

CITY OF MINNEAPOLIS
POTHOLE REPAIR POLICY
September, 2012

1. Introduction

The City of Minneapolis, Minnesota considers the repair and maintenance of city streets and alleys a basic city service. A regular part of those activities is the repair of potholes. Pothole repair is part of the city's overall pavement management program. The city, through its Department of Public Works, will install temporary and permanent repair of potholes. The work must be done in a way that ensures both public and worker safety, as well as in a cost efficient and effective manner. The city will normally use city forces, or it may outsource to other public agencies or private contractors to provide this service. However, the city also recognizes that its ability to deliver pothole repair services is solely dependent on factors of financial budgetary limits, resource availability and time of year.

2. Application

This policy applies to streets and alleys under the jurisdiction of the city. It does not apply to other governmental unit's roads within the city unless there is a specific agreement between the city and that other governmental agency. It does not apply to streets or alleys that are not within the public right-of-way including but not limited to University of Minnesota streets and private alleys, as the city is not responsible for, and does not provide service on those pavements.

When the City has an agreement to perform repair services for another governmental agency, all of the provisions of this policy apply to all such services provided. Public Works supervisors will prioritize and perform repairs on those respective roads as described in this policy and prioritize repairs with all other work as though they are part of the overall City street network.

3. Definitions

The word **pothole** as used in this policy includes but is not limited to various pavement defects that typically result from the normal aging of pavements, but are also frequently the

result of moisture infiltration and freeze-thaw cycles during the winter season. They may range in shape, size and depth, and can occur in all pavement types from “unpaved” surfaces, to built asphalt and concrete pavements. They may be the result of base collapses under the pavement, failure and material loss in cracks and joints, delamination of pavement layers, or simple deterioration and material loss of the pavement structure or street surface.

Utility cuts are not considered potholes for the purpose of this policy. Utility cuts are areas of pavement removed to repair or service an underground pipe, conduit, cable or other utility structure. Failed or open utility cuts, i.e., unrestored or failed temporary patches awaiting permanent repair, are often mistakenly reported as potholes. Once an alleged pothole is identified as a utility cut, different procedures regarding the city’s response apply and fall outside this policy.

4. **Types of repairs**

Pothole repair will generally fit into two categories; permanent and temporary repairs.

Permanent repair

Permanent repairs are generally performed in the summer construction and maintenance season which runs from approximately April 1st through December 1st. Permanent repairs take longer to complete due to additional steps needed to create a long-lasting, quality repair. Repairs are typically made with hot mix asphalt and other high quality materials and techniques. Adequate time is taken to remove temporary patches as needed, clean and prime the area with liquid asphalt cement, then apply and compact the asphalt in place. Repairs to concrete pavements may be done with asphalt or concrete in cases where that is deemed appropriate. Other techniques may also be utilized, including but not limited to spray injection patching or other modern procedures as they become available in the future.

Temporary repair

Temporary repairs are generally performed in the winter months, from approximately December 1st through April 1st, when warm weather, hot mix asphalt and other materials are not available. It is typically done by filling the potholes with “cold mix” asphalt without the cleaning, priming and placement procedures used when performing permanent repairs. The physical property that makes cold mix asphalt usable in winter months is that it is a very slow curing material that can stay workable for long periods and at low temperatures. Those same properties result in asphalt placement instability and consequently the life of the repair is inconsistent and unpredictable. Other materials may be used as well such as hot mix asphalt if it is available, hot recycled asphalt, spray injection methods, or any other potential patching method.

However, all repairs, patches or filling of potholes made with any material or process during the winter season are considered temporary remedies due to the general inability to

affect permanent repairs as described above. Some repairs will last only weeks, days, or even hours, and there is no way to predict how long they will last, or surmise with any certainty how long a particular repair lasted after its placement. There is no guarantee, expressed or implied, that temporary repairs will last for any time period due to repeated seasonal freeze-thaw cycles, freezing pavement conditions, and an inability to completely remove ice, water and moisture from the pavement to be repaired.

All repairs made to unpaved streets and alleys are considered temporary no matter what time of year they are performed as their surfaces are incapable of holding any type of repair.

5. **Criteria for Pothole Repair**

Not every defect or distress in a pavement surface is necessarily considered to be a pothole, or a problem in need of immediate or subsequent repair. However, there is no definitive way to describe in a consistent manner exactly which potholes will be repaired or not.

The decision to respond to a given size or severity of pothole will depend upon an assessment of the following factors:

- Location:
 - In a driving lane or parking lane.
 - On an arterial versus residential street versus an alley.
 - Traffic volumes and speeds.
 - The presence of pedestrian traffic or bike lanes.
 - All things being equal, the general priority for repair work is arterial streets first, residential streets second, and then alleys.
- Condition:
 - How likely a pothole is to cause vehicular damage, personal injury or severe disruption to traffic.
- Resource availability:
 - In winter months, snow and ice control is the primary mission of the Street & Bridge Department, and will supersede other activities. Resources will be directed toward snow and ice control activities as needed. Under certain circumstances pothole repair may be partially or totally suspended to accomplish the primary mission. Other activities such as street flooding may also deplete available resources when required. Supervisors will balance resources as needed depending upon conditions at the time; and
- In summer months, permanent pothole repair work is only one primary activity of street maintenance. Repair crews have other work including but not limited to utility cut restoration, crack sealing, seal coating, seal coat preparation, and alley resurfacing. Pothole repair activities will be appropriately prioritized and increase or decrease as that other work is performed if it is deemed to be of higher priority.

- Cost effectiveness and efficiency:
 - Because the numbers of potholes will always be far greater than the city’s ability to deal with them in a timely manner, the work must be prioritized. Crew resources are limited in comparison to the need. In order to be efficient and effective, supervisors will create routes for the crews to perform the work in the most efficient manner. A first-come first-serve reaction to specific reported complaints is inefficient and ultimately results in less repairs being made.
- Weather as a criteria affecting prioritization:
 - Weather can change priorities. A sudden thaw after a deep freeze during the winter may lead to an explosion in new potholes and will affect the supervisor’s decisions regarding prioritization of repairs. This may occur many times in a given season.
- Priority modifications:
 - If it is known that major work such as resurfacing, seal coating or construction is planned for a street or alley needing repair, repairs may be made only to the worst potholes while other repairs are ignored or modified in order to not waste financial resources, and be able to direct those limited resources to streets that will not receive more aggressive work that season.

Supervisors will factor in and balance all of the above criteria when creating daily plans or work routes. Routes will need to change with conditions and needs then present, particularly in the winter season.

Public Works supervisory staff, as designated by the Director of Public Works, has the discretion to decide the priorities of how and when potholes are repaired given all of the decision-making criteria set forth above.

6. **Weather Conditions**

Pothole repairs may be conducted only when weather conditions do not limit the ability to perform the work and when such work will not endanger the safety of city employees and equipment. Weather delays will affect response times. In the summer, rain may cause permanent pothole repair to be suspended. Response to severe winter storms or other emergency responses may divert resources to those higher priority events. During the winter, precipitation events will not only delay repair work during the event, but delays may be much longer due to the need to respond to snow and ice control events, and available resources.

7. **Documentation**

Due to the vast number of potholes that may exist across the city at any given time, it is not possible or reasonable to expect that workers will document each and every repair to potholes that are made under this policy. The types of records for pothole repair may

include:

- Specific responses to 311 reported cases; and
- General records that can be gleaned from time sheets. These records will not specifically identify each individual pothole, but may show the general street location where repairs were made. Summer records will be more detailed regarding specific repairs than winter records.

Both permanent and temporary repairs may be made that are not recorded. This is especially true for winter temporary repairs, as crews may fill potholes in isolated locations for a variety of reasons that do not warrant detailed record keeping.

8. **Warning Signs or Traffic Control Devices**

If the city knows of a pothole, or chronic surface problems in a street and it is not able to repair it, it may consider whether it should place warning signs or traffic control devices. Factors that will be considered will be the location of the pothole, it's potential to affect persons, property and traffic safety. Additional considerations are the time of year, the severity of the problem citywide, if temporary repairs are holding, resource availability and whether a warning sign or device would be effective. Warning sign or device placement decisions will be determined by whether it is an isolated problem that needs to be addressed, or so widespread across the City that placement of warning or traffic control devices at all locations is impracticable, if not impossible.

9. **Review and Modification of Policy**

This policy will be reviewed periodically to meet changing needs, budgetary limitations or any other relevant conditions as determined by the Director of Public Works.

10. **Savings clause**

This policy is a guide for City staff and the city of Minneapolis. When confronted with unusual circumstances or emergency situations, the City or Public Works Department may deviate from this policy if it is felt that the deviation is in the best interest of the City.