



Keep Greeley Moving





Public Works Director Joel Hemesath

Keep Greeley Moving (KGM) had a good year in 2020. This fifth year of the road improvement program culminated in an important landmark, by the end of 2020 more than 60 percent of Greeley's roads ranked at "excellent" quality – the

program also won its second statewide paving award, but more about that later.

Getting Greeley's road network to that level took a lot of work and a lot of funding. Without the approval and continued support of the Greeley voters, none of this would have been possible. This is something to celebrate, but only for a moment.

As soon as a road is finished, repaved, sealed, repaired, or treated it starts degrading. That's just how roads work. The biggest factors in a road's degrading condition are moisture, sun, and dramatic freeze-thaw changes in temperature – and it turns out Greeley has all three of those in abundance.

Greeley builds good and high-quality roads – that's a huge reason our roads win awards. But, we need to keep working to repair our worse roads and vigilantly treat and maintain our good and excellent roads to ensure the city's road network, as a whole, stays healthy.

I want to stop and take a moment to celebrate this initial achievement of the KGM program, but then I want to keep working to improve, replace, repave, and expand the roads throughout Greeley. Because if we stop working as hard and fast as we have been, every road in Greeley will worsen and undo all the efforts so far.

Let me talk a bit about the work we've done. In 2015, voters approved a seven-year 0.65 percent sales tax. The KGM program includes road expansion projects, repairs, and improvement for neighborhood roads, arterial and collector streets. It also includes concrete and sidewalk infrastructure.

The KGM program won three awards for the work done in two neighborhoods it promised to improve – Rolling Hills and Sunrise. The KGM program also won "Overall Best Overlay Program" in the state of Colorado in 2020. Our system of local and residential roads makes up two-thirds of our overall road network and it is critical the city improves these roads in front of Greeley homes. In the last few years, our bidding process resulted in a great price for the overlay project contract. That excellent price meant the last few years' pavement maintenance programs managed to improve even more miles of Greeley road than we originally planned.

Additionally, our concrete maintenance program finished an inventory of the city's concrete network. Those crews have made quite a dent in the massive backlog of concrete repairs Greeley inherited when it took responsibility for all concrete sidewalks as a part of KGM. In the last year alone, the program replaced 8,701 linear feet of sidewalk.

Looking forward, the KGM program made commitments to four major areas: neighborhood roads, road widening, collector and arterial road overlay, and concrete maintenance.

The tax, and the KGM program, ends (sunset) Dec. 31, 2022, and there is a never-ending supply of streets needing repair and as soon as they are paved, they begin to deteriorate. We may not have your street on the list just yet, but with the continued support of voters, your road will likely see some improvements soon.

For more information, please go to KeepGreeleyMoving.com.

– Joel Hemesath, Public Works Deputy Director

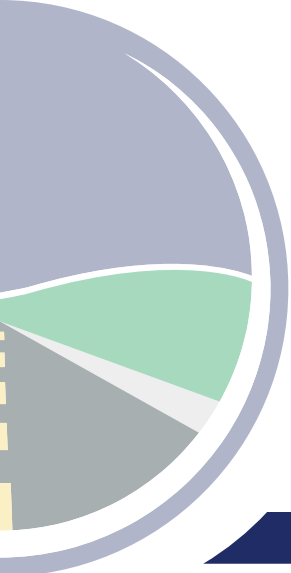
Credits

Cover photo shows overlay work in the Glenmere Neighborhood performed summer of 2020.v



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Keep Greeley Moving

Funding Allocation

It is estimated that the KGM tax will generate \$13.5 million annually. That amount combined with \$2.7 million from Food Tax revenue provides about \$16.2 million a year for street projects.

The graphic illustrates the annual funding allocation for each of the four commitments in the KGM program, and the following pages outline the details of those commitments.

Greeley currently has 52 miles of roads still needing a complete asphalt overlay at a cost of \$19.5 million and an additional 105 miles on the verge of needing overlay work at a cost of \$39 million, it's obvious there are many street needs in our city. The 0.65% sales tax has helps us touch 60 miles each year with crack seal, seal coat, overlay or other needed treatments.

\$16.2 M
Annual budget

Road Capacity
& Widening

\$3.6 M

Neighborhood Roads

\$8 M

Collector & Arterial
Road Maintenance

\$2.6 M

Concrete
Maintenance

\$2 M

Project highlight: 4th Street



Keept Greeley Moving completed the mill and overlay of 4th Street from 23rd Avenue to 35th Avenue in the summer of 2020.

Over time this increasingly important east-west road worsened and began to deteriorate with use. This past summer's overlay project took the nearly-1-mile stretch of road and gave drivers a brand-new arterial road to enjoy.

The work started with the removal of 4th Street's old surface. Crews then leveled the road and put down a special fabric to serve as a water barrier before overlaying the road with a new, high-grade asphalt surface.

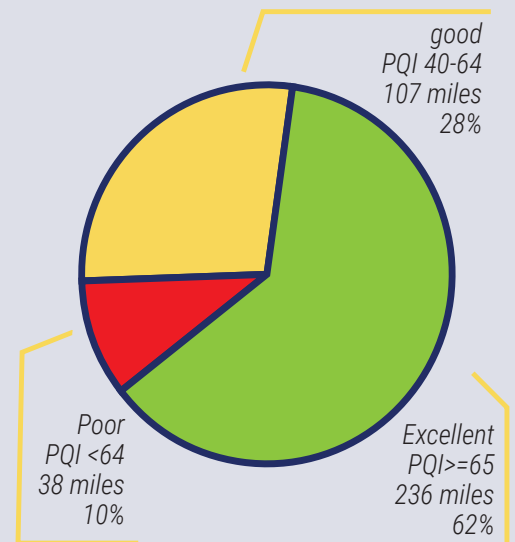
Pavement Quality Index

The City of Greeley is responsible for maintaining 381 miles of city streets every year.

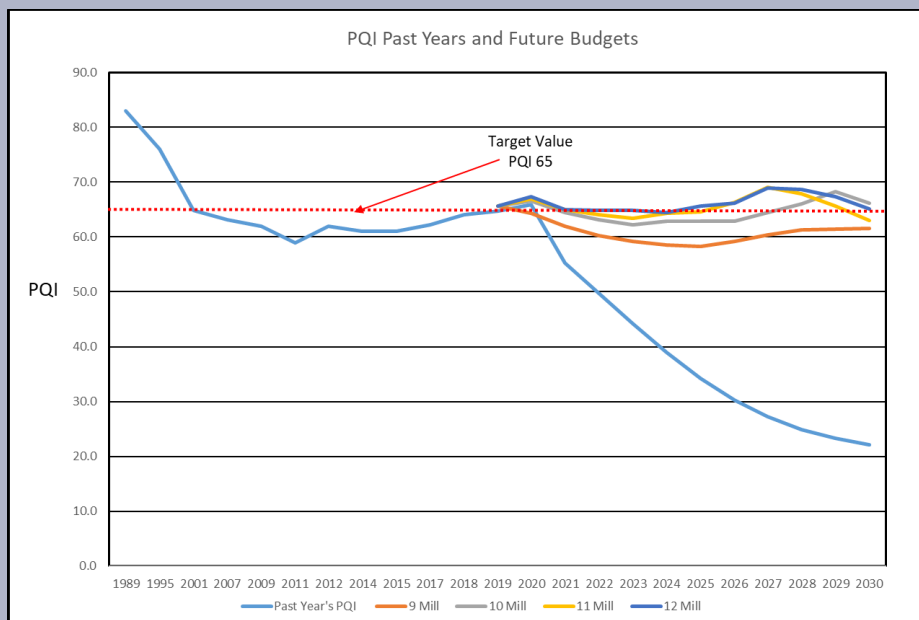
These streets are rated on a 0-100 Pavement Quality Index (PQI) scale, a nationally recognized pavement rating system. City officials' goal is to have 90 percent of all Greeley's streets with a PQI of at least 65.

In the early 2000s, the city's average PQI dropped below that goal. A lot of that had to do with road funding and minimal spending on the local road network. Around that time, Greeley staff managed to significantly improve the condition of the city's collector and arterial roads, but local roads make up two-thirds of the city's road system and continued to bring down the average PQI. With the declining condition of Greeley's local neighborhood roads, the city's PQI dropped.

The Keep Greeley Moving campaign is committed to maintaining all city roads. With the approval of the KGM 0.65 percent sales tax, city officials have funding through 2022 to improve local roads and improve the city's overall PQI.



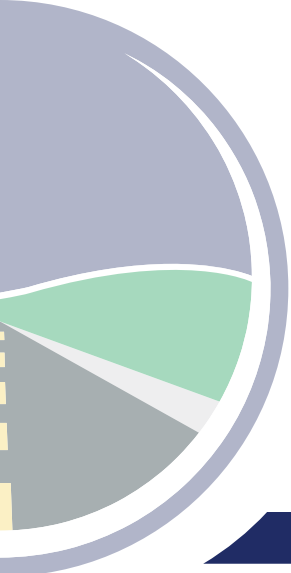
Currently only 236 miles, 62 percent, of Greeley's streets meet the 65-PQI goal.



This graph projects how Greeley's average PQI will change based on different levels of roadwork funding.

The plummeting blue line shows a future with no roadwork funding. The other diverging lines project Greeley's average road quality with 9 to 12 million in funding.

* A full-size version of this chart can be found at the end of the report in Appendix: C



Program Overview

Each year, City staff analyze the condition of Greeley's streets and implement one of five maintenance programs funded in the City budget.

The annual program requires coordination with the City's internal water, sewer and stormwater utilities, in addition to cable, gas and power franchise utilities – so they can perform any planned construction or upgrades before pavement maintenance begins.

The five programs listed below are designed to replace or extend roads beyond their anticipated 20-year life.

2020 — Completed

2021 — Planned

Overlay

Pavement overlay provides a new surface on existing streets that deteriorated to a condition that can't be repaired with general maintenance.

\$6,317,470

\$5,264,318

14.2 miles

8.8 miles

\$444,992 per mile

\$598,217 per mile

Chip Seal

Chip seal is a two-step process including an asphalt emulsion and then a layer of crushed rock. It waterproofs the existing surface and increases skid resistance. It can add 5-7 years to pavement life.

\$533,620

\$565,058

7.8 miles

7.6 miles

\$68,412 per mile

\$74,350 per mile

Seal Coat

A thin layer of asphalt and water mixture is sprayed over the pavement. This is done to protect roads from UV light and can add an additional 5-7 years to the pavement life.

\$145,500

\$190,000

5.4 miles

10.2 miles

\$26,944 per mile

\$18,627 per mile

Crack Seal

Crack seal consists of sealing the cracks in the pavement with a sealing product to prevent moisture from seeping under the pavement and causing potholes and road failures.

\$325,000

\$500,000

180,000 pounds

206,500 pounds

\$1.80 per pound

\$2.43 per pound

Patching

When part of a road fails, but the street's overall condition is good, the poor-quality area gets removed and patched.

\$1,239,025

\$1,250,000

26,618 sq yds (more than four footballs field)

24,800 sq yds

\$46.55 per sq yd

\$50.40 per sq yd

Road Capacity & Widening

Greeley's growing economic and cultural diversity has established the community as an economic hub. The presence of the University of Northern Colorado and Aims Community College creates an educational hub as well.

Those and other factors contribute to Greeley's past and anticipated growth. With the city's population expected to increase 50,000 by 2040,

more traffic is inevitable. To accommodate that growth, Greeley needs to increase roadway capacity.

When voters approved the Keep Greeley Moving tax in 2015, officials targeted three heavily-traveled roads in need of expansion. Those three road expansion projects will cost \$24 million total.

20th Street: 74th to 83rd Avenue—\$5,800,000

Growth and development along west 20th Street from 71st Avenue to 83rd Avenue caused a need to upgrade the roadway from a two-lane county road to a four-lane arterial roadway with medians and turn lanes. The roadway was improved to meet the needs of the community and support the ongoing growth in the area.

In 2019 and 2020, work continues to extend these improvements farther west.



71st Avenue: 12th to 22nd Street—\$9,087,000

This project improved an aging two-lane county road to modern city standards, expanded the road, added center and right-turn lanes, bike paths, detached sidewalks and more. As a part of the project, Greeley completely replaced the Sheep Draw Bridge south of 12th Street, allowing for the future expansion of Sheep Draw trail beneath it.

The 71st Avenue expansion project replaced an aging road and bridge and greatly improved the quality of an important Greeley roadway.



35th Avenue: 4th to "F" Street—\$9,080,000

This two-lane rural road has limited right-turn lanes and no sidewalks or bike lanes. Although both sides of this regional corridor have been developed, this significant northern gateway remains in poor condition. The area has had requests for sidewalks several times throughout the years. This project will widen 35th Avenue from 4th to "F" Street and will add on-street bike lanes, curb, gutter, sidewalks, roundabouts at C and F streets and landscaped medians.



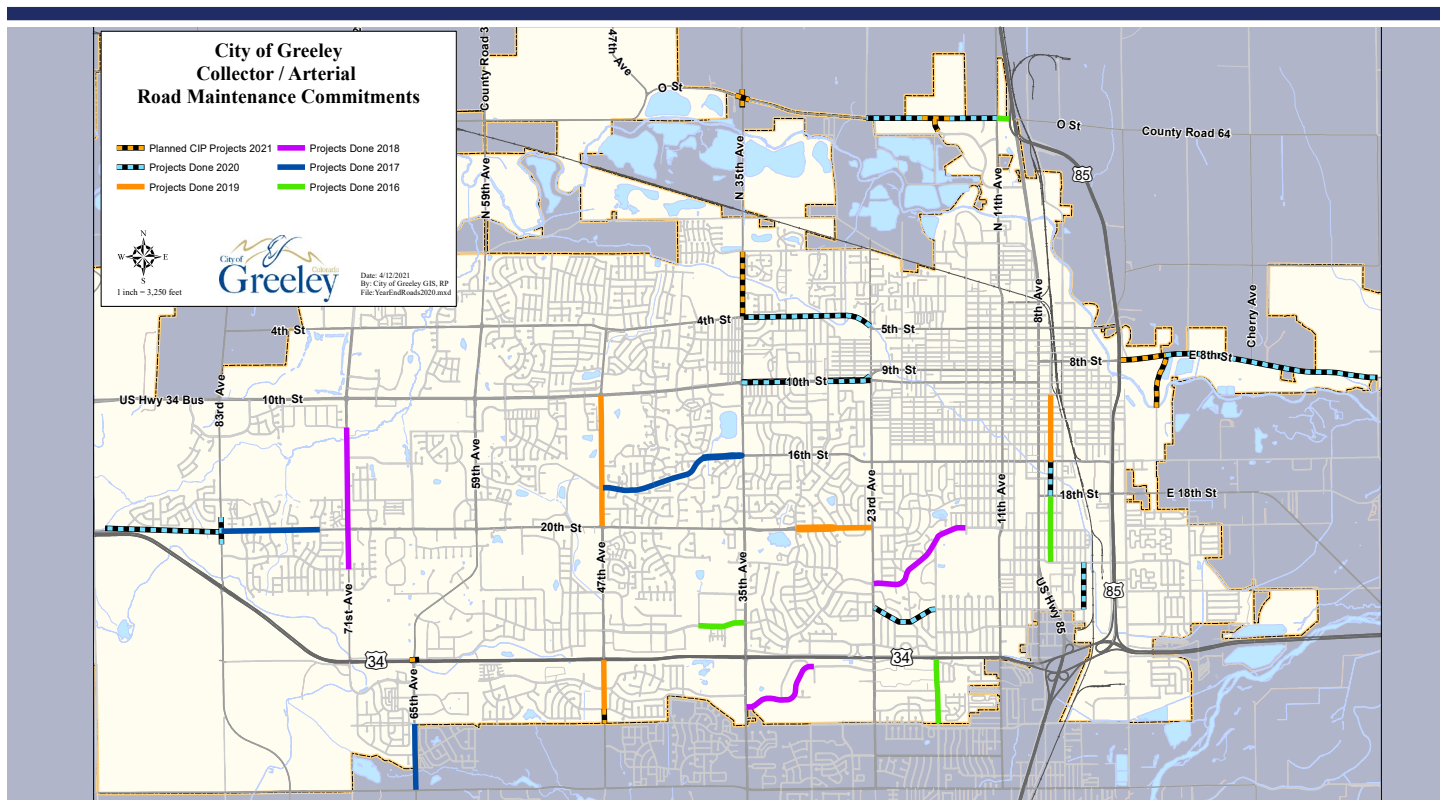
Keept Greeley Moving originally identified 10 heavily-traveled collector and arterial roads needing a complete overlay.

As the program gained extra funding, officials identified additional sections of road – 28th Street and an additional section of 25th Street – increasing the number of projects and bringing the projected cost to a total of \$7,258,443.

The first four projects were completed in 2016 and 2017 after voters approved the Keep Greeley Moving Tax.

In 2021, crews will overlay Ash Avenue: 8th to 16th Street.

Status	Project	Cost
✓	2016 17th Avenue: 34 Bypass to City Limits	\$424,265
✓	2016 7th Avenue: 18th to 22nd Street – phase 1	\$337,633
✓	2016 25th Street: 35th to 38th Avenue	\$496,177
✓	2017 16th Street: 35th to 47th Avenue	\$975,253
✓	2018 Reservoir Rd: 15th to 23rd Avenue	\$718,000
✓	2018 28th Street: Reservoir Rd to 27th Street	\$254,525
✓	2018 29th Street: 35th to 27th Avenue	\$635,250
✓	2019 7th Avenue: 13th to 18th Street – phase 2	\$270,240
✓	2019 47th Ave: 10th to 20th Street	\$1,167,695
✓	2020 25th Street: 23rd to 17th Avenue	\$365,000
✓	2020 4th Street: 23rd to 35th Avenue	\$750,000
	2021 Ash Avenue: 8th to 13th Street – phase 1	\$428,000
	2022 “O” Street: 25th to 35th Avenue	\$494,425
	2022 Ash Avenue: 13th to 16th Street – phase 2	\$428,000



* A full-size version of this map can be found at the end of the report in Appendix: A

Neighborhood Improvements

While developing the Keep Greeley Moving program, Greeley officials identified eight neighborhoods with the worst road conditions. With the approval of the Keep Greeley Moving program, those neighborhoods are getting the attention and work they need.

In 2020, more overlay work was completed – highlighted on the map below – throughout the eight neighborhoods. Roads in red will be completed in future years. In 2021, neighborhood improvement work will primarily focus on the

Clayton Neighborhood and downtown.

Although Greeley crews will overlay about 37 miles of neighborhood roads during a seven-year period, the city has far greater needs. Of the 243 miles of local roads in Greeley, more than 48 miles need a complete overlay. As funds become available, additional streets will be added to the list.

37 miles will be overlayed in eight neighborhoods in 7 years.

**Cascade
Park
24 Streets**

**Clayton
9 Streets**

**Cranford
11 Streets**

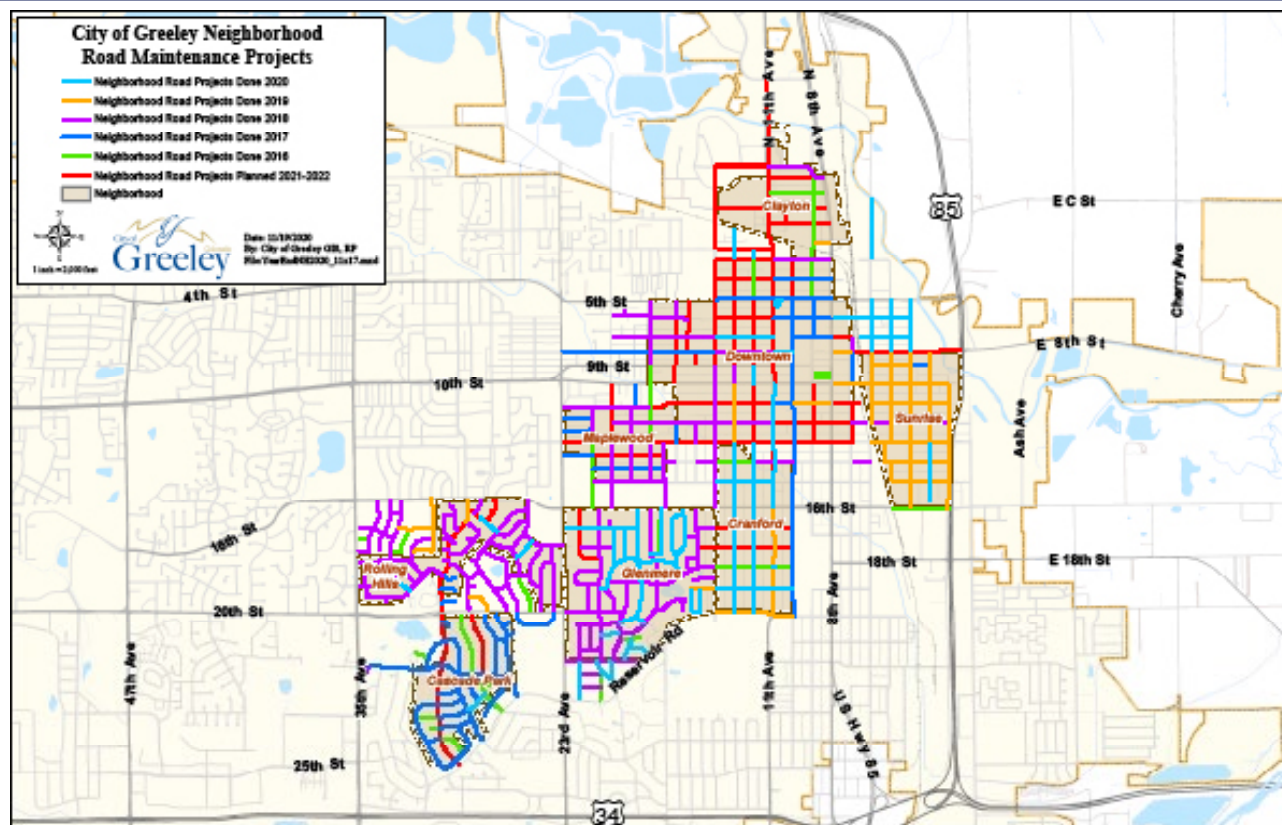
**Downtown
28 Streets**

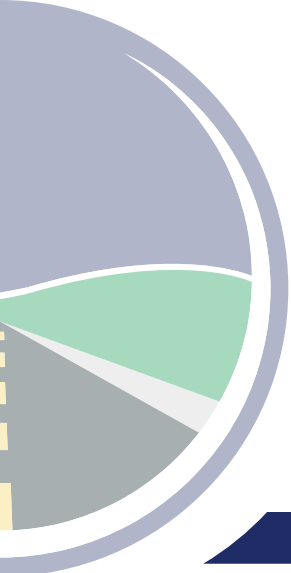
**Glenmere
25 Streets**

**Maplewood
10 Streets**

**Rolling Hills
39 Streets**

**Sunrise
25 Streets**





Concrete Improvements

As part of the Keep Greeley Moving 0.65% sales tax, the City of Greeley took responsibility for maintaining 700 miles of curb, gutter and sidewalk.

The concrete program has three essential functions: ADA-ramp repairs, general right-of-way concrete repairs, and neighborhood complaint repairs.

In 2016 the City developed a website enabling residents to register an online request for concrete repair. Along with website requests, residents can call and speak directly with a staff member. Requests began coming in for repairs in December of 2015.

Those requests, along with information from a completed inventory of concrete throughout Greeley, identified 329 locations with a high degree of hazard due to degrading or damaged concrete.

An inventory of Greeley concrete was completed in the summer of 2020. That process found more than 472,506 linear feet of degraded or broken curb and gutter, and more

than 1,633,090 square feet of 4-, 6-, and 8-inch, concrete flatwork in need of repair. All told, the running total of those repairs comes out to more than \$44 million.

In 2020, Concrete Maintenance Programs replaced and repaired:

- 64 ADA Ramps
- 8 Cross pans
- 8,701 Linear feet of sidewalk

o On streets overlaid in 2019-2020 and in neighborhoods in the Keep Greeley Moving program

o Lots of work in the Glenmere Neighborhood included replacing cross pans, but those were

recorded here in square feet

- \$44,637.63 in trip hazard mitigation work
- 292 addresses had repairs made in 2020

In 2020, the Concrete Maintenance Program worked in Glenmere, Hillside-Farr, UNC-Arlington Heights, and Weber West neighborhoods. The program also made extensive improvements on 71st Avenue bike path.

Need to request a repair?

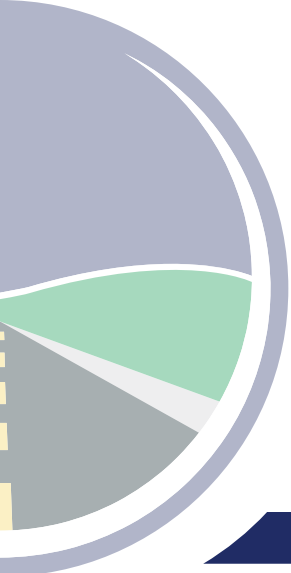
KeepGreeleyMoving.com

(970) 350-9881

Concrete Hazards

The Concrete Maintenance Program inspects, schedules, and repairs displaced or damaged concrete sidewalks and curbs in Greeley's right-of-way. The sidewalk work helps reduce trips and falls due to deteriorating and aging sidewalks, aprons, and access ramps. The curb work helps ensure proper water flow to the storm drain system

Trip hazards, usually displaced or damaged concrete, can be temporarily repaired by grinding the lifted area. If a sidewalk or apron has too high of a vertical displacement (usually above 1.5 inches), it will be temporarily repaired with a concrete or asphalt patch. After an area is temporarily repaired, it is evaluated and added to the appropriate program for replacement. If you see or know of a hazard, please go to keepgreeleymoving.com or call (970) 350-9881.



Upcoming for 2021

2021 Overlay Program

- 1 43rd Ave. – 10th St. to 16th St
- 2 31st Ave. – 29th St. to 29th St.
- 3 4th Ave. – 31st St. to 30th St.
- 4 30th St. – 1st Ave. to 4th Ave.
- 5 7th Ave. – 16th St. to 18th St.
- 6 46th Ave. – 20th St. to 21st St. Rd.
- 7 18th St. – 72nd Ave. to West CDS
- 8 19th St. – 71st Ave. to 72nd Ave.
- 9 72nd Ave. – 18th St. to 19th St.
- 10 Downtown

Each year staff review the Keep Greeley Moving plan to determine the most appropriate project and determine the most efficient timing for those projects. Utility construction, maintenance, or the reassessment of existing road conditions can cause the rescheduling of street maintenance.

In 2021, Keep Greeley Moving will focus its efforts on the Clayton neighborhood.

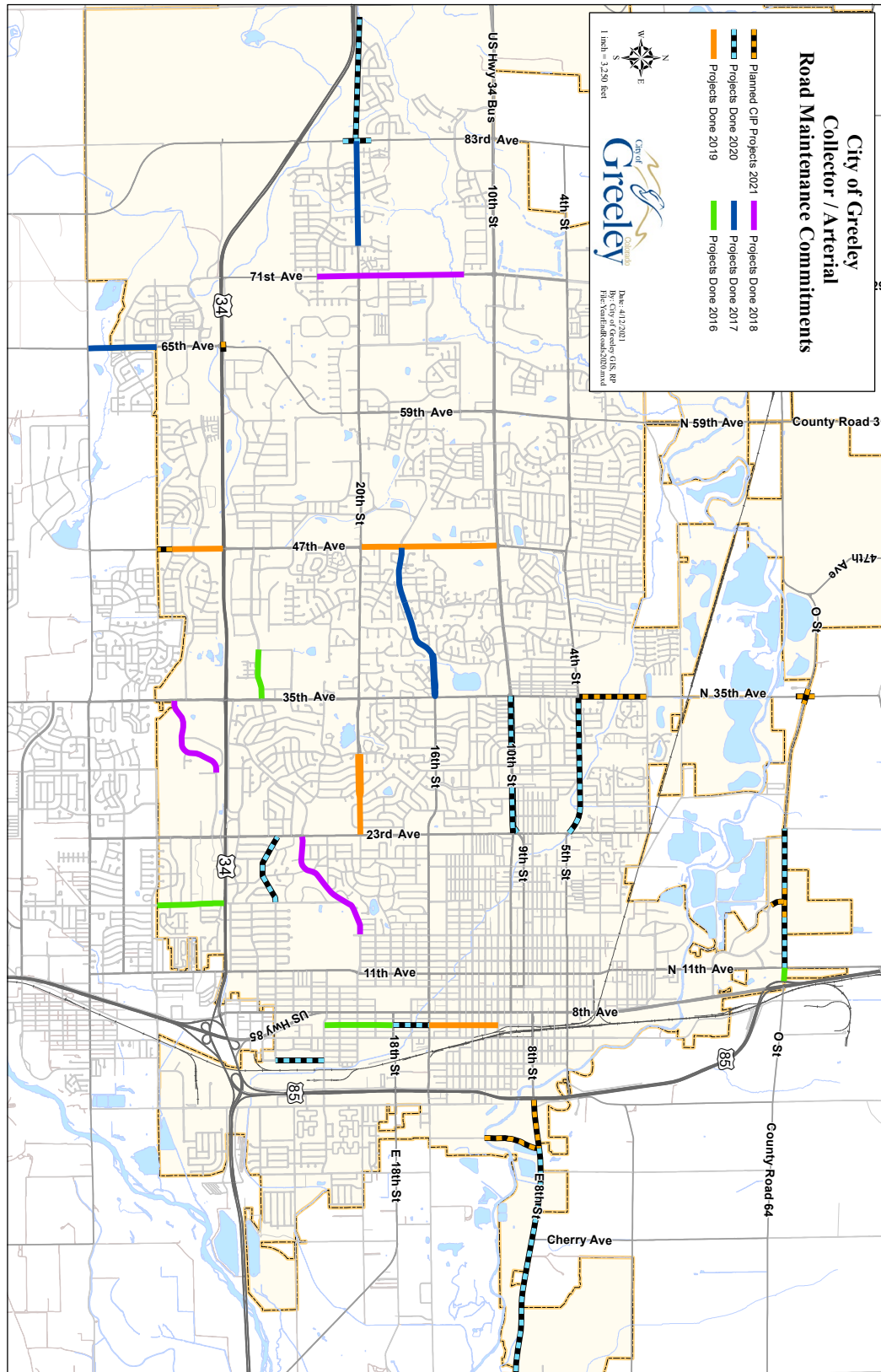
Underway

43rd Ave: 10th St. to 16th St



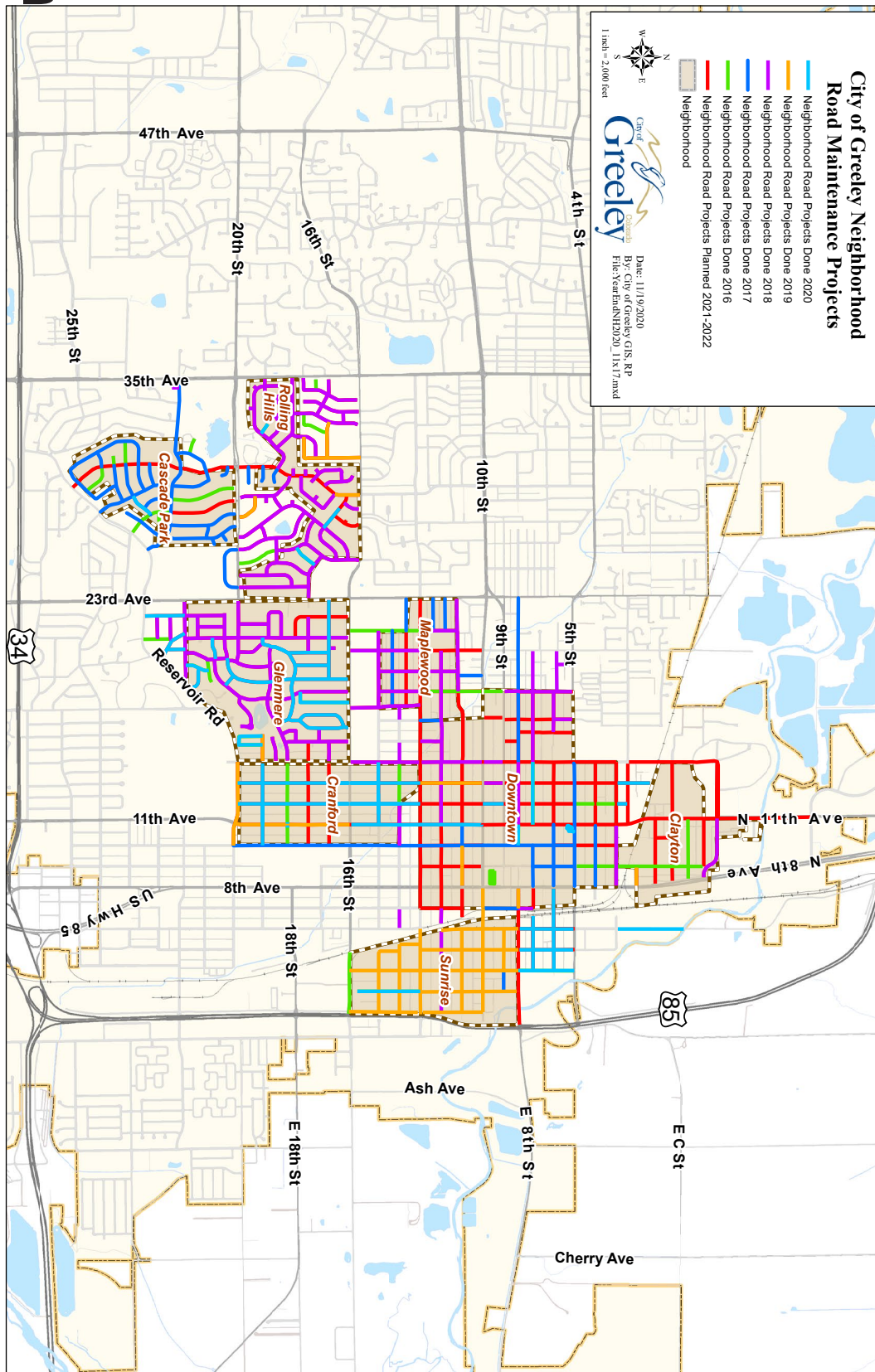
Appendix A:

Collector and Arterial Commitments



Appendix B:

Neighborhood Road Maintenance



Appendix C:

PQI Funding Projections

