

Truck Routes and Tipping Fees Overview

Truck Routes History

Commerce City truck routes were adopted by City Council via an ordinance in 1987. Truck routes were recommended by the City Engineer at the time based on a multitude of factors. In general, the key considerations engineers take into account when establishing truck routes are as follows:

- **Public Safety:** Routes are chosen to avoid areas with high pedestrian traffic.
- **Road Infrastructure:** Bridge heights, weight limits, road width, and the overall capacity of the road network are evaluated to ensure the route can handle large trucks.
- **Traffic Flow:** Routes are planned to minimize congestion and ensure smooth traffic flow, often requiring the use of highways and arterial roads.
- **Accessibility:** Routes need to provide access to key destinations including industrial areas and businesses.
- **Highway Connections:** Routes are planned with consideration of connections to major highways that can handle high volumes of truck traffic, ensuring trucks can quickly enter and exit the city.
- **Tipping fees are not a consideration.** A tipping fee is a charge levied upon a given quantity of waste received at a waste processing facility. This fee is charged to waste haulers when they deliver waste to landfills or recycling centers. The tipping fee helps cover the costs associated with the operation and maintenance of the waste processing facility.

Tipping Fees Collected

- 2020- \$1,145,910
- 2021- \$1,177,720
- 2022- \$1,224,894
- 2023- \$1,424,768
- 2024- \$1,485,621
- 2025 Projected- \$1,455,797
- 2026 Projected- \$1,495,858

Assuming 1.5% growth:

- 2027- \$1,518,296
- 2028- \$1,541,070
- 2029- \$1,564,186
- 2030- \$1,587,649

96th Avenue Truck Route

Current Conditions

Currently along 96th Avenue, west of Potomac, truck volumes are approximately:

AM Peak (0715-0815) - EB=59 and WB=34

PM Peak (1515-1615) - EB=30 and WB=82

Total Daily Trucks on 96th Avenue is approximately 1,170.

If 96th Avenue were to be removed from the City's list of approved truck routes, then the truck volumes that currently utilize that roadway would have to be rerouted to the 104th Avenue corridor.

Intersection Analysis

96th Avenue/Highway 2

- Peak hour EB trucks at 96th Avenue/Highway 2 would be re-routed north up Highway 2 to 104th Avenue. EB trucks would have to make a left-turn movement through a single left turn lane in lieu of the through movement in two through lanes. The time allocated to the EB left turn green would need to be significantly increased, which would take away time for WB traffic traveling through the intersection.
- Trucks complete a left-turn movement at a slower pace through passenger vehicles and there is more green time lost from truck left turns.
- There would be significant impact to the level-of-service at this intersection, which is already nearing capacity during the AM peak due to very heavy SB through and WB left volumes.

104th Avenue/Tower Road

- With 96th Avenue truck volumes redistributed to 104th Avenue, the NB left movement would be highly impacted by the additional trucks.
- During the PM peak, the Synchro model indicates that the NB left turn storage lanes would spill back into the #1 NB through lane. The volume/capacity(V/C) ratio increased from 0.71 to 0.88. The current V/C ratio of 0.71 indicates that the movement is generally functioning satisfactorily.

- As the V/C moves toward 1.0, this indicates that the movement is reaching its full capacity and increased congestion and delay will result. With added volume due to natural growth over the next 20 years in the area, it is anticipated that the additional truck traffic for the NB left will lead to significant operational issues.

104th Avenue/Highway 2

- With 96th Avenue truck volumes redistributed to 104th Avenue, the WB left movement would be impacted by the additional trucks.
- During the PM peak, the current V/C is .96. With the additional trucks from 96th Ave, the V/C increases to 1.17.
- Similar to the NB left at 104th/Tower, the result would be WB left turn volumes spilling back into the #1 WB through lane of 104th Ave during the PM peak hour.

Summary of Findings and Staff Recommendation

Below is information for consideration regarding the 96th Avenue designated truck route. In general, there would be significant impacts to traffic operations during peak hours if the 96th Avenue truck route were to be removed. The three major intersections along the corridor, 96th/Highway 2, 104th/Tower, and 104th/Highway 2, would be heavily impacted.

As the department responsible for the transportation network and signal operations, Public Works does not recommend rerouting trucks from 96th Avenue as there would then be impacts on other corridors not designed to support the level of traffic or weight of traffic generated from truck routes.

Colorado Boulevard Truck Route

Road Analysis

Colorado Boulevard to the north of 70th Avenue currently carries approximately 1,360 trucks per day with SB volume of 675 and NB volume of 685.

It is assumed that a percentage of this volume would need to be rerouted to alternate truck routes including 74th Ave, Dahlia St, and US 85. 74th Avenue would be the most logical alternative to the Colorado Boulevard truck route. However, it is unknown what percentage of the current truck volumes would need to be rerouted as there are existing business operations, including Brannan Gravel, that cannot be rerouted off Colorado Blvd. Enforceability would need to be addressed by Commerce City Police Department.

If we assume that 50% of these trucks would be rerouted, the impacts to the surrounding roadway network and alternate trucks routes may be minimized. Staff does not have a Synchro model of these corridors nor the volume data available that would allow staff to construct a model. The alternate routes for trucks in this immediate area would not fall on Commerce City maintained roadway and coordination/outreach to CDOT and Adams County Public Works would be needed.

Summary of Findings and Staff Recommendation

Below is information for consideration regarding the Colorado Boulevard designated truck route.

In concept, Public Works would support the reduction in the number of cut-through trucks on Colorado Boulevard to improve the quality of life for residents along Colorado Boulevard.

Engineering analysis does not support adding physical barriers to prevent trucks from exiting Colorado Boulevard. However, the 68th Avenue multimodal improvement project will explore ways to enhance safety for all users of the 68th Avenue corridor and discourage trucks from turning off Colorado Boulevard, considering its proximity to a designated truck route

Staff will pursue contracting a third-party engineering firm to complete the modeling and data collection needed for a complete analysis. Staff will then coordinate with the appropriate jurisdictions to discuss feasibility and next steps.

The estimate for collecting the critical intersection data and the modeling exercise for 74th Avenue is \$25,000.