

City of Arts & Innovation

TO: TRANSPORTATION COMMITTEE MEMBERS DATE: SEPTEMBER 8, 2016

FROM: PUBLIC WORKS DEPARTMENT

WARDS: ALL

SUBJECT: TRUCK ROUTES TECHNICAL ANALYSIS - UPDATE

ISSUE:

The issue for Transportation Committee consideration is to receive updated information regarding establishment of truck routes within the City.

RECOMMENDATIONS:

That the Transportation Committee:

- 1. Receive and file this report containing updated information pertaining to the establishment of truck routes in the City of Riverside; and
- 2. Support continued use of enforcement, special raised median configurations, and expansion of weight limit restrictions on select streets to better restrict truck traffic.

BACKGROUND:

On December 10, 2015, the Transportation Committee (Committee) reviewed a preliminary analysis regarding establishment of truck routes within the City. Upon review of the initial report, the Committee requested that the Public Works Department further assess the topic to include evaluation of enforcement options and the potential need for community meetings to obtain public input and return to the Committee with updated information.

The Public Works Department conducted truck volume studies in 2015 and 2016 on select arterial roadways including some in the County of Riverside and within the March Joint Powers Authority (JPA) to determine current truck volumes, percentage of trucks, and the potential impacts to the circulation element and adjoining agencies as a result of establishing truck routes. The Highway Capacity Manual (HCM) is used by transportation professionals including the Public Works Department to assess traffic and environmental impacts on roadway projects. The HCM establishes that an acceptable truck traffic percentage on a typical roadway is three percent (3%) of total traffic volume.

In order to assess truck traffic, the Federal Highway Administration (FHWA) classifies trucks/heavy vehicles by the system shown in Figure 1:



Figure 1: FHWA Vehicle Classifications

Analysis of select roadway segments using the FHWA truck/heavy vehicle classification system revealed that truck percentages along the major arterials of Alessandro Boulevard, Van Buren Boulevard, and Trautwein Road fall below the average level of 3% provided in the Highway Capacity Manual. Table 1 is a compilation of classification studies from May and November 2015, and January and February 2016.

The roadways highlighted in Table 1 serve primarily industrial/commercial facilities and carry a higher than average truck traffic, with the most significant percentages experienced along Eastridge and Columbia Avenues. Although truck percentages exceed the standard 3% on Main Street, Meridian Parkway, and Iowa, Columbia, Eastridge, and Cactus Avenues, these roadways have lower vehicular volumes and the capacity to carry increased truck traffic, primarily serve industrial development, and are in close proximity to highways minimizing impacts to residential and collector roads.

Street	Segment	Number of Trucks - Percent of Trucks Total				
]	NB	SB	EB	WB	
** Van Buren	West of Meridian Pkwy			326-1.8%	242-1.3%	568-1.6%
Van Buren Blvd	South of Jurupa Av	544-2.1%	588-2.2%			1132-2.2%
Van Buren Blvd	South of Indiana Av	330-1.9%	366-1.9%			696-1.9%
Van Buren Blvd	North of SR-91	370-1.8%	496-2.3%			866-2.1%
** Van Buren	East of Washington St			325-1.5%	327-1.6%	652-1.5%
Van Buren Blvd	650' West of Dauchy Av			346-1.7%	285-1.4%	631-1.6%
Van Buren Blvd	650' East of Wood Rd			346-1.7%	326-1.6%	672-1.7%
** Van Buren	650' East of Gardner Av			293-1.4%	359-1.7%	652-1.6%
** Van Buren	500' West of King Av			232-1.4%	263-1.7%	495-1.5%
Alessandro Blvd	West of I-215			198-0.9%	274-1.2%	472-1.0%
Alessandro Blvd	North of Trautwein Rd	263-0.9%	281-1.0%			544-0.9%
Alessandro Blvd	North of Chicago Av	288-1.6%	129-0.9%			417-1.3%
Trautwein Rd	South of Alessandro Blvd	132-0.8%	122-0.8%			254-0.8%
Trautwein Rd	North of Van Buren Blvd	123-1.0%	131-1.0%			254-1.0%
Main St	North of Columbia Av	947-8.2%	1159-9.2%			2106-8.7%
**Meridian Pky	South of Cactus Av	420-9.7%	296-5.8%			716-7.6%
Iowa Av	South of Columbia Av	350-3.4%	367-3.2%			717-3.3%
Columbia Av	East of Iowa Av			618-12.7%	592-13.2%	1210-12.9%
Eastridge Av	East of Sycamore Cyn			834-14.3%	937-12.0%	1771-13.0%
**Cactus Av	East of Meridian Pkwy			341-7.6%	520-8.8%	861-8.0%

Table 1: 24-Hour Vehicle Classification Counts

** Roadways under the jurisdiction of the County of Riverside

A listing of roadway capacities is provided in Table 2 below and illustrations of Riverside industrial areas and existing truck restrictions (Attachments 1-4).

Table 2. 24-hour Trailic Volumes and Roadway Capacity							
Street	Volume	Existing Maximum Capacity	% Utilization				
Main Street	24,207	33,000	73%				
Meridian Parkway (JPA)*	9,467	33,000	29%				
Iowa Avenue	21,766	49,500	66%				
Columbia Avenue	9,357	33,000	28%				
Eastridge Avenue	13,634	33,000	41%				
Cactus Avenue (JPA)*	10,727	33,000	33%				

Table 2: 24-Hour Traffic Volumes and Roadway Capacity

*Values shown within the March JPA are based on measured lane numbers and City of Riverside Roadway Capacities

Further, designated truck routes are listed under "Local Truck Routes" on the Caltrans website and are utilized by truck drivers and GPS providers to plan truck travel routes. Designation of truck routes within the City would likely increase commercial truck volumes. Due to the unique geographical position of the City which is bound by or in very close proximity to major area freeways including I-15, SR-91, SR-60, and I-215, the probability is high that trucks traveling on these freeways would elect to utilize City truck routes (if established) to avoid freeway congestion and/or select an alternate route through our City to reduce travel time. Additionally, traffic delays experienced by truck drivers as the result of major freeway or regional projects would result in the use of City truck routes to bypass these congested paths.

The Public Works Department anticipates that the establishment of truck routes would increase truck traffic, traffic volumes and delays, pollution, noise, and emergency response times, negatively impacting both quality of life and health for Riverside residents. Adverse economic impacts could also be experienced with potential increased truck traffic including elevated transportation infrastructure costs, health care costs, increased demand on City emergency services, and an increased number of regulatory agency inspectors. Additionally, traffic signals are timed to turn green in sequence in order to move groups of vehicles through corridors at a certain rate of speed; increased truck volumes along a corridor would disrupt the progression of passenger cars as trucks are slower to both accelerate & decelerate.

One of the potential truck routes being considered, Van Buren Boulevard, traverses both the City and County of Riverside. To operate effectively the truck route would need to include the segments of Van Buren Boulevard within the County of Riverside. The Public Works Department consulted with the County of Riverside Transportation and Land Management Agency (RCTLMA) regarding the potential project and determined the County, including political leaders, oppose the establishment of truck routes within the County's jurisdiction due to anticipated negative impacts to traffic, local businesses, and residential communities.

Alternative methods of limiting truck traffic including axle and weight limit restrictions, as well as physical constraints such as special raised median configurations have been utilized by the City and other agencies to manage truck traffic. An axle restriction was previously adopted to prohibit larger commercial trucks from utilizing Main Street (Columbia Avenue to SR-60) to cut-through the City due to the roadway's connection to the SR-60 Freeway and other nearby cities. Weight limit restrictions have also been enacted to prevent use and/or cut-through on select street segments positioned in close proximity or in route to major freeways, other nearby jurisdictions, or local residential streets including Fair Isle Drive, Lochmoor Drive, Orange Street, Third Street, and Washington Street. Special raised median islands have also been utilized to restrict truck access at intersections such as Alessandro Boulevard at San Gorgonio Drive and Van Buren Boulevard at Meridian Parkway within the March JPA area.

Currently, the Riverside Police Department (RPD) actively enforces established weight limit, axle and use restrictions to encourage commercial truck utilization of local freeways and unrestricted arterial roadways. In addition, RPD, California Highway Patrol (CHP), and adjacent City and County agencies collaborate to form a multi-agency strike force to target overweight trucks and mechanical violations to increase safety, minimize damage to local roadways, and maintain a high quality of life for local residents. RPD and CHP also work together to perform local truck inspections at various locations throughout the City to achieve similar results on a smaller scale.

Given the potential for increased truck use on our City roadways should truck routes be established and the correlating adverse impacts of greater truck traffic within our City, the Public

Works Department recommends that the Committee oppose the establishment of truck routes within the City. The Public Works Department supports the continued use of enforcement efforts as well as the potential use of physical constraints and a possible expansion of adoption of weight limit restrictions on select City streets to better control truck traffic, minimize the impacts in more sensitive areas, and ensure the safe and efficient transport of goods to and from the numerous area businesses and neighborhoods within the City of Riverside.

FISCAL IMPACT:

There are no costs associated with this report.

Prepared by:Kris Martinez, Public Works DirectorCertified as to
availability of funds:Scott G. Miller, Chief Financial Officer/TreasurerApproved by:Al Zelinka, FAICP, Assistant City ManagerApproved as to form:Gary G. Geuss, City Attorney

Attachments:

- 1. Main Street Area Map
- 2. Columbia and Iowa Avenues Area Maps
- 3. Eastridge Avenue Area Map
- 4. Meridian Parkway and Cactus Avenue Area Map
- 5. Transportation Committee Meeting Minutes, December 10, 2015
- 6. Presentation