

# Santa Fe & Mineral Improvements Project



## FREQUENTLY ASKED QUESTIONS

The City of Littleton reviewed feedback collected through an Open Littleton survey about the Santa Fe & Mineral Improvements project. The most frequently asked questions from the survey are listed in this document with the project team's responses.

### Public Involvement

#### Will the city seek public input in the design of the quad road?

The design team will consider input from the public as the design progresses and will **incorporate feedback into the design** that is feasible within the overall project schedule and budget.

#### Will there be opportunities in the future for public involvement?

The city will involve residents and stakeholders throughout the design process over the next several months. Join the **distribution list on the website** to be notified of engagement opportunities.

#### How will the city educate drivers to understand and properly use this quad road?

Wayfinding and additional signage will be included in the design to help drivers use the new intersection properly. In addition, **the City will launch an educational campaign** as construction nears completion.

### Construction

#### How long will construction of the quad road take to complete and how will traffic be accommodated during construction?

The construction of the quad road and the improvements to Santa Fe Drive and Mineral Avenue will take **about two years**. The quad road construction will take place mostly off the main routes so impacts to traffic flows will be minimal.

#### How much will it cost to obtain right-of-way, and design and construct the quad road?

The quad road has **received funding** in partnership with CDOT. The full project is roughly **\$27 million** from start to finish. The quad road and the surrounding improvements are within city and CDOT right-of-way. Additional right-of-way may be needed along Mineral Avenue and Platte River Parkway to improve pedestrian and bicycle mobility and can be accommodated as part of the project funding.

### Operational

#### How does the new design improve traffic operations compared to the slow speeds and long queues today?

Today, the drive regularly takes more than 10 minutes to go southbound from Church Avenue to Mineral Avenue in the evening rush hour. When the quad road opens, this trip should take less than five minutes and the length of the traffic backup at Mineral Avenue should **decrease more than 90 percent**. Travel delay and queue lengths for vehicles waiting at the traffic signal will similarly decrease along the other approaches to the intersection.

#### How much additional traffic can the quad road configuration accommodate?

Today, **90,000 vehicles** travel through the Santa Fe Drive and Mineral Avenue intersection each day, with significant delay during rush hours. The quad road configuration will accommodate at least **30 percent growth**, or at least 115,000 vehicles before nearing the system's capacity. Most drivers will experience shorter delays than they do today.

#### Are there examples of active quad roads in the United States?

Quad roads have been **successfully installed** in many states including Kentucky, Illinois, North Carolina, Ohio, Oregon, and Virginia. **On the project website is a video** of a partial quad road in North Carolina, where left turns are restricted at the main intersection for two of the four approaches.

#### Who will need to use the quad road?

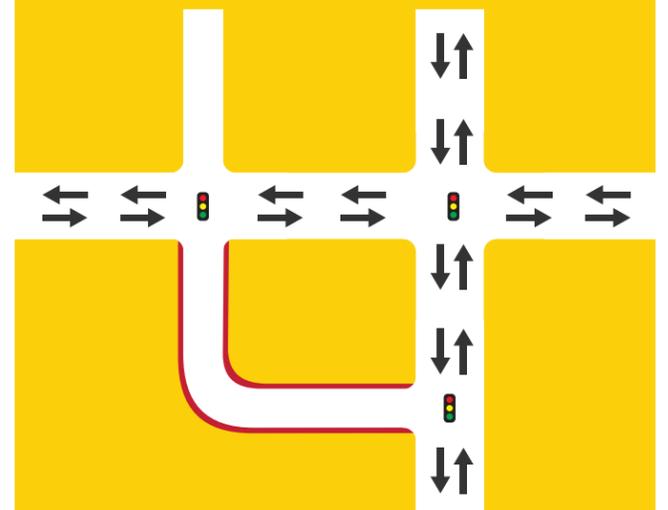
Anyone turning left at Santa Fe Drive and Mineral Avenue today will need to use the quad road to reach their destination. This means some drivers will need to travel out of direction, but the **time savings will offset the travel increase**.

#### Will the new quad road design improve safety?

**Left turns will be eliminated** at Santa Fe Drive and Mineral Avenue, reducing the chance of opposite-direction crashes. Limited data is available because quad roads are still relatively new, but injury and fatal crashes typically decrease when left turns are redirected away from the main intersection.

### Quadrant Road

An intersection that relocates left-turn movements to a new roadway, separate from Mineral Avenue and Santa Fe Drive. Rather than using a left-turn lane on Mineral Avenue or Santa Fe Drive, users are relocated to a quadrant road for the left-turn movement.



### Participate at [www.littletongov.org](http://www.littletongov.org)



If you have additional questions that aren't included here, please submit them through the project website to receive a response.



### Operational CONTINUED

#### How will congestion decrease if a new traffic signal is added along Santa Fe Drive south of Mineral Avenue?

The new traffic signal south of Mineral Avenue and the existing one at Mineral Avenue will be timed to **optimize traffic flow**. Because the new traffic signal takes left turns away from the main intersection, the green time at that intersection can be given to the through movements along Santa Fe Drive and Mineral Avenue instead of splitting up the green time with left turn arrows. This allows the high traffic volumes on all four sides of the intersection to move through more efficiently.

#### Will improving congestion along Santa Fe Drive help reduce cut-through traffic in local neighborhoods?

The quad road will likely **reduce the amount of traffic** cutting through local neighborhoods to avoid congestion at the Santa Fe Drive and Mineral Avenue intersection, especially in the evening rush hour. Remaining on Santa Fe Drive and Mineral Avenue should be the quickest option, so cutting through will be less attractive.

#### Why is there a U-turn on Santa Fe Drive at the new Nichols Avenue intersection?

The U-turn offers another option for drivers to access eastbound Mineral Avenue from southbound Santa Fe Drive that will **save significant travel time**. Drivers can also use the quad road to reach eastbound Mineral Avenue.

#### Can large commercial vehicles use the U-turn?

Vehicles more than 12,000 pounds (like a large semi-truck) are not allowed to travel on Mineral Avenue east of Santa Fe Drive so **they would not be using the U-turn**. If a large vehicle does need to access Mineral Avenue for a particular reason, they can use the quad road which is designed to accommodate semi-trucks.

#### How will the quad road accommodate those walking and biking through the area?

As part of the quad road design, a **shared-use path** will be provided along Platte River Parkway, which will be extended south of Mineral Avenue. The quad road project also includes improvements to bicycle and pedestrian crossings along Mineral Avenue at Platte River Parkway and the 7-Eleven driveway.

#### Will the quad road increase my travel time during off-peak hours?

Some drivers making left turns may see minimal additional travel time during off-peak hours, but the **daily savings of the quad road are significant**.



### Design

#### Will the quad road include any ramps to separate traffic, or will there just be traffic signals?

The quad road will not include any grade-separated ramps or bridges to separate traffic. The design will use existing and planned infrastructure more efficiently by using the **two existing traffic signals** on Mineral Avenue at Santa Fe Drive and Platte River Parkway, and a new signal just south of Mineral Avenue on Santa Fe Drive. This allows the city to **improve traffic conditions** on a much faster timeline and at a much lower cost than providing a grade-separated interchange.

#### Will it be safe to make a U-turn on Santa Fe Drive?

The designated U-turn lanes from southbound to northbound Santa Fe Drive at Nichols Avenue will have a fully protected traffic signal phase. This means when the U-turn lanes have a protected green arrow, all other conflicting traffic movements will have a red signal. This provides a **high level of comfort and safety** for the U-turn movement.

#### If there will be an interchange at Santa Fe Drive and Mineral Avenue in the future, why not save the funds from the quad road and invest in a long-term solution?

The quad road is a **long-term solution** and is expected to perform well for more than a decade – and even longer if no improvements are made elsewhere along Santa Fe Drive and Mineral Avenue. Without those outside improvements, an interchange might not be needed, and that money can be spent on other improvement projects in the city.

#### Does the quad road design account for traffic from planned developments around the quad road and at Aspen Grove?

**Yes**, additional traffic from proposed developments has been considered in the future traffic modeling and design for the quad road. The design accommodates these trips in addition to those additional future vehicles passing by on Santa Fe Drive and Mineral Avenue due to anticipated development in Douglas County and south Jefferson County.

#### Is the quad road the ultimate design for the Santa Fe Drive and Mineral Avenue intersection, or are there plans to build an interchange?

**An interchange could be considered in the future**, but such a design would be extremely expensive and impactful during construction. Securing funds for a grade-separated interchange will take years, if not a decade or more, and the Santa Fe Drive and Mineral Avenue intersection needs a solution now.

### Project Timeline



**Spring 2024**

Final design will be completed



**Fall 2024**

Construction is expected to start



**2026**

The new quad road and surrounding improvements will be open in 2026

