Truck Routes and Tipping Fees Overview

08/25/2025

Overview

- Outline history of truck routes in Commerce City
- Review considerations for truck routes
- Define impact of truck routes on tipping fees
- Discuss the 96th Avenue and Colorado Boulevard 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. Truck routes can be changed via a new ordinance that is adopted by the City Council.

History Continued

- The most heavily utilized routes in the City, not listed in order, are: 56th Avenue, 96th Avenue, Colorado Boulevard, Tower Road, and Quebec.
  - Due to the recent/ongoing improvements to Colorado Boulevard and 96th Avenue, staff determined it would be most appropriate to explore these two routes.

Establishing Truck Routes

- 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

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Tipping Fees

- 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.
- Truck routes do not impact the amount levied for a tipping fee.

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

Current Conditions

- AM peak truck volumes (0715-0815) - EB=59 and WB=34.
- PM peak truck volumes (1515-1615) - EB=30 and WB=82.
- Total daily trucks on 96th Avenue is approximately 1,170.

- Upon completion of the widening project, the level of service for the roadway will increase to C or better except for the SB movement at 96th/Chambers during the PM peak hours.

96th Ave/Hwy 2 → Hwy 2/104th Ave

- Peak hour EB trucks at 96th Avenue/Highway 2 would be re-routed north up Highway 2 to 104th Avenue.
- EB trucks would make a left-turn movement through a single left turn lane in lieu of the through movement in two through lanes.
  - Time allocated to the EB left turn green would need to be increased, which would decrease 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 Ave/Tower Road Impact

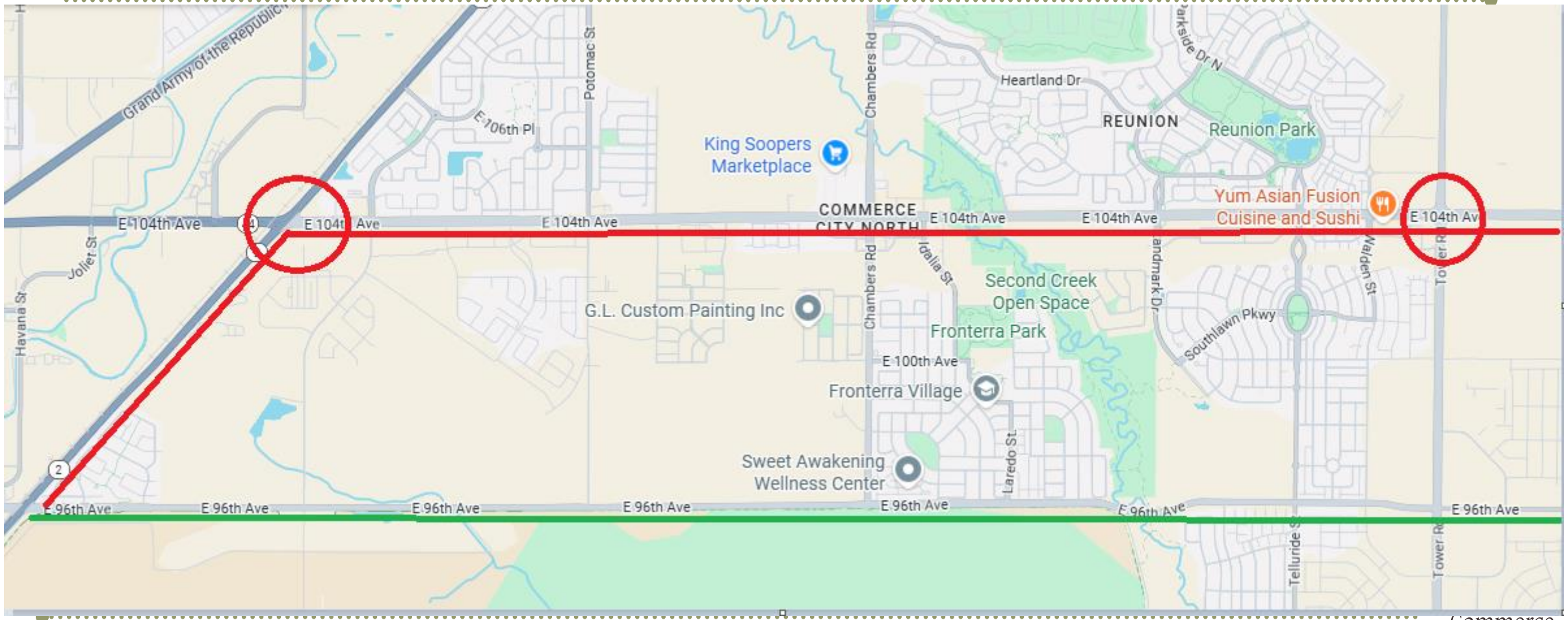
- With 96th Avenue truck volumes redistributed to 104th Avenue, the NB left movement would be highly impacted by the additional trucks.
- During the PM peak, the Synchro model indicates that the NB left turn storage lanes would spill back into the #1 NB through lane.
  - The volume/capacity(V/C) ratio increased from 0.71 to 0.88.
  - Current V/C ratio of 0.71 indicates that the movement is functioning satisfactorily.
- As the V/C moves toward 1.0, the movement is reaching its full capacity, and increased congestion, and delays.
- 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 Ave/Hwy 2 Impact

- 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.
- The result would be WB left turn volumes spilling back into the #1 WB through lane of 104th Ave during the PM peak hour.

Map of Routes

Green line = current route
Red line = alternative route
Red circles = negatively impacted intersections if route shifts



Recommendation

- If 96th were to be removed from the City's list of approved truck routes, the three major intersections along the corridor, 96th/Highway 2, 104th/Tower, and 104th/Highway 2, would be heavily impacted.

- 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

Current Conditions

- Total daily SB truck volume = 675.
- Total daily NB volume = 685.
- Total daily trucks on Colorado Boulevard is approximately 1,360.

Colorado Blvd→ Other Roads

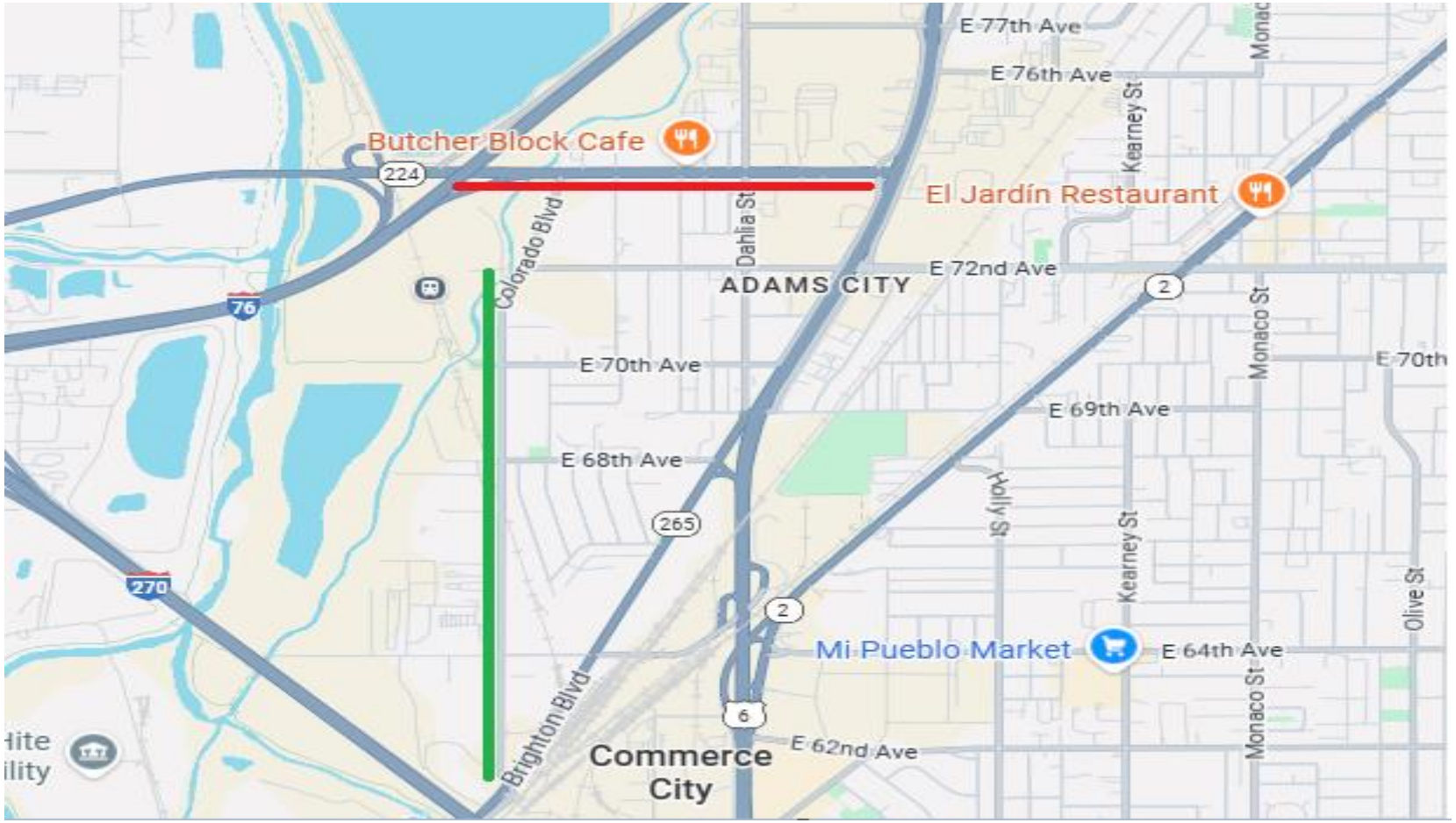
- Trucks would be rerouted to alternate truck routes including 74th Avenue, Dahlia Street, and US 85. However, it is unknown what percentage of the current truck volumes would need to be rerouted as there are existing business operations that cannot be rerouted off Colorado Boulevard.
- 74th would be the most logical alternative route.

Colorado Blvd→ Other roads Continued

- Assuming only 50% of these trucks would be rerouted, the impacts to the surrounding roadway network and alternate trucks routes may be minimized.
- Staff currently 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.

Map of Routes

Green line = current route
Red line = assumed alternative route



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Recommendation

- 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.

Recommendation Continue

- 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.

Discussion