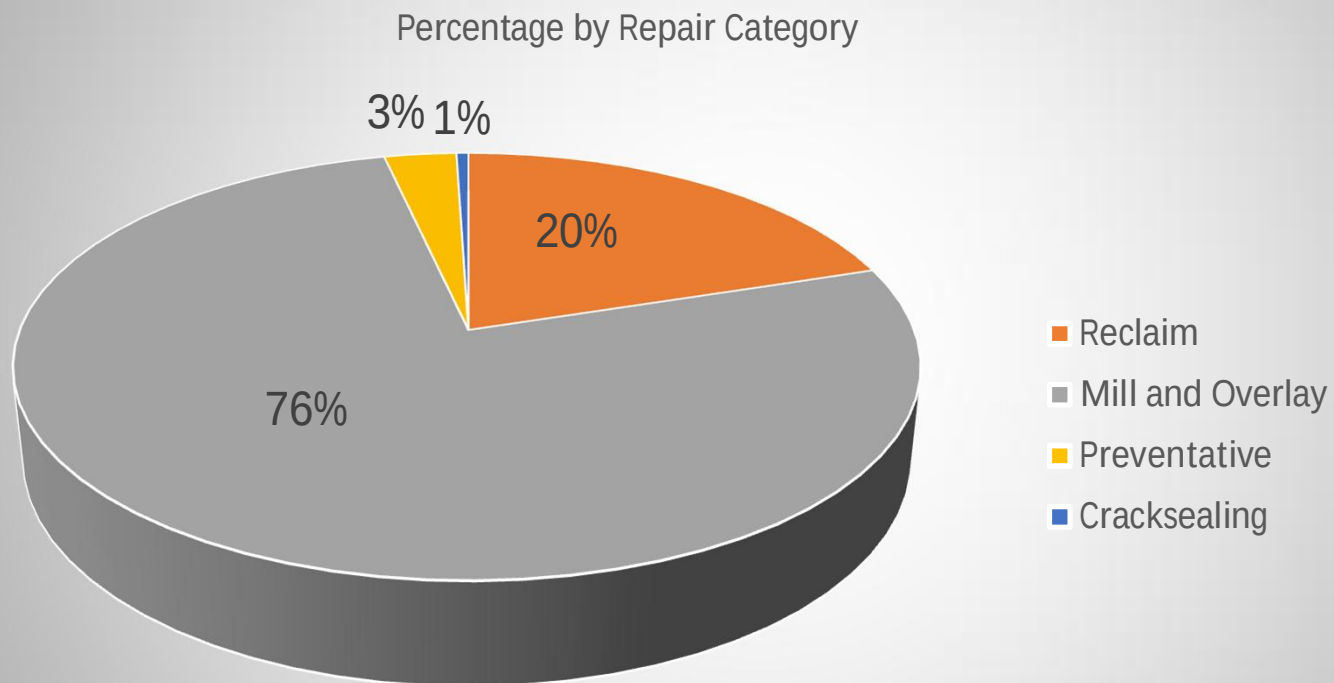
Funding Percentage by Repair Category



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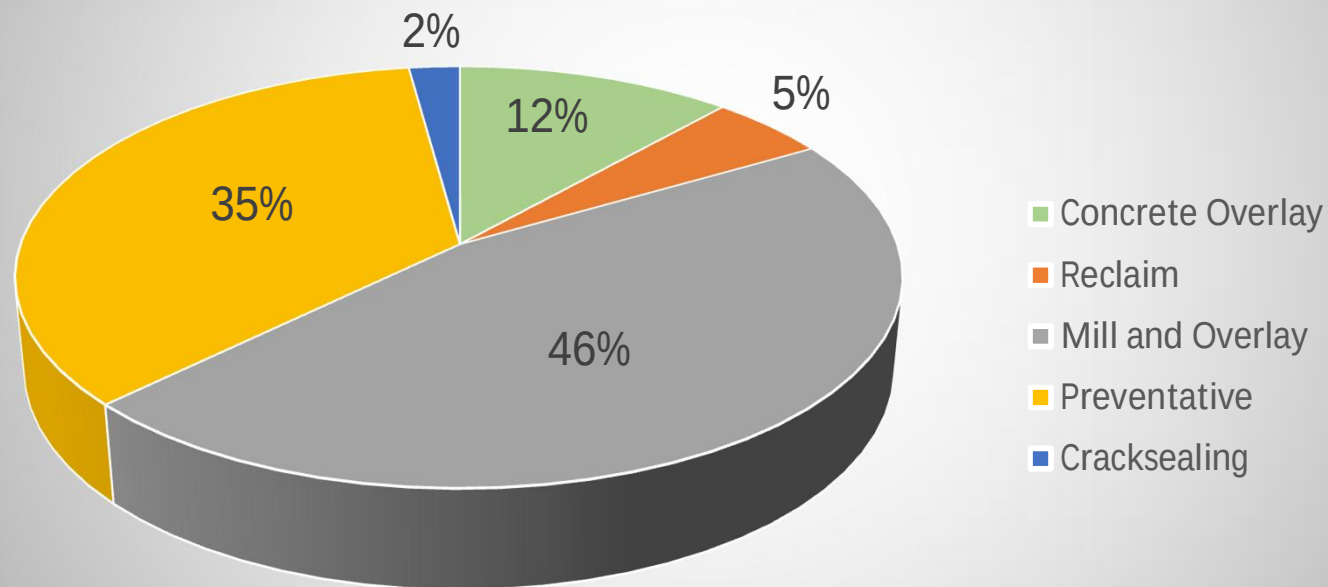


CITY OF NEWTON – PAST PROGRAM



CITY OF NEWTON – FUTURE PROGRAM

Percentage by Repair Category



PAVEMENT MANAGEMENT

Progress Milestones



ž Conduct StreetScan Inspections

In Progress

ž Identify roadways and treatments

In Progress

ž Site Visits to Confirm Inspections

End January/Early Feb.

ž Construction Estimates

February

ž Bid Documents

Early April

ž Paving Contracts

Mid/End April

ž Begin Construction





City of Newton, MA Department of Public Works

ACCELERATED PAVEMENT MANAGEMENT PROGRAM

B | E | T | A

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