Preservation Chicago Unveils the 2018 Chicago 7 Most Endangered...

Brick Paved Streets and Alleys

Throughout Chicago

OVERVIEW:
Joni Mitchell sang “you don't know what you’ve got, ’til it's gone”, and Chicago’s brick-paved streets and alleys are almost gone. In the era before asphalt and concrete, Chicago had hundreds of miles of brick-paved streets and alleys. Most of Chicago’s brick-paved streets and alleys have been destroyed and hauled off to landfills, but some remain buried beneath the asphalt, and a few remain in use today.

The precise number of brick-paved streets and alleys is unknown as, to our knowledge, there has never been an accurate survey of this endangered resource. An important first step toward preservation would be a city-wide survey, followed by a moratorium on further damage or removal, and a requirement that repair to brick-paved streets and alleys be made with like materials.

The brick streets and alleys located within Designated Chicago Landmark Districts are theoretically protected as a significant and contributing feature of the Landmark District’s historic identity. However, construction from utility repairs (gas, electric, sewers) and homeowner projects (new garages and driveways) takes a heavy toll. Contractors are not required to restore the brick paving they disturb, so brick-paved historic alleys are often covered with a patchwork of asphalt and concrete repairs. Eventually, the condition becomes so degraded that the brick-paved streets or alleys are paved with asphalt, rather than repairing and resetting the brick pavers.

Chicago has a few remaining wood block streets and alleys, most of which have been asphalted over. A few historic sandstone sidewalks remain, which are frequently removed and discarded as part of sidewalk replacement programs. These also require attention and protection.

Brick Paved Streets and Alleys

Address:
Throughout Chicago

Date:
Primarily between 1880s and 1910s

Photo Credits:
Photos page 1, 2, & 4 © Eric Allix Rogers
Photos page 3 © Gabriel X. Michael
Photos page 5 © Adam Natenshon
Chicago 7: Brick Paved Streets and Alleys

Many municipalities, Oak Park for instance, have protected their sand stone sidewalks because of their beauty, rarity and durability; qualities which are seen to enhance property values.

HISTORY:
Originally, Chicago streets were packed dirt, which turned to thick mud when wet and were a constant source of frustration for early Chicagoans. Dirt roads were initially paved with inexpensive wooden planks and later with wooden blocks; however, this practice was largely phased out after the Chicago Fire of 1871. Between the 1880s and the 1910s, brick pavers were widely used throughout Chicago's highly traveled streets, as they were much stronger, highly durable, fire-proof, and remained functional when wet or snow-covered. These new brick paved streets proved up to the challenge of the wear and tear from steel rimmed wagon wheels of pre-automobile street traffic.

Chicago's street pavers were typically fired-clay bricks made from the tough clay abundant under the prairie grass. Heavier solid granite pavers were also used, especially in commercial and industrial districts where the streets were built to withstand incredibly heavy loads. In some instances where the granite pavers have been removed and hauled off to landfills, the contractors left the granite pavers in place under the medians to serve as the foundations for new concrete curbs due to their incredible strength and durability.

BENEFITS:
Brick Paved streets present immediate and long-term benefits to Chicago including: reduced long-term maintenance and replacement costs, reduced potholes and emergency pothole repair costs, reduced street patches, reduced traffic speeds, significantly increased pedestrian and cyclist safety, ADA accessibility, environmental benefits, and visual benefits.

Economic Benefits: The approximate lifespan of asphalt is 10 to 15 years and concrete is 20 to 30 years. The approximate lifespan of brick roads is over 150 years. In fact, the over 2,000 year old cobblestones laid down for Rome’s Appian Way are still in use today.
While the per square foot cost is higher for brick pavers than asphalt or concrete, the lifespan of brick pavers can be 6 or 10 times as long, which makes a powerful argument for the long-term economic advantage of brick pavers.

**Reduced Potholes:** Unlike asphalt and concrete roads, brick paved roads are not prone to potholes, as gaps between brick paver’s allow snow, ice and moisture to drain underground. An increase of brick paved roads would directly reduce the high cost associated with emergency pothole repair, lessen a significant burden on the City of Chicago, and reduce the frustration of Chicagoans with flat tires caused from potholes.

Perhaps even more destructive than Chicago winters, the high frequency of underground utility work (gas, electric, water, and sewer) leaves recently paved asphalt streets with unsightly and pothole-prone patches. When concrete and asphalt fail, removal, hauling off, and full replacement of the road surface is required.

**Eliminate Street Patches:** Brick paved streets are highly durable and easily repairable. When the construction crews complete their underground work, the gravel bedding layer can be re-compacted and the original pavers reset. It is often impossible to see where the pavers were disturbed. When brick pavers crack, that individual paver can simply be replaced.

**Safety:** Another benefit of brick paved roads is increased safety by significantly reducing traffic speeds. According to one study, the average speed dropped from 41 mph to 29 mph following a brick installation project. This represents 30% decrease in speed, but more significantly, the risk of death when a pedestrian is hit by a vehicle is approximately 4 times higher at 40 mph versus at 30 mph.

In 2017, 46 pedestrians and six cyclists were tragically killed after being struck by cars and trucks. The increased safety offered by brick paved streets to Chicago’s children, pedestrians, and bicyclists would be significant.
Chicago 7: Brick Paved Streets and Alleys

ADA Compatibility: Brick pavers are highly compatible with Americans with Disabilities Act (ADA) guidelines. There are hundreds of examples across the nation where brick paved streets, curb ramps, and adjacent sidewalks fully comply with ADA requirements. Furthermore, crosswalks across brick pavers streets do not need to be brick pavers, though, there are many examples where brick pavers are intentionally used for crosswalks to visually distinguish the crosswalk for reasons of aesthetics and safety.

Environmental Benefits: Rain water seeps down between the pavers into the ground below, which serves to slow and filter the water, thus reducing polluted runoff that builds up on our streets and sewers, and which ultimately ends up in Lake Michigan and Chicago’s drinking water. Additionally, by reusing brick pavers, the tonnage of petroleum-saturated failed asphalt and concrete hauled off to our landfills would be significantly reduced.

Visual Benefits: Brick and granite paving reflects a certain quality of construction and refinement within a neighborhood. They relate seamlessly to Chicago’s historic architecture and are perhaps more authentic in reflecting the time period in which many of these historic buildings were constructed.

RECOMMENDATIONS:
Nationally, internationally, and in the immediate Chicago-region, brick paver roads have consistently proven to be highly durable and remarkably resilient. Large cities such as New York, Boston, Philadelphia and St. Louis maintain brick paved streets. There are a number of examples where Chicago suburbs have found high levels of success. Wilmette restored seven blocks of roadway to brick pavers formerly covered by asphalt. Other communities such as Forest Park and Downers Grove have taken measures to restore their existing brick streets.
Preservation Chicago applauds the City of Chicago and the Chicago Department of Transportation (CDOT) for their preservation and restoration of granite paved streets in the Fulton Randolph Market District along Fulton Street.

Preservation Chicago recommends that the City of Chicago and CDOT recognize the value of brick paved streets and alleys for reasons of improved economics, safety, aesthetics, and sustainability. Necessary next steps should include:

1. An accurate survey of brick and granite paved streets and alleys.
2. A City Council moratorium preventing further damage or removal of existing brick paved streets and alleys.
3. A requirement that repairs to brick and granite paved streets and alleys be made with in-kind material.
4. Enforcement to ensure that utility repair crews and private contractors repair the brick paving they disturb.
5. Brick paved streets should be considered for installation in all Designated Chicago Landmark Districts.