



City of Arts & Innovation

Transportation Board

TO: TRANSPORTATION BOARD **DATE: AUGUST 7, 2024**

FROM: PUBLIC WORKS DEPARTMENT **WARD: 5**

SUBJECT: ESTABLISHMENT OF AXLE RESTRICTION – SEGMENT OF MADISON STREET

ISSUE:

Consideration of establishment of an axle restriction on Madison between Indiana Avenue and Victoria Avenue prohibiting cut-through traffic by commercial vehicles exceeding three axles.

RECOMMENDATION:

That the Transportation Board recommend that the Infrastructure & Mobility Committee review and provide recommendation regarding the proposed establishment of an axle restriction prohibiting cut-through traffic by commercial vehicles exceeding three axles on Madison Street from Indiana Avenue to Victoria Avenue.

BACKGROUND:

The Public Works Department may establish weight limits or axle restrictions to prohibit use of select streets by larger commercial vehicles. Weight limit restrictions are often utilized to reduce commercial truck traffic on certain local, residential, or collector roadways by directing truck traffic onto larger collector or arterial roadways and assist in preserving the pavement and promoting safe use of streets which may have distinctive roadway conditions, are residential in nature, or experience cut-through truck traffic. Axle restrictions are utilized to restrict larger commercial trucks which exceed 3 axles from cutting through arterial roadways as an alternative to traveling on local area freeways or to bypass congestion on local freeways. Such restrictions do not prevent use for the purpose of delivering or picking up of materials/merchandise or the performance of services in connection with a property within the specific block.

Historic classification counts conducted on Madison Street south of Indiana Avenue to assess truck traffic volumes along the corridor had previously not reflected excessive truck traffic (exceeding 3 percent of total traffic) for a multi-lane arterial roadway, thus implementation of an axle restriction had not been recommended. Periodic reassessment of truck traffic volumes on this segment of Madison Street was supported due to area resident concerns and reported increases in commercial truck traffic along the roadway.

DISCUSSION:

A classification count conducted in March 2024 on Madison Avenue south of Indiana Avenue reflected elevated truck activity along the corridor with a combined truck traffic volumes of 4.0 percent of total traffic volumes. The Public Works Department is proposing establishment of an axle restriction prohibiting use by commercial trucks exceeding 3 axles on Madison Street from Indiana Avenue to Victoria Avenue to reduce cut-through traffic to improve quality of life and help preserve the road. The axle restriction is now recommended based on updated classification count data performed in March 2024 which resulted in the percentage of truck traffic above the maximum 3 percent truck traffic threshold utilized by the City and consistent with the Federal Highway Administration (FHWA) guidelines. The maximum 3 percent truck traffic threshold has historically been utilized to determine if there is excessive truck traffic cutting through a particular arterial. As the March 2024 classification counts reflected a combined truck traffic volume of 4 percent of total traffic volumes, an axle restriction was recommended to prohibit cut-through truck traffic by larger trucks exceeding 3 axles to reduce higher commercial truck traffic volumes and to restore expected levels of truck use (3 percent or below) along this stretch of the Madison Street corridor.

The proposed axle restriction will deter potential cut-through commercial truck traveling through the County between local freeways. The proposed axle restriction would also aid in reducing safety and noise concerns created by large truck use and preventing excessive asphalt damage on this segment of roadway.

Implementation of the proposed axle restriction would aid in regulating heavy truck traffic on this segment of Madison Street keeping larger trucks on local area freeways promoting safer operations and reducing impacts to residential neighborhoods which sit adjacent to or back up to this segment of Madison Street. Trucks which exceed 3 axles directly enroute to business locations in the vicinity and/or engaged in pick-up and/or delivery activities within this area would be compliant with the regulations and not considered in violation of the posted axle restrictions and vehicles with 3 axles or less would not be impacted.

STRATEGIC PLAN ALIGNMENT:

This proposal follows Strategic Plan Goals 2.4, to “Support programs and innovations that enhance community safety, encourage neighborhood engagement, and build public trust” and 6.2, to “Maintain, protect and improve assets and infrastructure within the City’s built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.” Additionally, proposed establishment of an axle restriction relates to the cross-cutting threads as demonstrated below:

1. Community Trust: Establishment of axle restrictions develop Community Trust through the assessment of commercial truck activity on public roadways to ensure that commercial truck volume levels do not exceed standards. Excessive truck activity may be the result of cut-through truck traffic associated with elevated traffic volumes, noise, and damage to roadway pavement.
2. Equity: The establishment of axle restrictions on roadways improves the quality of life within neighboring communities by reducing noise, cut-through traffic, and by improving safety.

3. Fiscal Responsibility: Axle restrictions are a cost-effective measure to mitigate cut-through commercial truck traffic and notify commercial truck drivers of the prohibited use by trucks exceeding three axles.
4. Innovation: This proposed axle restriction represents a continuation of innovative uses of successful axle restrictions implemented in the past.
5. Sustainability & Resiliency: Axle restrictions help to restore commercial truck traffic to at or below standard levels while allowing for commercial truck activity related to local business and pick-up and delivery of goods and services and enable police enforcement to address trucks in violation. Adopted and posted restrictions help to deter cut-through activity enhancing safety, reducing noise, and helping to preserve roadway pavement condition.

FISCAL IMPACT:

The cost of sign fabrication and installation is estimated to be \$2,000. Funding is available in the existing Public Works, General Fund, Streets Maintenance Division, Signing Supplies account number 4110100-424143, to cover this cost.

Prepared by: Philip Nitollama, City Traffic Engineer
Approved by: Gilbert Hernandez, Public Works Director

Attachments:

1. Site Map
2. Aerial Map
3. Truck Analysis
4. PowerPoint Presentation