

**CITY OF DELAWARE  
PUBLIC WORKS/PUBLIC UTILITIES  
COMMITTEE  
MEETING TO BE HELD VIRTUALLY VIA CISCO Webex \*\*  
6:00 P.M.**

**AGENDA**

August 4, 2020

1. ROLL CALL
2. APPROVAL of the Motion Summary for the meeting of the Public Works/Public Utilities Committee meeting held February 4, 2020, as recorded and transcribed
3. PUBLIC COMMENTS  
Due to the meeting being held virtually, written public comment, maximum 500 words, is requested to be received before 3p.m. the date of the meeting through email at [emccloskey@delawareohio.net](mailto:emccloskey@delawareohio.net). To provide live public comment please email [emccloskey@delawareohio.net](mailto:emccloskey@delawareohio.net) to sign up by 3 p.m. the date of the meeting. Name and address are required for public comment. Comments received on Facebook may have to be addressed by staff subsequent to the meeting.
4. PRESENTATIONS:
  - A. Community Energy Aggregation Program – Jay Sell and Alan Samuels, Aspen Energy Corporation
  - B. Municipal Aggregation – Chris Bailey, AEP Energy
5. REVIEW AND DISCUSSION of 2020 Pavement Ratings
  - A. [Pavement Rating Map Link](#)
6. REVIEW AND DISCUSSION of 2020 Safe Walks Program
7. REVIEW AND DISCUSSION of HPS to LED Streetlight Conversion
8. REVIEW AND DISCUSSION of Single Stream Recycling Collection
9. STAFF COMMENTS
10. MEMBER COMMENTS
11. ADJOURNMENT

\*\* This meeting will be a virtual meeting. Residents are encouraged to view online through the City of Delaware Facebook page. To comply with the CDC recommendation prohibiting group meetings, no in person attendance by Council, staff, or the public will be available.

**PUBLIC WORKS/PUBLIC UTILITIES COMMITTEE**  
**MOTION SUMMARY**  
**February 4, 2020**

ITEM 1. Roll Call

Chairman Jones called the meeting to order at 6:00 p.m.

Members Present: Councilmember George Hellinger and Councilmember Cory Hoffman and Chairman Chris Jones

City Staff Present: Bill Ferrigno, Public Works Director/City Engineer and Blake Jordan, Public Utilities Director, Jonathan Owen, Project Manager Engineer

ITEM 2. ELECTION OF OFFICERS

A. Chairperson

**Motion:** Mr. Hellinger motioned to nominate Mr. Jones as Chairperson, seconded by Mr. Hoffman. Motion approved by a 3-0 vote.

B. Vice-Chairperson

**Motion:** Mr. Hellinger motioned to nominate Mr. Hoffman as Vice-Chairperson, seconded by Mr. Jones. Motion approved by a 3-0 vote.

ITEM 3. APPROVAL of the Motion Summary of the Public Works/Public Utilities Committee meeting held August 6, 2019 as recorded and transcribed.

**Motion:** Mr. Hellinger moved to approve the Motion Summary of the Public Works/Public Utilities Committee meeting held August 6, 2019, seconded by Vice-Chairman Hoffman. Motion approved by a 3-0 vote.

ITEM 4. PUBLIC COMMENTS

There was no public comment.

ITEM 5. DISCUSSION of Transportation Needs/Funding

Mr. Ferrigno provided a presentation on transportation needs and funding. He discussed what would funds go to maintain. Three components of roadway maintenance program include Traffic Maintenance, Street Maintenance, and Street Resurfacing. He reviewed the cost and estimated funding gap to these programs. He discussed repairs to alleys and that the City currently will do pothole repairs to alleys, but the proposal for additional funding would recommend alleys be maintained by the City. Mr. Jones informed staff that

there was a concern at 28 South Sandusky regarding large potholes. Mr. Ferrigno discussed that since the 1995 the City road network has increased by 69% and in addition the cost for asphalt has increased from under \$30 per ton to \$90 per ton. The expected cost to pave a mile of residential street can exceed \$300,000. Mr. Ferrigno discussed the increase in streetlights that have maintenance and repairs. In the past 25 years there are over 2,500 streetlights added. Mr. Ferrigno provided a list of poor and very poor rated streets. He discussed the recommendation to pave arterial roads every 15 years, local roads every 25 years, and 20 years for collector roads. He discussed the need to get to a sustainable road maintenance program by prioritizing the road paving needs and having an adequate funding source.

ITEM 6. UPDATE and DISCUSSION relating to Public Utilities

A. Dogwood Drive Stormwater Culvert Rehabilitation

Mr. Jordan discussed that the ravine behind the homes had eroded heavily. He provided photographs of the project and expects the final grading to be done in next few weeks.

B. Stratford Road Energy Dissipation Project

Mr. Jordan reviewed the project and that they are working with ODOT and plan to have the project started in early spring.

C. Discussion on New PFAS Regulation

Mr. Jordan discussed that from 2013-2015 there was testing for 6 PFAS compounds and none were found. Tests will be started again in 2020 and if any PFAS compounds are found it discussed that these can be treated with reverse osmosis.

ITEM 7. UPDATE and RECOMMENDATION relating to Sidewalks

A. Code Section 909 – Sidewalks

Mr. Ferrigno discussed that the section in our code that deals with installation and maintenance of sidewalks. He discussed the additional to the code to multi-family and commercial property owners responsible for sidewalk maintenance. The second update is the American Disability Act and Public Right-of-Ways Guidelines. He also discussed the update the code to provide maintenance to individual properties. The language was adjusted to identify repairs by all property owners needed without a schedule.

**Motion:** Mr. Hellinger motioned that the proposed ordinance changes be forwarded to Council, seconded by Vice-Chairman Hoffman. Motion approved by a 3-0 vote.

B. Resolution of Necessity for 2020 Sidewalk Maintenance Program

Mr. Owens discussed the two different maintenance programs. The one is the downtown area and the non-downtown area. The program will evaluate areas that streets were repaved in 2019. The area was broken down to areas that are property owners responsibilities and city responsibility. The resolution of necessity states that private property owners are responsible for the repairs with a deadline of July 18. Any repairs not made at this time the resident will be assessed for the repairs and the City will contract the work out. Mr. Owens reviewed that \$150,000 has been budgeted for each program. Mr. Ferrigno discussed that properties will be complaint driven or targeted areas where streets have been repaired. Mr. Owens reviewed the estimated cost per sidewalk area.

C. Resolution of Necessity for Downtown Sidewalk Maintenance Program

Mr. Owens provided an updated list of property owners repairs. The schedule will be the same as discussed in the 2020 Sidewalk Maintenance Program. This area will be limited to the downtown streetscape area.

**Motion:** Mr. Hellinger motioned to bring the Resolution of Necessity for both 2020 Sidewalk Maintenance Program and Downtown Sidewalk Maintenance Program to Council, seconded by Vice-Chairman Hoffman. Motion approved by a 3-0 vote.

ITEM 8. UPDATE and RECOMMENDATION relating to Public Works

A. Code Section 901 – Excavations in Public Right-of-Way

Mr. Ferrigno discussed the code relating to excavating in public rights-of-way. The code changes is terminology changes and the second change strengthens the code language relating to road closures. If roads are closed for construction the changes will discuss the responsibility of the contractor to notify the public and set guidelines for road closures. The code changes will adopt the Maintenance and Traffic Notification Process.

B. Code Section 197.02 – Right of Way Permitting Fees Draft

Mr. Ferrigno discussed making the process simpler and track the cost per month and bill monthly. Code Section 197.02 and Code Section 901 will be sent to the BIA for review.

**Motion:** Mr. Hellinger motioned to bring code changes for Section 197.02 and 901 before Council for review, seconded by Vice-Chairman Hoffman. Motion approved by a 3-0 vote.

C. Maintenance of Traffic and Public Notification Policy

The Committee in agreement that this policy be at an administrative level and is not needed to come to a council level for approval.

D. Roadside Memorials Policy Draft

Mr. Ferrigno discussed that these memorials can get onto the road and often are not maintained. He discussed that the City can not pick and choose who can put signs in public right-of-way. He discussed working with the Parks Department on a memorial tree program. This policy will allow for roadside memorials to be taken down and provide an alternative program for families to have a memorial area in the area of a Memory Tree where an individuals name is inscribed on an individual leaf and added to the sculpture open to public viewing along with a planting program of a live tree.

**Motion:** Mr. Hellinger motioned to send the memorial policy by forwarded to Council for review, seconded by Vice-Chairman Hoffman. Motion approved by a 3-0 vote.

ITEM 9. STAFF COMMENTS

Mr. Ferrigno discussed the senior discount for refuse collection. The code reflects this discount is for single senior citizens. Other individuals can get any size trash toter, but that there is not a discount and they pay the full rate. Mr. Ferrigno discussed that the concern will be that more people would want smaller toters and they will be overflowing with trash.

Mr. Jordan questioned the Committee's interest in electricity aggregation. Chairman Jones and Mr. Hellinger voiced their support in gathering further information.

Mr. Hellinger questioned the interest to solar power. Mr. Jordan discussed working with two consultants on a Solar Feasibility Study.

ITEM 10. MEMBER COMMENTS

Mr. Jones questioned if there was any feedback on the electric vehicle charging station. Mr. Ferrigno had provided a memo to the Council previously on this topic.

ITEM 11. ADJOURNMENT

**Motion:** Mr. Hellinger motioned to adjourn the Public Works/Public Utilities Committee meeting. The meeting adjourned at 7:10 p.m.

---

Chairman

---

Elaine McCloskey, Clerk



**AGENDA ITEM: 5**

**2020 Pavement Ratings**



# City of Delaware

Prepared July 1<sup>st</sup>, 2020

by

William L. Ferrigno, P.E.  
Director of Public Works/City Engineer

Nathaniel E. McCoy, P.E.  
Project Manager

## 2020 Pavement Condition Report

**Access Delaware**  
Let's get there together

Report does not reflect street  
resurfacing work to be  
completed in 2020





## Table of Contents

**Existing Conditions..... 2**

**Sustainable Pavement Management ..... 4**

**Funding Requirements ..... 4**

**Available Revenues & Expenditures ..... 5**

**Recommended Pavement Management Strategy..... 6**

**Pavement Ratings for Council Wards**

**Pavement Ratings for Council Ward I ..... 7**

**Pavement Ratings for Council Ward II ..... 8**

**Pavement Ratings for Council Ward III ..... 9**

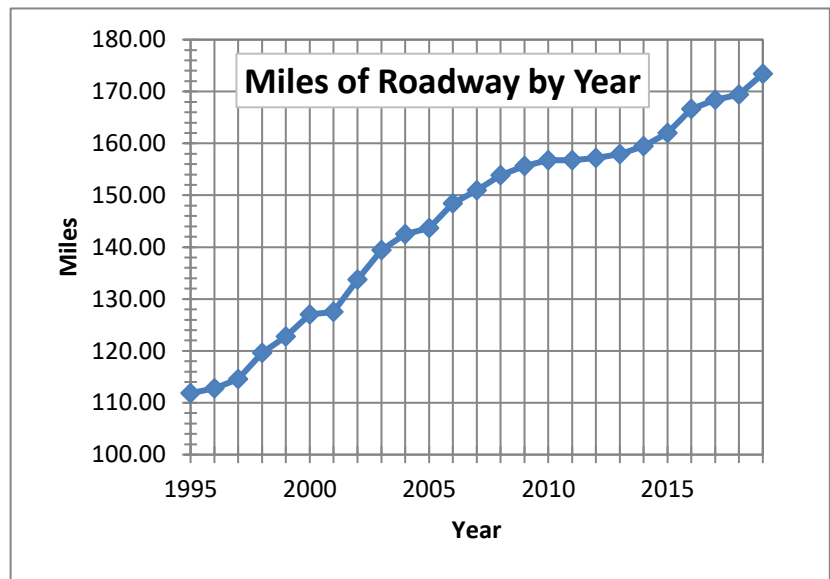
**Pavement Ratings for Council Ward IV .....10**

**Pavement Condition Rating – Visual Evaluation Criteria.....11**

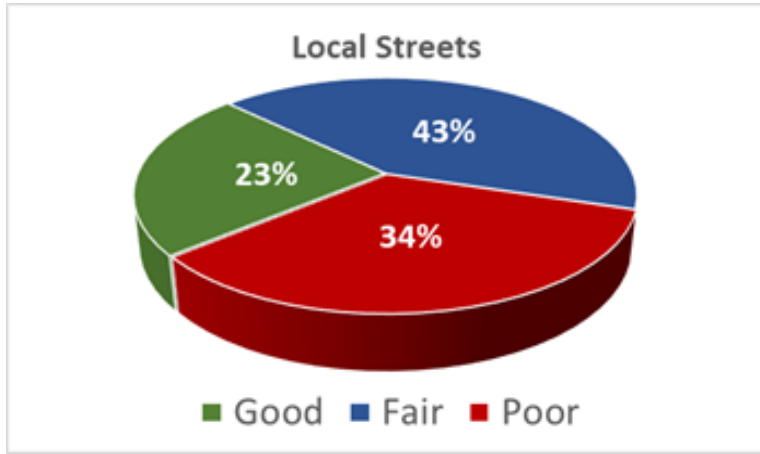
## Existing Conditions

The City of Delaware is responsible for maintaining 174 miles of roadway. As Delaware has grown over the past 20 years, so too has the City's network by an average of 2.5 miles per year. (See chart) Delaware's street network is a significant public asset, valued at over \$500 million and used by every one of our 40,000-plus residents in some way. It is one of the most critical assets owned and maintained by the City. To sustain this pavement investment, Delaware must invest an estimated \$3.7 to \$4.9 million on an annual basis, an amount that exceeds the current \$2.2 million in annual expenditure. In addition, the backlog of streets rated as 'Poor' now requires upward of \$20 million to repair. Without both, the overall condition of Delaware's street network will continue to deteriorate.

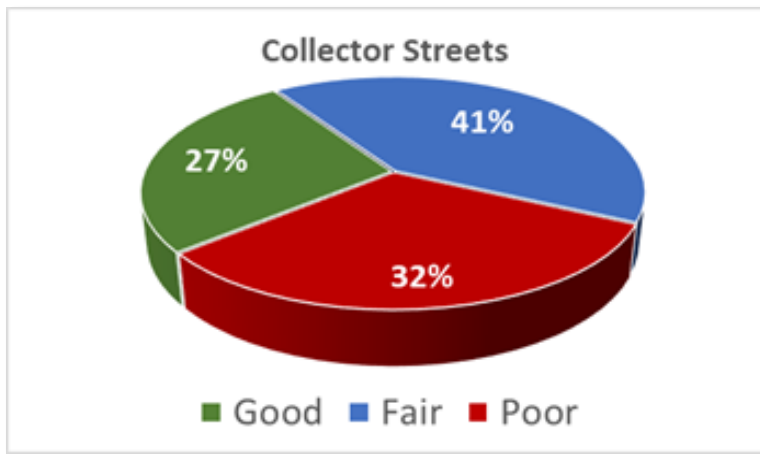
In Delaware, a visual rating system is utilized that assigns pavement condition ratings to pavement sections ranging from "Good", "Fair" and "Poor". This method allows for the relatively quick assessment and assignment of pavement condition ratings to all streets within the City's roadway network on an annual basis. Ratings are performed by City staff, trained to identify pavement deficiencies including cracking, rutting, potholes, base failures etc.



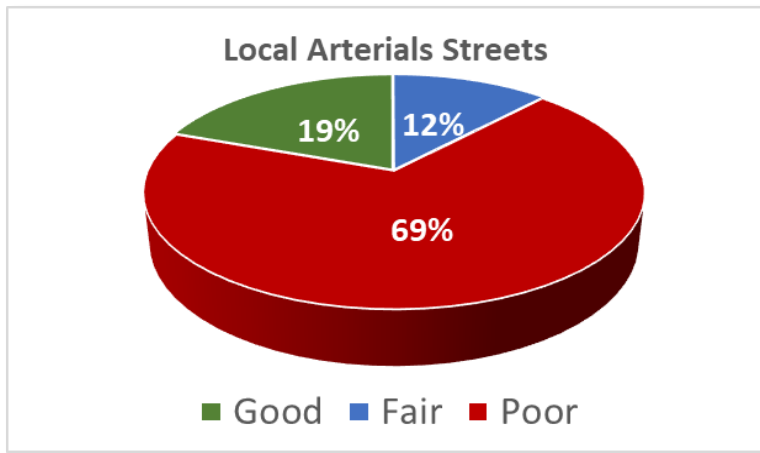
2020 Pavement Condition Ratings by Classification (miles)				
Road Type	Total Miles	GOOD	FAIR	POOR
Alley	9.6	-	-	9.6
Local Streets	88.7	20.2	37.8	30.7
Collectors	46.5	11.2	19.7	15.6
Local Arterials	14.5	3.6	1.8	9.1
US/SR's	14.9	0.4	5.0	9.5
<b>Totals</b>	<b>174.2</b>	<b>35.4</b>	<b>64.3</b>	<b>74.5</b>



Delaware has just under 89 miles of 'Local' streets of which 34% or 30 miles require resurfacing. Based on an anticipated pavement life cycle of 25 to 30 years, the maximum amount in any given year that require resurfacing should be at or below 4 miles with the adequate funding of a sustainable pavement management program.



Delaware has just under 47 miles of 'Collector' streets of which 32% or 16 miles require resurfacing. Based on an anticipated pavement life cycle of 15 to 20 years, the maximum amount in any given year that require resurfacing should be at or below 3 miles with the adequate funding of a sustainable pavement management program.



Delaware has just under 15 miles of 'Local Arterial' streets of which 69% or 9 miles require resurfacing. Based on an anticipated pavement life cycle of 10 to 12 years, the maximum amount in any given year that require resurfacing should be at or below 1.5 miles with the adequate funding of a sustainable pavement management program.

Delaware currently has over 46 miles of combined local and collector streets rated as 'Poor' and that require immediate resurfacing. The local and collector streets largely make up the majority of our residential neighborhoods. It is clear that the growing backlog of pavement repair will continue to increase until a fully funded sustainable pavement management program is in place.

*Delaware currently has over 46 miles of combined local and collector streets rated as 'Poor' and that require an estimated \$20 million in resurfacing repair.*

At current costs, a mile of local street requires an estimated \$300,000 to resurface, and upwards of \$500,000 if the conditions continue to deteriorate once the pavement's useful life is met. Based on the existing backlog of local and collector streets rated as 'Poor', it will take an infusion of an additional \$20 million to address the paving needs of the neighborhood streets.

## **Sustainable Pavement Management**

A sustainable paving management program includes a combination of pavement preservation and resurfacing treatments that together increase the useful life of the street network while reducing long-term maintenance costs. Pavement deteriorates at varying rates depending on a number of factors including volume of vehicles and large trucks, pavement drainage and surface maintenance. High volume (arterial) roads generally require resurfacing every 10 to 15 years, while less travelled residential streets may last up to 30 years and longer if properly maintained. In general, the top course of asphalt on any particular street will remain in "Good" condition for a longer period if appropriate preservation treatments are applied, thus increasing the pavement's life cycle. To reduce annual maintenance costs, it is recommended that the City introduce a significant amount of preservation effort in its pavement management program – specifically targeting locations within subdivisions. In particular, surface preservations treatments such as mastic sealants and micro-overlays should be implemented to supplement ongoing crack sealing efforts. Adding preservation treatments to the annual resurfacing program, however, is not feasible considering current funding levels.

*Pavement preservation increases the useful life of streets while reducing long-term maintenance costs.*

## **Funding**

The following table summarizes the estimated annual pavement maintenance costs for Delaware's street network. The lower cost values assume a robust pavement preservation effort is included in the annual resurfacing efforts. The higher cost figures in the range reflects

increased resurfacing costs associated with poorly maintained streets with shorter life cycles. To reach a sustainable pavement management level, the recommended annual expenditure should fall within the range of total cost shown at the bottom of the table. Currently Delaware is \$1.5 million below the lower limit of recommended annual expenditure.

Sustainable Pavement Management Program Annual Funding Goals				
Classification	Miles	Pavement Life Cycle	Miles Per Year Paved	Annual Cost
Local Streets	88.74	20-30 Yrs.	2.9 to 4.4	\$1.6 - \$2.1 M
Collector Streets	46.57	15-25 Yrs.	1.9 to 3.1	\$1.2 - \$1.6 M
Arterial Streets	14.55	10-15 Yrs.	1.0 to 1.4	\$0.7 - \$1.0 M
US/State Routes	14.96	10 Yrs.	(Managed by ODOT) <sup>(1)</sup>	\$0.2 M
US23 Expressway	10.33	10 Yrs.	(Managed by ODOT) <sup>(2)</sup>	\$0
<b>Total Projected Annual Expense for Street Paving</b>				<b>\$3.7 - \$4.9 M</b>
(1) US and SR's within the City are paved by ODOT through the Urban Resurfacing Program with 20% Local Contribution (2) US23 is paved by ODOT with 100% State funding				

Annual Resurfacing Program Revenue & Expenditures						
Revenue Source	Expenditures					Total
	CDBG <sup>(1)</sup>	Local Streets	OPWC <sup>(2)</sup>	ODOT UR <sup>(3)</sup>	Construction Admin & Inspection	
General Fund Match (Resurfacing)		\$310,000				\$310,000
State Gas Tax & License Fees		\$240,000	\$360,000	\$150,000	\$50,000	\$800,000
Permissive License Fee (Existing \$10) <sup>(4)</sup>			\$440,000			\$440,000
Ohio Public Works Commission Grants			\$450,000			\$450,000
County Grant Match Funding			\$150,000			\$150,000
CDBG & RLF (Avg per year)	\$75,000					\$75,000
<b>Totals</b>	<b>\$75,000</b>	<b>\$550,000</b>	<b>\$1,400,000</b>	<b>\$150,000</b>	<b>\$50,000</b>	<b>\$2,225,000</b>
(1) CDBG - Community Development Block Grant Funds directed toward eligible Low-Moderate Income (LMI) Area streets (2) OPWC - Ohio Public Works Commission Funds directed toward eligible higher traffic collector and local arterial streets (3) ODOT UR - Ohio Department of Transportation Urban Resurfacing Funds directed toward eligible State and US Routes in City (4) Additional \$5 Permissive License Tax approved in '20 dedicated toward roadway safety projects						

---

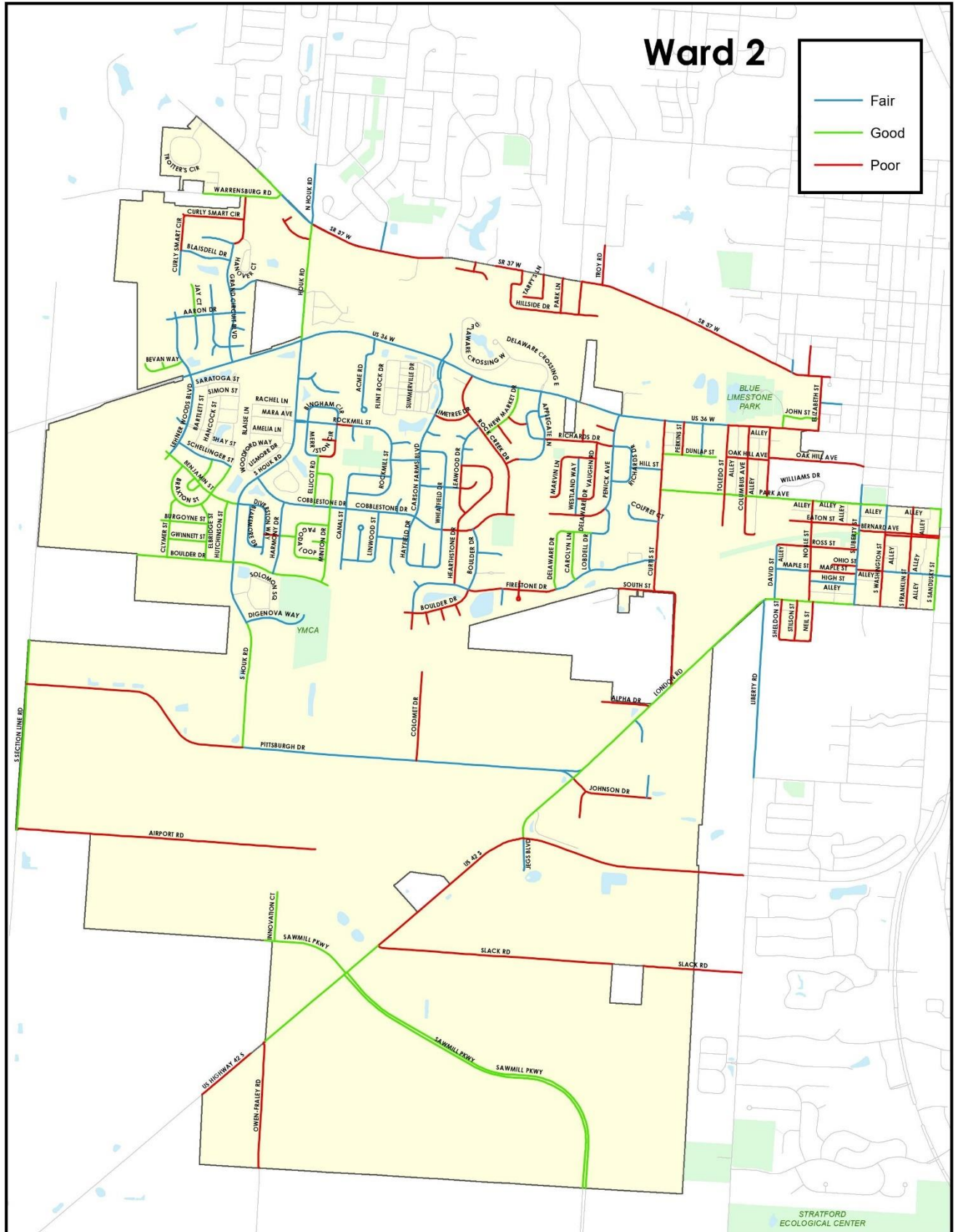
## Recommended Pavement Management Strategy

A sustainable pavement management program includes appropriate preservation, resurfacing, and reconstruction efforts for each classification of roadway in accordance with industry best practices to maximize the life cycle of the pavement surface. To protect the future of Delaware's \$500 million roadway network investment, the following recommendations are made:

1. Increase annual pavement maintenance expenditure to \$5.0 million to fund a sustainable pavement management program and to address the growing backlog of the resurfacing needs of streets rated as 'Poor'.
2. Allocate up to 30% of annual pavement maintenance funding toward the application of preservation treatments, focusing on the local street network.
3. Establish pavement life-cycle goals as follows:
  - a. Resurface every 25 Years for Local (Residential) Streets
  - b. Resurface every 20 years for collector streets
  - c. Resurface every 15 years for Arterial Streets
4. Continue participation in State Urban Resurfacing Program which provides 80% funding for resurfacing of US36, SR37, US42, and SR521, and 100% of funding for US23. This requires fully addressing required pavement maintenance work including timely completion of all identified pavement base repairs.
5. Increasing annual funding for highway maintenance operations and staffing levels within the Public Work's Street and Traffic Maintenance Divisions to address declining service levels.

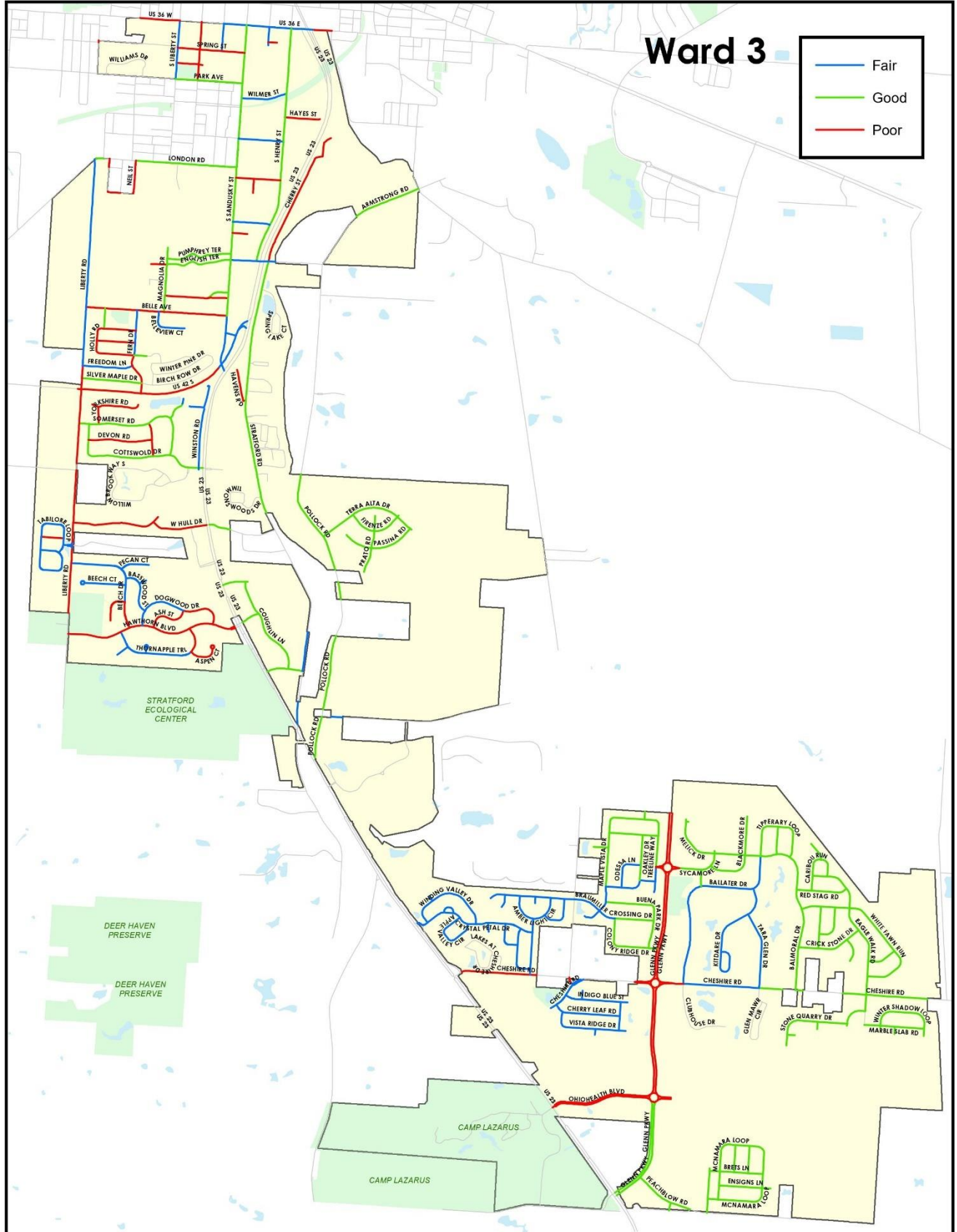




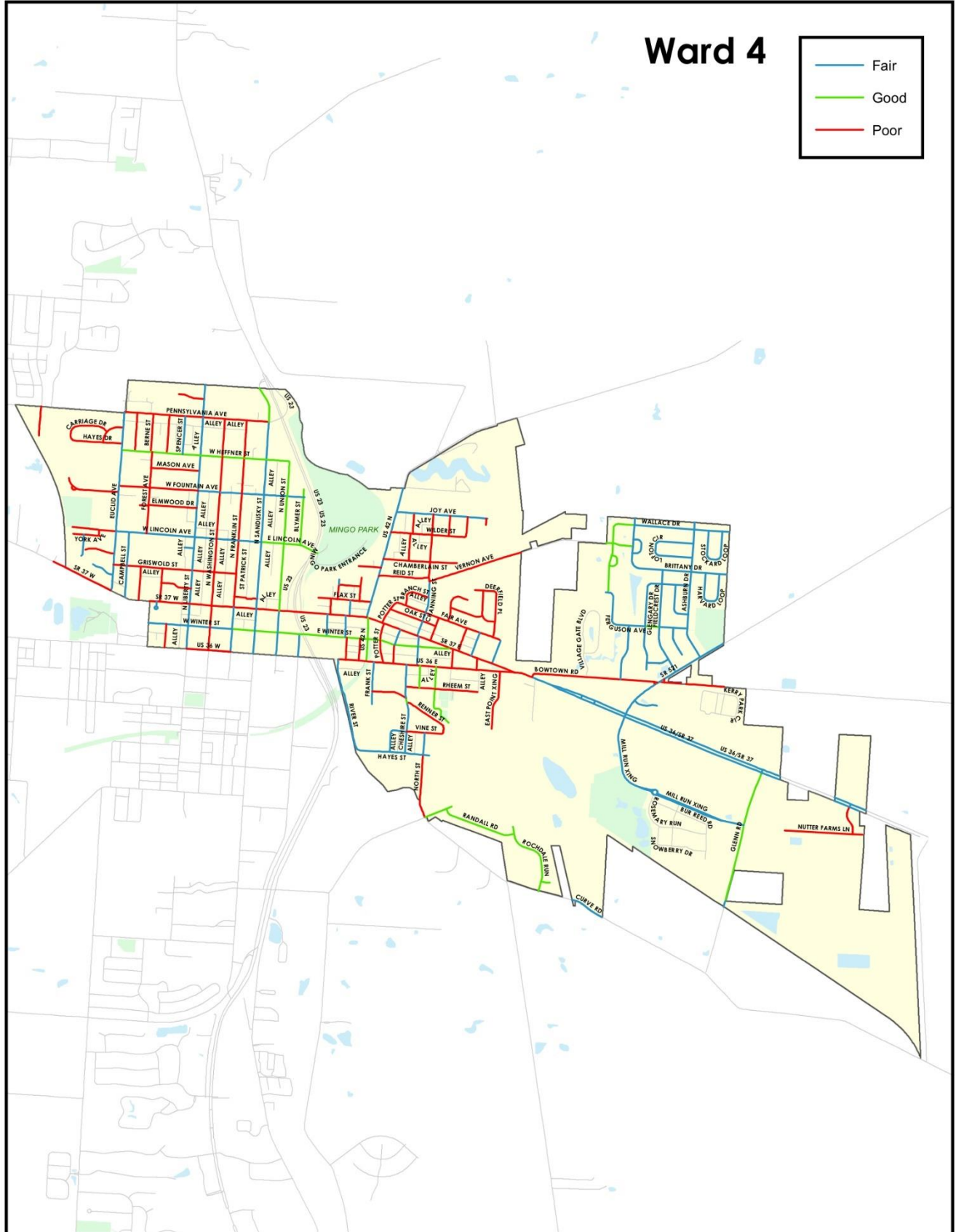




PAVEMENT CONDITION REPORT  
2020 DRAFT UPDATE



# PAVEMENT CONDITION REPORT 2020 DRAFT UPDATE



## Pavement Condition Rating – Visual Evaluation Criteria



### GOOD

- “Like new” condition
- Minor crack sealing may be required
- Asphalt binder shows little or no reveal around individual stones
- Maintenance treatments will add little to no value in extending pavement life



### FAIR

- Light to moderate cracking
- Open transverse joints or cracks
- Repairs in areas may be required
- Asphalt binder shows minor to moderate reveal around aggregate
- Ideal time to apply preservation treatments to extend pavement life



### POOR

- Moderate to heavy amounts of cracking
- Minor to moderate structural deficiencies
- Repairs in areas are required
- Asphalt binder failing/light raveling
- Potholes begin to form
- Preservation treatments no longer extend the pavement life
- Pavement resurfacing is required.





**AGENDA ITEM: 6**

**Safe Walks Program**

## Safe Walks Program

Uneven sidewalk continues to be an issue throughout the community as sidewalks age or are impacted by tree root growth. Most deficiencies appear as tripping hazards. The following summary outlines the current approach the City takes in addressing sidewalk tripping hazards.

### Customer Complaint Received (CSR)

- Following receipt of complaint, Public Works staff inspects property to determine whether deficiency (typically a tripping hazard) is the responsibility of the City or property owner to repair.
- Tripping hazards are marked with orange safety paint
- Repair responsibility are indicated by painting a 'Blue Dot' on sidewalk sections that the City is responsible to repair, and a 'White Dot' where the property owner is responsible.
- Inspection notification is left on the door with explanation of findings.
  - **For City Responsibility:**
    - Use best efforts to make immediate repair by:
      - City Street crew to repair tripping hazard by surface grinding where practical
      - Repair tripping hazard with conventional replacement when necessary
  - **For Property Owner Responsibility:**
    - Send certified letter to property owner requesting repair to be addressed in specified timeframe depending on the time of year. Repair specifications are included.
    - If property owner fails to complete repairs in requested time:
      - Resolution of Necessity requiring repairs is presented for council approval.
      - Certified letter sent to property owner giving 60 days to complete repairs
      - Property owner retains right to appeal required repairs.
      - If property owner fails to complete repairs:
        - City contracts out repair work and invoices property owner.
        - If property owner fails to pay invoice, City to assess repair cost against property taxes.

### Repairs Associated with Annual Resurfacing Program

- Public Works staff inspects properties adjacent to all streets included in proposed annual resurfacing program to determine the responsibility of making sidewalk repairs.
- Tripping hazards are marked with orange safety paint
- Repair responsibility are indicated by painting a 'Blue Dot' on sidewalk sections that the City is responsible to repair, and a 'White Dot' where the property owner is responsible.
- Inspection notification is left on the door with explanation of findings.

- **If City Responsibility:**
  - City Street crew to repair tripping hazard by surface grinding where practical
  - Where conventional replacement is necessary, this work will be included as part of the annual resurfacing contract for repair by contractor.
  
- **If Property Owner Responsibility:**
  - Send certified letter to property owner requesting repair to be addressed in specified timeframe depending on the time of year. Repair specifications are included.
  - If property owner fails to complete repairs in requested time:
    - Resolution of Necessity requiring repairs is presented for council approval.
    - Certified letter sent to property owner giving 60 days to complete repairs
    - Property owner retains right to appeal required repairs.
    - If property owner fails to complete repairs:
      - City contracts out repair work and invoices property owner.
      - If property owner fails to pay invoice, City to assess repair cost against property taxes.

## Typical Repair Methods

**Conventional Repair**



**Surface Grinding**

