



# Keep Greeley Moving





Public Works Director Joel Hemesath

2018 marked a productive year for the Keep Greeley Moving (KGM) program. Our second major road expansion project – 71st Avenue road and bridge – reached substantial completion.

Our bidding process resulted

in a great price for our overlay project contract. That excellent price meant this year's pavement maintenance program managed to improve even more miles of Greeley road than we originally planned.

Additionally, our concrete maintenance program started making a dent in the massive backlog of concrete repairs by replacing more than 11,000 feet of curb, gutter, and sidewalk – all of which the city agreed to take ownership of when voters passed Keep Greeley Moving.

We did a lot we are proud of in 2018 and we're looking forward to the great work we will do these next few years as we head into the backside of the KGM tax's seven-year lifespan.

In 2018, the city saw a huge push into neighborhoods that have been neglected for decades. 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's homes. To that end, we're celebrating the significant work accomplished in the Rolling Hills and Cottonwood neighborhoods northeast of 20th Street and 35th Avenue – and Maplewood neighborhood north of 13th Street and 21st Avenue.

In addition to the excellent overlay contract price, approval from voters at the end of 2017 to keep extra KGM tax revenue, due to a strong

economy vastly increased the city's ability to improve Greeley's roads. That additional money allows the KGM program to expand and include several additional streets that were not originally scheduled for the first seven years – such as 29th Street east of 35th Avenue and 68th Avenue near Farr Library.

With three years of work under our belt, we are focused and determined to complete the remaining work and see the benefits of the improvements to our road network. There is a never-ending supply of streets needing repair. And as soon as they are paved, they begin to deteriorate because of our high elevation and the freeze-thaw conditions our area sees in the winter.

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

The estimated \$16.8 million a year is allocated as such:

- » \$7.2 million – neighborhood roads
- » \$3.6 million – road capacity and widening
- » \$4.2 million – collector and arterial road maintenance
- » \$1.8 million – concrete maintenance

With 61.2 miles of roads needing a complete asphalt overlay at a cost of \$34 million and an additional 125 miles on the verge of needing overlay work at a cost of \$66.8 million, it's clear there are many street needs in our city. We are optimistic that the 0.65% sales tax will help us touch 60 miles each year with crack seal, seal coat, overlay, or other needed treatments.

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 in the near future.

For more information, please go to [KeepGreeleyMoving.com](http://KeepGreeleyMoving.com).

– **Joel Hemesath, Public Works Director**

## Credits

Cover photo shows overlay work on Reservoir Road performed summer of 2018.



# Table of contents

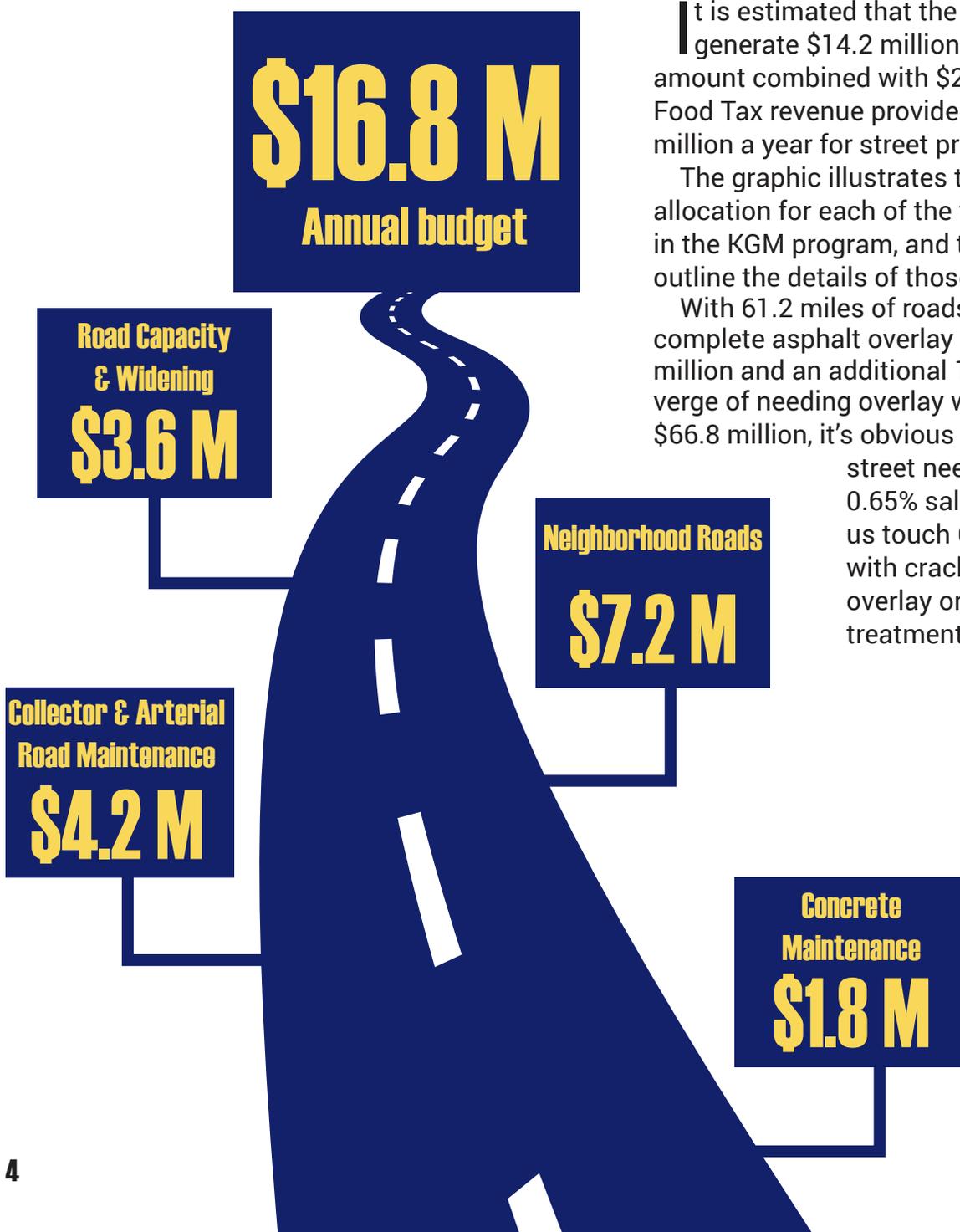
---

- **Keep Greeley Moving funding allocation – 4**
- **Pavement quality index – 5**
- **Project highlight – 6**
- **Program overview – 7**
- **Road capacity and widening projects – 8**
- **Keep Greeley Moving commitment – 9**
- **Neighborhood improvements – 10**
- **Concrete improvements – 11**
- **What's next? – 12**
- **Maps – 13 & 14**



# Keep Greeley Moving

## Funding Allocation



It is estimated that the KGM tax will generate \$14.2 million annually. That amount combined with \$2.6 million from Food Tax revenue provides about \$16.8 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.

With 61.2 miles of roads needing a complete asphalt overlay at a cost of \$34 million and an additional 125 miles on the verge of needing overlay work at a cost of \$66.8 million, it's obvious there are many

street needs in our city. The 0.65% sales tax has helped us touch 60 miles each year with crack seal, seal coat, overlay or other needed treatments.

# Project highlight: Reservoir Road



**K**eept Greeley Moving completed the mill and overlay of Reservoir Road between 23rd and 14th Avenues in the summer of 2018.

About a dozen years ago that stretch of Reservoir Road was chip sealed, but over time the 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 Reservoir Road'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

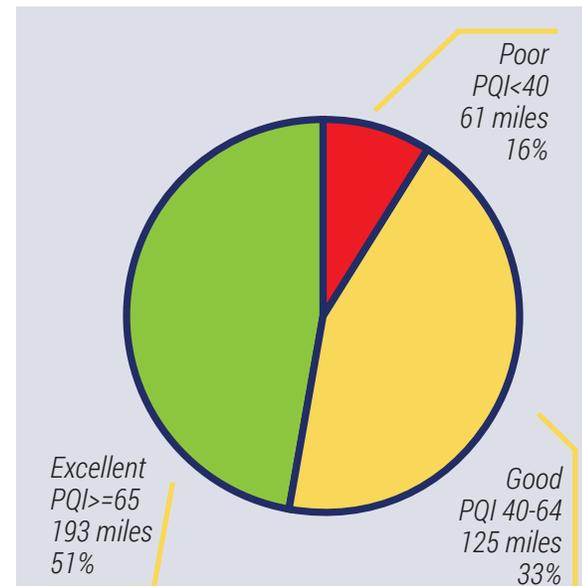
The City of Greeley is responsible for maintaining 379 miles of city streets every year.

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.

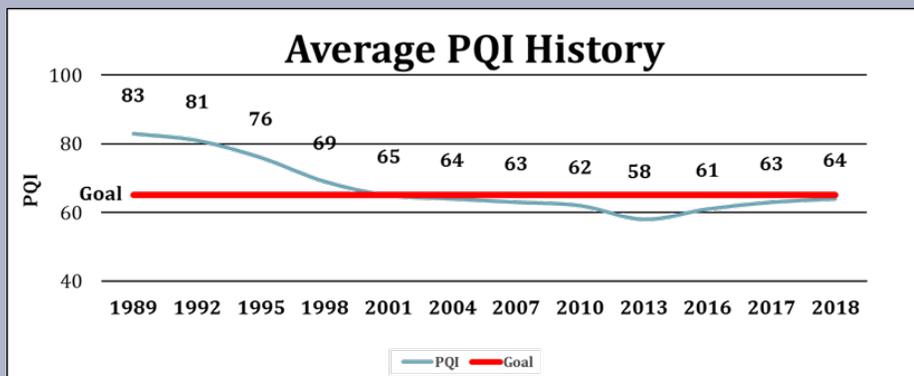
In the early 2000s, the city's average PQI dropped below that goal. A lot of that had to do with road funding and minimal spending on the local road network. Around that time, Greeley staff managed to significantly improve the condition of the city's collector and arterial roads, but local roads make 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 increase in PQI from 58 in 2013 to 61 in 2016 was due in large part to an additional contribution averaging \$4 million annually from 2011 to 2015. Those one-time contributions from the general fund were made possible by higher severance and sales tax revenue due to a robust local economy and savings that were realized by lower general fund expenditures.

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.



This pie chart identifies the percentage of streets in poor (<40), good (40-64) and excellent (65-100) condition. Currently only 193 miles or 51 percent of Greeley's streets have met the at-least-65-PQI goal.



This graph shows how Greeley's average PQI has changed in recent years.

The increase in PQI from 58 in 2013 to 61 in 2016 was due in large part to an additional contribution that averaged about \$4 million annually from 2011 to 2015.



# 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.

## 2018 – Completed

## 2019 – Planned

### Overlay

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

\$7,083,900

\$5,519,063

14.41 miles

9.22 miles

\$491,596 per mile

\$598,596 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.

\$1,248,900

\$968,900

16.2 miles

10.7 miles

\$97,600 per mile

\$98,700 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.

\$182,233

\$145,000

5.51 miles

5.9 miles

\$33,073 per mile

\$28,579 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.

\$403,920

\$500,000

244,800 pounds

312,500 pounds

\$1.65 per pound

\$1.60 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.

\$1,351,000

\$844,700

32,690 sq yds (three-quarters the size of a football field)

30,500 sq yds (the size of Lincoln Park)

\$41.50 per sq yd

\$41.50 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.



## 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, a traffic signal at "C" Street and landscaped medians.



# Collector and Arterial Road Commitments

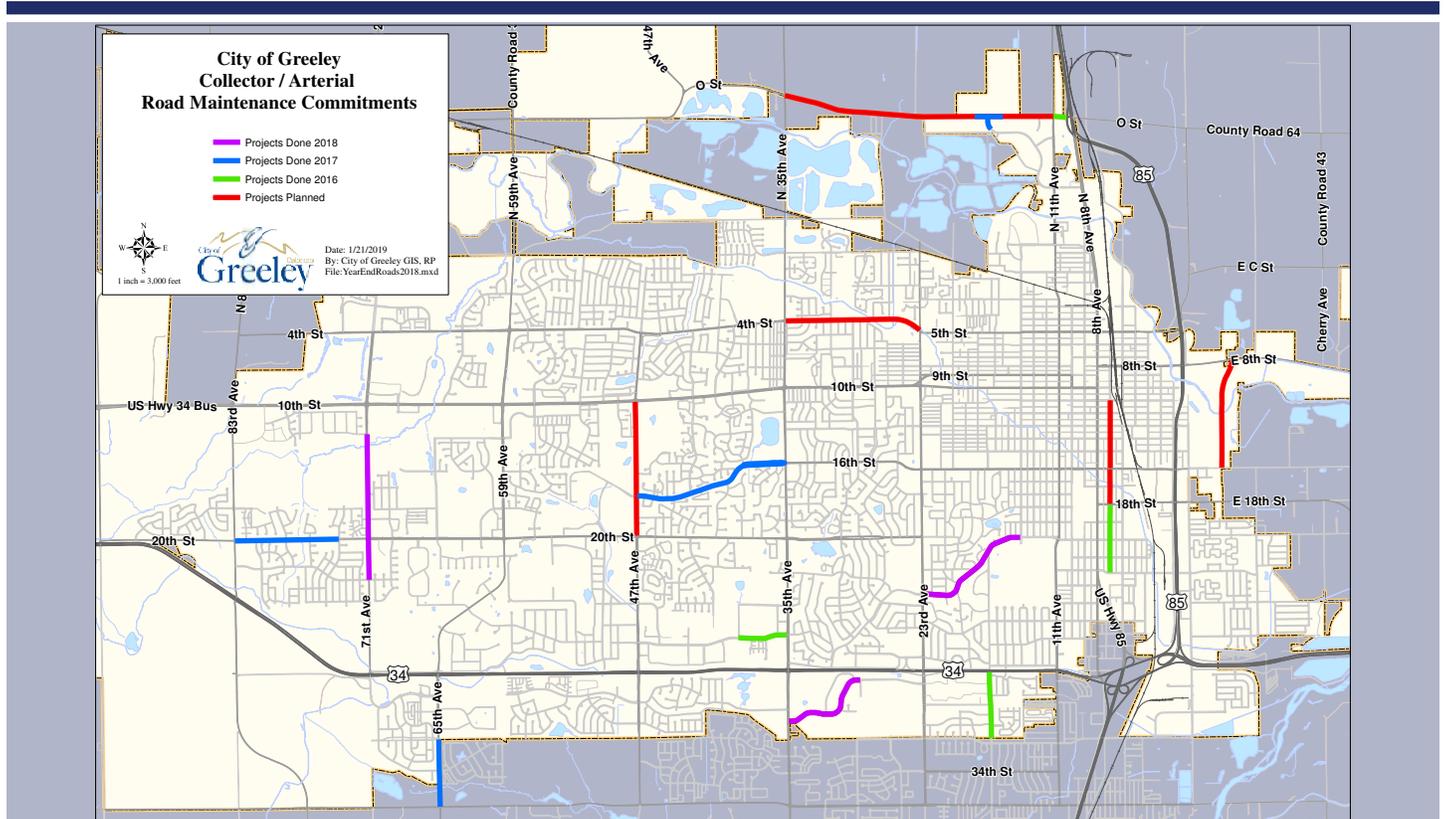
**K**eep Greeley Moving originally identified 10 heavily-traveled collector and arterial roads needing a complete overlay.

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 2019, crews will overlay 7th Avenue and 47th Avenue.

| 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          | \$300,000   |
| 2020   | “O” Street: 25th to 35th Avenue           | \$494,425   |
| 2022   | 4th Street: 23rd to 35th Avenue           | \$765,000   |
| 2022   | Ash Avenue: 8th to 16th Street            | \$419,980   |



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

# Neighborhood Improvements

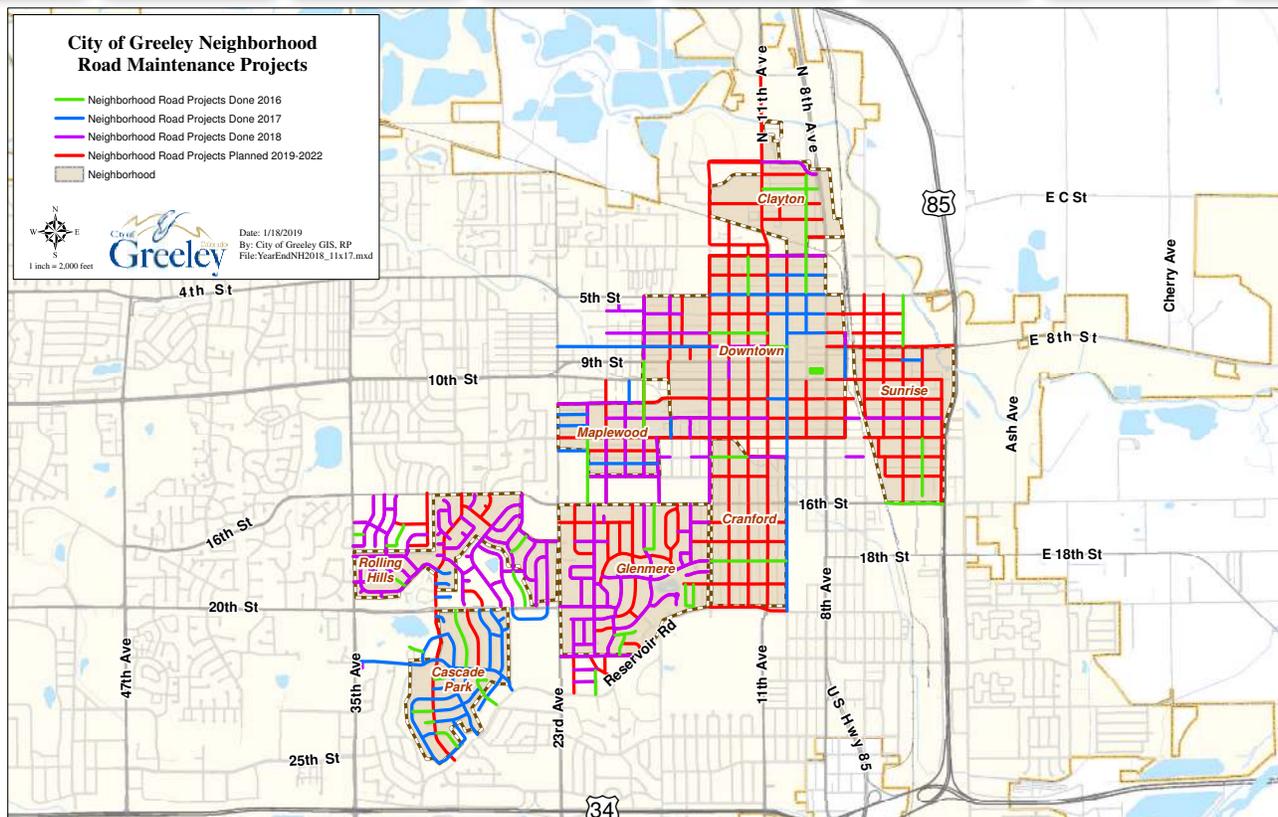
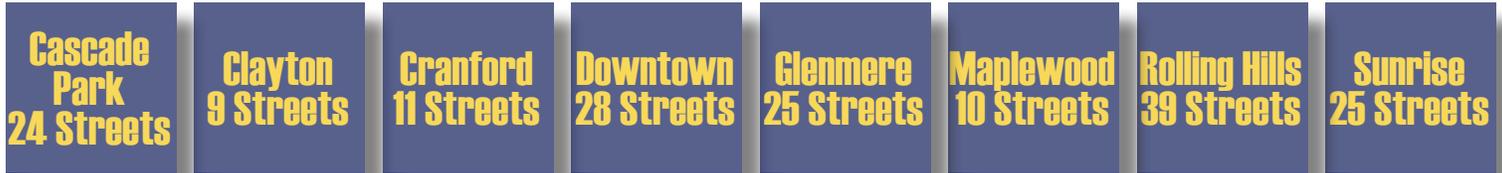
While developing the Keep Greeley Moving program, Greeley officials identified eight neighborhoods with the worst road conditions. With the approval of the Keep Greeley Moving program, those neighborhoods are getting the attention and work they need.

In 2018, more overlay work was completed – highlighted on the map below – throughout the eight neighborhoods. Roads in red will be completed in future years. In 2019, neighborhood improvement work will primarily focus on the

Sunrise 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 overlaid in eight neighborhoods in 7 years.





# 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 and currently the Concrete Maintenance staff has 281 outstanding requests creating a \$1.8 million citizen request backlog. In 2018, Greeley's concrete crews managed to complete 40 resident requests to repair damaged concrete.

In Keep Greeley Moving neighborhoods there is a 27-mile, \$13 million backlog of needed concrete work in KGM neighborhoods. Staff also began taking a complete inventory of concrete

throughout Greeley to determine the city's overall needs.

In early 2016 Concrete Maintenance staff identified the condition of all ramps in Greeley. Of the 6,319 ramps, 849 or 13.4 percent were ADA compliant. In 2018 that number increased to 20 percent.

In 2018 concrete maintenance programs replaced or repaired:

- 224 ADA ramps at approximately \$3,600 each.
- 20 cross pans
- 18,201 linear feet of sidewalk (on streets overlaid in 2018 and in neighborhoods in the Keep Greeley Moving program)

- \$19,000 worth of trip hazard mitigation.

In 2019, concrete maintenance programs will include work in the Sunrise neighborhood. Concrete repair will also occur on streets being overlaid to bring sidewalks and ramps up to ADA compliance. Currently throughout the entire city there are more than 1,500 cross pans with an estimated 35 percent in need of repair.

## 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 2019

## 2019 Overlay Program

- 1 47th Ave. - 10th St. to 20th St.
- 2 47th Ave. – U.S. 34 to city limit S
- 3 10th St. - 23rd Ave. to 35th Ave.
- 4 7th Ave. - 11th St. to 13th St.
- 5 14th St. – 7th Ave. to 8th Ave.
- 6 29th St. – 65th Ave. to circle west
- 7 Sunrise Neighborhood
- 8 Glenmere Rd. – 14th Ave. to end

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 2019, Keep Greeley Moving will focus its efforts on the Sunrise neighborhood.

## COMING 2021

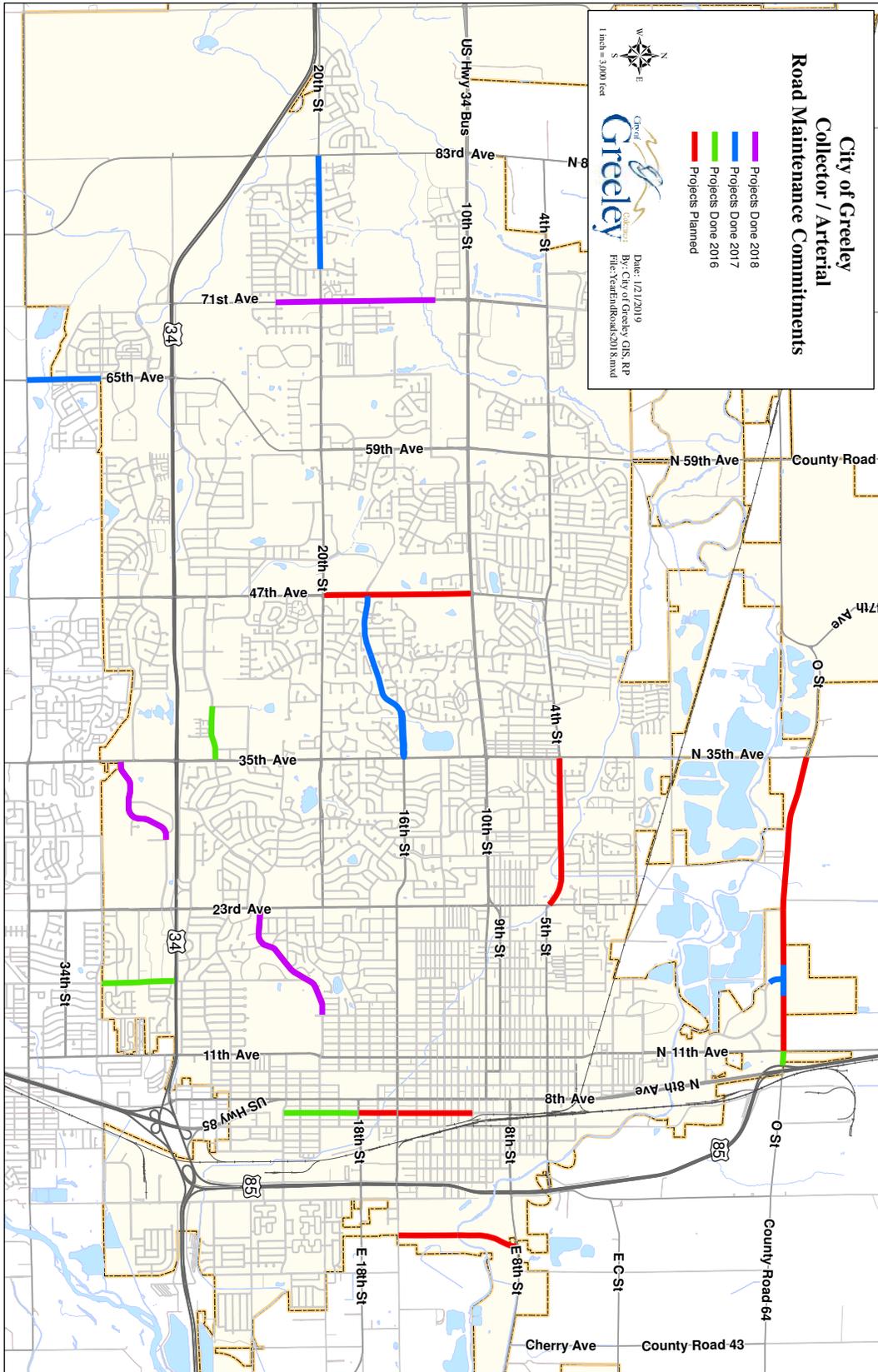
### 35th Avenue: 4th to F street



Work on this \$9.1 million project to widen 35th Avenue in order to increase the road's capacity will begin 2021. Design will begin in 2019.

# Appendix A:

# Collector and Arterial Commitments



# Appendix B:

# Neighborhood Road Maintenance

