

**REPORT TO MAYOR AND COUNCIL****TO THE HONORABLE MAYOR AND COUNCIL:**

DATE: April 22, 2014

SUBJECT: ADOPT RESOLUTION NO. 14-3521.2 AUTHORIZING REMOVAL OF THE TRUCK ROUTE DESIGNATION FROM FARM BUREAU ROAD**Report in Brief**

Over the past several months, City staff conducted studies and reviewed the feasibility of removing the truck route designation from Farm Bureau Road. Based on this review, it was determined that this action would result in a net benefit to the residential community along the Farm Bureau Road corridor and to the City at large, while truck operators would still have alternative means of access to destinations throughout the City from adjacent freeways.

On March 13, 2014, the Council Committee on Infrastructure and Franchise (Committee) reviewed a proposal by Community and Economic Development (CED) staff to remove the truck route designation from Farm Bureau Road, and directed that the matter be presented to the City Council with a recommendation for approval.

Staff recommends that the City Council adopt Resolution No. 14-3521.2 authorizing removal of the truck route designation from Farm Bureau Road.

Background

On March 13, 2014, CED staff presented a report to the Committee (Committee Report) with a proposal to remove the truck route designation from Farm Bureau Road. The Committee Report forms the basis for the summary information presented in this Council report, and is included in Attachment A for full information on background, technical analysis and findings.

Truck Route designations are established on certain limited streets and roads within a community to allow access to vehicles with very high gross weights. The City's designated truck routes provide an efficient system for the movement of goods throughout the City. The City Council has the authority to revise an existing truck route by resolution when deemed necessary.

The California Vehicle Code (CVC) specifies the allowable gross weight limit imposed upon a highway based on the number of vehicle axles and the distance between consecutive axles, ranging from 34,000 to 80,000 pounds. Section 35701(a) of the CVC also allows any city, such as the City of Concord, to prohibit by ordinance the use of any street (under the exclusive jurisdiction of the local authority enacting the ordinance) by commercial vehicles or any vehicle exceeding a specified

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maximum gross weight limit, except with respect to vehicles owned by a public utility and vehicles used for the collection and transportation of garbage.

In August 1968, the Concord City Council adopted Traffic Resolution No. 3521 designating streets in the City as “Truck Routes” for the movement of commercial vehicles exceeding a maximum gross weight limit of three tons¹. Deviation from the nearest truck route is permitted without the need to obtain an encroachment permit when it is necessary to traverse another street or streets to a destination for the purpose of loading or unloading. Provisions governing truck routes and other related restrictions on use of public streets in the City can be found in Sections 106-251, -252, and -253 of the Concord Municipal Code. The City’s Truck Routes Map is included in Attachment A.

Commercial vehicles exceeding three tons in gross weight are prohibited from using City streets for cut-through purposes, unless they are designated as Truck Routes. Truck route restrictions do not apply to: (1) passenger buses; (2) any vehicle owned by a public utility while in use in the construction, installation, or repair of any public utility; and (3) refuse collection vehicles which operate on City streets.

The City Council may revise an existing truck route by resolution in response to changed conditions or adverse impacts to local communities. Several factors may be considered when the Council reviews possible changes to truck routes; they include: access to business/delivery destinations, network connectivity, vehicle miles of travel, greenhouse gas emissions, ease of access to adjacent freeways, intersection levels of service, intersection vehicle queuing, school area safety, residential quality of life, and future connectivity to the Concord Reuse Project site.

Discussion

Farm Bureau Road is a two-lane, undivided major collector that carries approximately 10,200 vehicles per day, including commuter trips, non-work related trips, and truck traffic. Farm Bureau Road extends for a distance of 1.2 miles in a north-south direction connecting Clayton Road to Willow Pass Road where the street name changes to E. Olivera Road. The adjacent land use along Farm Bureau Road is primarily residential, with some commercial uses located near Willow Pass Road and Walnut Avenue. Farm Bureau Road is on the walking route to Wren Avenue Elementary School and provides direct vehicular access to this school. The posted speed limit on Farm Bureau Road is 35 miles per hour.

Farm Bureau Road was first designated as “Truck Route” in 1968. Currently, it carries approximately 600 medium- to heavy-duty trucks on weekdays (or 6% of total daily traffic), as shown in Table 1. This truck volume includes commercial trucks (gas or diesel powered) ranging in size from 2 axles to 5+ axles. During the AM or PM peak hour, approximately 85 trucks travel along Farm Bureau Road between Willow Pass Road and Clayton Road. Truck traffic in the morning coincides with school traffic in the area and school children crossing the street at Wren Avenue. Truck traffic also contributes to vehicle backups on Farm Bureau Road at the all-way STOP control intersections at Wren Avenue,

¹ Pine Hollow Road is included as part of the City’s truck route system but is subject to special restrictions regarding its use. Vehicles in excess of 10,000 pounds in gross weight are prohibited from using this street between Ygnacio Valley Road and the city limits between the hours of 10:00 p.m. and 7:00 a.m. daily.

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Walnut Avenue, and Chestnut Avenue, thus adding more traffic to an already congested residential street during the AM and PM commute periods.

Table 1

Time Period	Medium- to Heavy-Duty Truck Volumes on Farm Bureau Road ¹		
	Northbound	Southbound	Total
<i>Daily</i>	265	330	595
<i>AM</i> Peak Hour	40	45	85
<i>Midday</i> Peak Hour	25	25	50
<i>PM</i> Peak Hour	40	45	85

¹Based on vehicle classification counts taken on September 3, 4 and 5, 2013.

Farm Bureau Road serves as a direct link between Clayton Road and Willow Pass Road and in recent years has experienced increased traffic volumes from both auto and truck traffic. The residential community along this corridor has experienced the increase in vehicular congestion, pollution, noise, vibrations (house shaking), especially from truck traffic. For example, heavy haul trucks and gas tankers travel daily on Farm Bureau Road and generate loud noise and smoke when downshifting, stopping and starting up at STOP controlled intersections. Truck travel occurs both during the day and at nighttime.

The weight of trucks traveling on a daily basis on Farm Bureau Road has contributed significantly to its wear-and-tear and poor pavement conditions. In addition, the residential community around Farm Bureau Road is concerned about the safety risk of exposure to truck traffic, especially for children walking and bicycling to Wren Avenue Elementary School.

Truck Route Review

Vehicle classification counts were collected on September 3, 4 and 5, 2013 on Farm Bureau Road, Clayton Road and Willow Pass Road after public and private schools were back in session for school year 2013-14. These counts were reported on an hourly basis. The counts on Clayton Road and Willow Pass Road were collected in both directions of travel near Farm Bureau Road to identify the travel patterns of commercial trucks in and around the Farm Bureau Road corridor. All types of vehicles were included in these counts, including commercial trucks ranging in size from 2 axles to 5+ axles. The truck counts were used to review the feasibility of removing Farm Bureau Road from the City’s truck route system. A summary of the elements considered in this review and staff findings are presented below. For full information on the analysis discussion and findings, please refer to the Committee Report in Attachment A.

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Travel Patterns of Commercial Trucks. Based on the truck counts taken on Farm Bureau Road, Willow Pass Road and Clayton Road, coupled with field observations by City staff, it was determined that Farm Bureau Road primarily serves truck trips that travel between Hwy 4 and Clayton Road via Willow Pass Road and Farm Bureau Road. This travel pattern appears to originate from East, Central or West County where trucks travel along Hwy 4 and enter or leave the City of Concord via the Hwy 4/Willow Pass Road interchange.

Inbound trucks travel westbound on Willow Pass Road from Hwy 4, turn left onto Farm Bureau Road, and then go straight to Clayton Road where they turn right or left to reach their final destinations within the City of Concord or Clayton. Conversely, outbound trips include trucks that turn onto Farm Bureau Road from Clayton Road and drive to Willow Pass Road where they make a right turn and proceed eastbound on Willow Pass Road to Hwy 4.

Downtown Alternate Route. Assuming the truck route designation was removed from Farm Bureau Road, truck operators who are currently using this street to travel between Willow Pass Road and Clayton Road would likely shift to an alternate route through downtown Concord without impacting other residential neighborhoods. This alternate route would follow Clayton Road, Port Chicago Highway/East Street and Grant Street en route to Hwy 242 and Hwy 4 as illustrated in Figure 1.

The downtown alternate truck route shown in Figure 1 is one mile shorter in travel distance (each way) than the current route of “Farm Bureau Road–Willow Pass Road.” This net reduction in travel distance translates into an estimated decrease of 600 truck miles traveled each day on City streets. Assuming 50% of the trucks originate in East County and the other 50% originate in Central or West County, the net change in travel distance along the adjacent freeway system would probably be an increase of 1.2 miles.

Rerouting trucks from Farm Bureau Road to the downtown alternate route would not impede the ability of truck operators to access commercial destinations in the City of Concord or Clayton from the freeway system. Potential impacts from this rerouting scenario were analyzed against numerous factors and were documented in the Committee Report in Attachment A. The results of this analysis are summarized below.

Findings

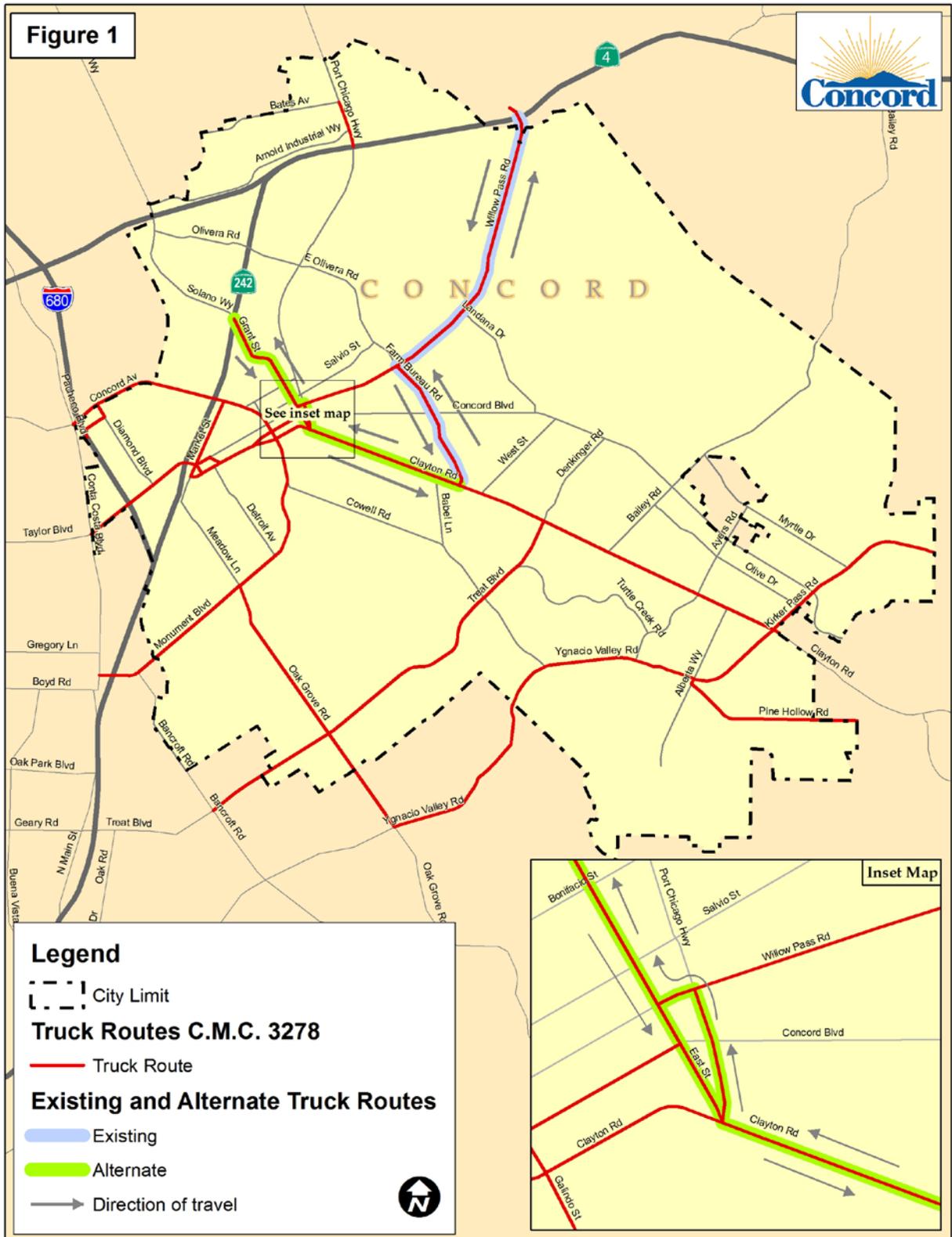
The findings of the analysis of potential impacts as a result of removing Farm Bureau Road from the truck route system are listed in Table 2.

As shown in Table 2, the removal of the truck route designation from Farm Bureau Road would have no significant impact or positive impact on access to business/delivery destinations, network connectivity, vehicle miles of travel, greenhouse gas emissions, ease of access to adjacent freeways, intersection levels of service, intersection vehicle queuing, school area safety, residential quality of life, and future connectivity to the Concord Reuse Project site.

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Table 2

Prevailing Factors	Potential effects of Proposed Removal of Truck Route Designation from Farm Bureau Road
Access to business/delivery destinations	<u>No Significant Impact</u> on the ability of truck operators to reach business or delivery destinations within the City of Concord or Clayton.
Network connectivity	<u>No Significant Impact</u> on network connectivity due to a built-in redundancy in the current truck route system.
Vehicle miles of travel (VMT)	<u>No Significant Impact</u> on the total daily VMT within the City of Concord due to a negligible increase of 120 truck miles per day, or 0.005% of the City's total daily VMT.
Greenhouse gas (GHG) emissions	<u>No Significant Impact</u> on GHG emissions within the City of Concord due to a negligible increase in total daily VMT.
Ease of access to adjacent freeways	<u>No significant Impact</u> on truck access to/from Hwy 4, Hwy 242 or I-680; all truck routes connecting to these freeways would remain intact.
Intersection Levels of Service (LOS) ²	<u>No Significant Impact</u> on peak hour LOS at critical intersections along the downtown alternate route; downtown intersection LOS would remain unchanged and acceptable.
Intersection vehicle queuing	<u>No Significant Impact</u> on peak hour vehicle queuing along the downtown alternate route; any variations in vehicle queuing conditions would be addressed through minor traffic signal timing adjustments.
School area safety	<u>Positive Impact</u> on children safety by removing trucks from the walking route to Wren Avenue Elementary School.
Residential quality of life	<u>Positive Impact</u> on adjacent neighborhoods by removing congestion, pollution, noise, vibrations, pavement wear-and-tear, and safety risks associated with truck traffic.
Future connectivity to the Concord Reuse Project (CRP) site	<u>No significant Impact</u> on future access of trucks into the CRP site; truck access into this site will be provided directly from Willow Pass Road just south of Hwy 4.

² LOS is an index used to grade intersection operations. LOS is defined in terms of delay and ranges from LOS A (free-flow conditions) to LOS F (long delays). Delay represents a measure of driver discomfort, frustration, fuel consumption, and lost time. Specifically, LOS delay criteria are stated in terms of average stopped delay per vehicle typically during the AM and PM peak hours.

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Conclusion

Based on the above analysis and findings, staff has determined that the proposed removal of the truck route designation from Farm Bureau Road would result in a net benefit to the residential community along the Farm Bureau Road corridor and to the City at large, while also providing truck operators alternative means of access to destinations throughout the City from adjacent freeways.

Staff has also determined that the removal of Farm Bureau Road from the City's truck route system should be categorically exempt from the requirement for preparation of an environmental document as provided for in Section 15301 of the California Environmental Quality Act (CEQA). This determination was based on the fact that this activity would fall within the class of projects that are operational in nature and involve no expansion of street use beyond existing conditions.

Currently, Farm Bureau Road is the only truck route in the City running almost exclusively through a residential area, with single-family homes directly fronting this street. Diverted trucks from Farm Bureau Road would be able to use an alternate route through downtown Concord (or possibly other alternate truck routes) to the freeway system without traveling through residential neighborhoods.

If approved by the City Council, CED staff will coordinate the removal of the truck route designation from Farm Bureau Road with the Concord Police Department so that once the appropriate signs prohibiting truck use on this street have been erected, a warning period not to exceed 30 days (or as otherwise directed by Council) would go into effect. During this warning period, commercial vehicles exceeding three tons in gross weight that are contacted by the Police Department on Farm Bureau Road will receive a warning but will not be ticketed. Truck use exceptions provided in the Concord Municipal Code would still apply to Farm Bureau Road when necessary to traverse to a destination for the purpose of loading or unloading.

Fiscal Impact

The City Council may remove the truck route designation from Farm Bureau Road by Resolution, which would be effective immediately upon its passage and adoption. The Resolution would authorize and direct staff to remove and install the appropriate signs on Farm Bureau Road and at gateway locations entering this street from Clayton Road and Willow Pass Road, to effectuate this Resolution. The cost to remove and install the appropriate signs should not exceed \$3,000 and will be covered through the FY 2013-14 operating budget for Signs & Markings and Transportation Planning.

The removal of the Farm Bureau Road designation as "Truck Route" is not expected to impede truck access to business destinations located within or outside of the City of Concord. As such, this action should have no impact on the economic conditions of the City or the region, or on interstate commerce.

If the City Council determined to keep the truck route designation on Farm Bureau Road, extensive road repair and maintenance work would be needed to continue to accommodate truck traffic. The estimated cost to add 2 ½" of Asphalt Concrete (AC) to the pavement section on Farm Bureau Road to accommodate the necessary Traffic Index design for commercial trucks may range from \$600,000 to \$750,000 (in 2014 dollars), depending on the final design of future street improvements.

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Therefore, removal of the truck route designation from Farm Bureau Road could result in substantial savings in the future when the street undergoes rehabilitation improvements. Moreover, the diversion of trucks to other designated truck routes through downtown Concord would not increase future costs to rehabilitate the downtown streets or the need to accelerate their implementation schedules.

The proposed re-designation of Farm Bureau Road to a non-truck route status would not impact the proposed sidewalk improvements or right-of-way requirements for the ongoing Safe Routes to School CIP (Capital Improvement Program) project on Farm Bureau Road between Willow Pass Road and Wren Avenue. Nevertheless, elimination of heavy truck loadings would reduce the total cost to complete this project by reducing the AC thickness needed for the new pavement section.

Public Contact

Posting of the Council Agenda provides public notice. Additionally, an Open House was held by Transportation staff on January 29, 2014 to provide an overview of this project's review schedule, as well as to provide an opportunity to obtain feedback and answer questions regarding the proposed removal of the truck route designation from Farm Bureau Road. The Open House was publicized to area residents and commercial businesses along the Farm Bureau Road corridor, as well as other potentially impacted businesses and stakeholders.

Many residents along Farm Bureau Road attended the Open House and expressed an overwhelming support for re-designating this street to a non-truck route status. They cited quality of life issues as a result of allowing trucks to use this residential street and how their lives have been negatively affected by this policy, some since 1968. Among the impacts cited were noise, pollution, safety, congestion, pavement wear-and-tear, and overall neighborhood discomfort. Additionally, they indicated that, sometimes, heavy trucks appear in groups on Farm Bureau Road as early as 4:00 a.m. and use the side of the road as a staging area before they proceed to their final destinations later in the morning. To date, no feedback has been received by the City from the business community regarding this proposal.

A public notice was mailed to area residents and commercial businesses along the Farm Bureau Road corridor, as well as other potentially impacted businesses and Stakeholders, advising that City staff will bring this matter to the City Council for consideration on April 22, 2014.

Council Committee Recommendation

On March 13, 2014, the Council Committee on Infrastructure and Franchise (Helix/Hoffmeister) reviewed the staff proposal to remove the truck route designation from Farm Bureau Road. Three members of the public attended the meeting and positive comments were made in support of this proposal.

The Committee concurred with the staff proposal and directed that the matter be presented to the City Council with a recommendation for approval.

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Recommendation for Action

Staff and the Infrastructure and Franchise Committee recommend that the City Council adopt Resolution No. 14-3521.2 authorizing removal of the truck route designation from Farm Bureau Road.

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Attachments:

Attachment A – Report to Council Committee on Infrastructure and Franchise

Attachment B – Proposed Resolution No. 14-3521.2

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**REPORT TO COUNCIL COMMITTEE ON
INFRASTRUCTURE & FRANCHISE**

TO THE HONORABLE COMMITTEE MEMBERS:

DATE: March 13, 2014

SUBJECT: REMOVAL OF TRUCK ROUTE DESIGNATION FROM FARM BUREAU ROAD

Report in Brief

Over the past several months, City staff conducted studies and reviewed the feasibility of removing the truck route designation from Farm Bureau Road. Based on this review, it was determined that this action would result in a net benefit to the residential community along the Farm Bureau Road corridor and to the City at large, while truck operators would still have alternative means of access to destinations throughout the City from adjacent freeways.

Staff recommends that the Infrastructure & Franchise Committee (Committee) review the proposal to remove the truck route designation from Farm Bureau Road, provide comments and/or direction to staff, and direct the report to the City Council with their recommendations.

Background

Truck Route designations are established on certain limited streets and roads within a community to allow access to vehicles with very high gross weights. The City's designated truck routes provide an efficient system for the movement of goods throughout the City. The City Council has the discretion to revise the existing truck routes by resolution, as deemed necessary.

The California Vehicle Code (CVC) specifies the allowable (maximum) gross weight limit imposed upon a highway based on the number of vehicle axles and the distance between consecutive axles, ranging from 34,000 to 80,000 pounds. Section 35701(a) of the CVC also allows any city, such as the City of Concord, to prohibit by ordinance the use of any street (under the exclusive jurisdiction of the local authority enacting the ordinance) by any commercial vehicle or any vehicle exceeding a specified maximum gross weight limit, except with respect to vehicles owned by a public utility and vehicles used for the collection and transportation of garbage.

In August 1968, the Concord City Council adopted Traffic Resolution No. 3521 establishing streets or portions of streets in the City as "Truck Routes" for the movement of commercial vehicles or

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any vehicle exceeding a maximum gross weight limit of three tons¹. Deviation from the nearest truck route is permitted without the need to obtain an encroachment permit when it is necessary to traverse another street or streets to a destination for the purpose of loading or unloading. Provisions governing truck routes and other related restrictions on use of public streets in the City can be found in Sections 106-251, -252, and -253 of the Concord Municipal Code.

Truck route provisions do not apply to: (1) passenger buses; (2) any vehicle owned by a public utility while in use in the construction, installation, or repair of any public utility; and (3) refuse collection vehicles which operate on City streets.

The Truck Route map underwent periodic updates between 1968 and 1996, but the principal network remained nearly unchanged over the years. These updates were implemented to improve system connectivity or in response to local street improvements (such as the construction of the Port Chicago Highway extension from Clayton Road to Salvio Street in 1996) and freeway access improvements (such as the relocation of the Interstate 680 northbound off-ramp from Concord Avenue to Burnett Avenue in 1996). These updates resulted in the addition of the following street segments to the truck route system since its inception in 1968:

- Kirker Pass Road (within the city limits)
- Clayton Road (between Colfax Street and Market Street)
- Concord Boulevard (westbound from East Street to Clayton Road/Sutter Street)
- Burnett Avenue (between I-680 and Diamond Boulevard)
- Diamond Boulevard (between Burnett Avenue and Concord Avenue)
- Willow Pass Road (between Market Street and Gateway Boulevard)
- Gateway Boulevard

The current Truck Route map is posted on the City's website and is included in Attachment 1. Appropriate signs are installed and maintained by the City on the streets designated as truck routes. Illegal use of streets other than the truck routes by commercial vehicles or any vehicle exceeding the maximum gross weight limit of three tons is subject to enforcement by the Police Department.

The City Council may determine to revise the existing truck routes by resolution. However, review of truck routes should consider many factors including access to business/delivery destinations, network connectivity, miles of travel, emissions, ease of access to adjacent freeways, traffic volumes and intersection levels of service, school area safety, residential quality of life, and future connectivity to the Concord Reuse Project (CRP) site.

Discussion

Farm Bureau Road is a two-lane, undivided major collector that carries approximately 10,200 vehicles per day, including commuter trips, non-work related trips, and truck traffic. Farm Bureau Road extends for a

¹ Pine Hollow Road is included as part of the City's truck route system but is subject to special restrictions regarding its use. Vehicles in excess of 10,000 pounds in gross weight are prohibited from using this street between Ygnacio Valley Road and the city limits between the hours of 10:00 p.m. and 7:00 a.m. daily.

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distance of 1.2 miles in a north-south direction connecting Clayton Road to Willow Pass Road where the street name changes to E. Olivera Road. The adjacent land use along Farm Bureau Road is primarily residential, with some commercial uses located near Willow Pass Road and Walnut Avenue. Farm Bureau Road is on the walking route to Wren Avenue Elementary School and provides direct vehicular access to this school. The posted speed limit on Farm Bureau Road is 35 miles per hour.

Farm Bureau Road was first designated as “Truck Route” in 1968. Currently, it carries approximately 600 medium- to heavy-duty trucks on weekdays (or 6% of total daily traffic), as shown in Table 1. This truck volume includes commercial trucks (gas or diesel powered) ranging in size from 2 axles to 5+ axles. During the AM or PM peak hour, approximately 85 trucks travel along Farm Bureau Road between Willow Pass Road and Clayton Road. Truck traffic in the morning coincides with school traffic in the area and school children crossing the street at Wren Avenue. Truck traffic also contributes to vehicle backups on Farm Bureau Road at the all-way STOP control intersections at Wren Avenue, Walnut Avenue, and Chestnut Avenue, thus adding more traffic to an already congested residential street during the AM and PM commute periods.

Table 1

Time Period	Medium- to Heavy-Duty Truck Volumes on Farm Bureau Road ¹		
	Northbound	Southbound	Total
<i>Daily</i>	265	330	595
<i>AM</i> Peak Hour	40	45	85
<i>Midday</i> Peak Hour	25	25	50
<i>PM</i> Peak Hour	40	45	85

¹Based on vehicle classification counts taken on September 3, 4 and 5, 2013.

Farm Bureau Road serves as a direct link between Clayton Road and Willow Pass Road and in recent years has experienced increased traffic volumes from both auto and truck traffic. The residential community along this corridor has experienced the increase in vehicular congestion, pollution, noise, vibrations, especially from truck traffic. For example, heavy haul trucks and gas tankers travel daily on Farm Bureau Road and generate noise and smoke when stopping and starting up at STOP controlled intersections. Truck travel occurs both during the day and at nighttime.

The weight of trucks traveling on a daily basis on Farm Bureau Road has contributed significantly to its wear-and-tear and poor pavement conditions. In addition, the residential community around Farm Bureau Road is concerned about the safety risk of exposure to truck traffic, especially for children walking and bicycling to Wren Avenue Elementary School.

Truck Route Review

Vehicle classification counts were collected on September 3, 4 and 5, 2013 on Farm Bureau Road, Clayton Road and Willow Pass Road after public and private schools were back in session for school year 2013-14. These counts were collected over a period of three days and reported on an hourly basis. The counts on Clayton Road and Willow Pass Road were collected in both directions of travel near Farm Bureau Road to identify the travel patterns of commercial trucks in and around the Farm Bureau Road corridor. All types of vehicles were included in these counts, including commercial trucks ranging in size from 2 axles to 5+ axles. The truck counts were used to review the feasibility of removing Farm Bureau Road from the City's truck route system. A summary of the elements considered in this review and staff findings are discussed below.

Travel Patterns of Commercial Trucks. Based on the truck counts taken on Farm Bureau Road, Willow Pass Road and Clayton Road, coupled with field observations by City staff, it was determined that Farm Bureau Road primarily serves truck trips that travel between Hwy 4 and Clayton Road via Willow Pass Road and Farm Bureau Road. This travel pattern appears to originate from East, Central or West County where trucks travel along Hwy 4 and enter or leave the City of Concord via the Hwy 4/Willow Pass Road interchange. Inbound trucks travel westbound on Willow Pass Road from Hwy 4, turn left onto Farm Bureau Road, and then go straight to Clayton Road where they turn right or left to reach their final destinations within the City of Concord or Clayton. Conversely, outbound trips include trucks that turn onto Farm Bureau Road from Clayton Road and drive to Willow Pass Road where they make a right turn and proceed eastbound on Willow Pass Road to Hwy 4.

Assuming the truck route designation was removed from Farm Bureau Road, truck operators who are currently using this street would most likely shift to an alternate route through downtown Concord, without impacting residential neighborhoods. This alternate route provides access to/from Hwy 242 mainly via Clayton Road, Port Chicago Highway/East Street and Grant Street. Existing and alternate truck routes associated with the removal of the truck route designation from Farm Bureau Road are illustrated graphically in Figure 1.

- **Truck Miles of Travel:** The alternate downtown truck route shown in Figure 1 is one mile shorter in travel distance (each way) than the existing route of Farm Bureau Road and Willow Pass Road. This net reduction in travel distance translates into an estimated decrease of 600 truck miles traveled each day on City streets. Additionally, as a result of re-routing truck trips through downtown Concord, daily truck volumes on Willow Pass Road between Hwy 4 and Farm Bureau Road would probably drop from 1,350 to 750 trucks per day, a reduction of 44%. Conversely, daily truck volumes along the alternate path of Clayton Road-East Street/Port Chicago Highway-Grant Street would probably increase from 2,150 to 2,750 trucks per day, an increase of 28%.

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The change in travel distance along the freeway system would vary depending on the origin of the trip outside of the City of Concord. For example, if a truck trip originated in East County, travel distance on the freeway (Hwy 4 and Hwy 242) would increase by approximately 3.4 miles each way. By contrast, if the trip originated in Central or West County, travel distance on the freeway would decrease by approximately one mile each way. Assuming 50% of the trucks originate in East County and the other 50% originate in Central or West County, the net change in travel distance along the adjacent freeway system would probably be an increase of 1.2 miles.

This net increase in travel distance translates into an increase of 720 truck miles of travel each day on the freeway system. Specifically, daily truck volumes on Hwy 4 would probably not change as a result of removing Farm Bureau Road from the City's truck route system. However, truck volumes along the short segment of Hwy 242 between Hwy 4 and Solano Way would probably increase by 600 trucks per day, a relatively small increase of 0.6% compared to the total traffic volume of 97,000 vehicles per day on Hwy 242 near its junction with Hwy 4.

In sum, removal of Farm Bureau Road from the City's truck route system would probably result in a net increase of 120 truck miles of travel per day on all roadways in Concord, including surface streets and freeways. To put this number in perspective, the total Vehicle Miles of Travel (VMT) within the City of Concord is estimated at 2.3 million vehicle miles per day for all types of vehicles². Compared to this number, an increase of 120 VMT in truck traffic would only amount to 0.1% of the City's total daily VMT. This negligible increase in VMT should not create any significant change in greenhouse gas emissions within the City of Concord.

Finding #1: Removal of the truck route designation from Farm Bureau Road would have no significant impact on the total daily VMT or greenhouse gas emissions within the City of Concord.

Traffic Impacts. The alternate truck route through downtown Concord would follow a straight line along each of these streets: Clayton Road, East Street and Grant Street, passing through signalized intersections that are synchronized for continuous traffic flow to/from Hwy 242. No turns are made along these streets so as to affect levels of service or dictate intersection operations during the AM, Midday or PM peak hour. However, in order to reach East Street from Clayton Road, outbound trucks would take Port Chicago Highway, turn left onto Willow Pass Road and then turn right onto East Street. These back-to-back turning movements within a short distance of Willow Pass Road triggered the need for a close examination of potential traffic impacts to intersection levels of service and vehicle queuing at this location.

To assist the City's evaluation, traffic consultant Omni-Means was hired to examine the segment of Willow Pass Road between East Street and Port Chicago Highway for existing vehicle queuing and intersection operations and for conditions with the additional truck traffic as a result of the proposed truck route modification. This review was supplemented with field observations of existing conditions during the peak hours.

² Source: Contra Costa Transportation Authority (CCTA) travel demand forecasting model. The daily VMT is estimated from the model for all roadways in Concord.

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- **Intersection Level of Service:** Level of service (LOS) analysis was conducted by Omni-Means at the intersections of Port Chicago Highway/Willow Pass Road and Willow Pass Road/East Street during the AM, Midday and PM peak hours³. These intersections are considered critical and were selected for this review due to the anticipated increase in turning movement volumes at these intersections with the removal of Farm Bureau Road from the City’s truck route system and shifting truck trips to downtown Concord.

LOS calculations were conducted for existing traffic volumes (“**BEFORE**” condition) and with the added truck volumes (“**AFTER**” condition), using current traffic signal timings. The results of this analysis are summarized in Table 2.

Table 2

Critical Intersection	Peak Hour	Truck Turning Movement	Additional Trucks Turning	Intersection Level of Service (LOS)	
				(BEFORE)	(AFTER)
Port Chicago Hwy & Willow Pass Road	<i>AM</i> Peak Hour	Left-Turn PCH → WP Rd	<i>40</i>	<i>C</i>	<i>C</i>
	<i>Midday</i> Peak Hour		<i>25</i>	<i>B</i>	<i>B</i>
	<i>PM</i> Peak Hour		<i>40</i>	<i>B</i>	<i>B</i>
Willow Pass Road & East Street	<i>AM</i> Peak Hour	Right-Turn WP Rd → East St	<i>40</i>	<i>C</i>	<i>C</i>
	<i>Midday</i> Peak Hour		<i>25</i>	<i>B</i>	<i>B</i>
	<i>PM</i> Peak Hour		<i>40</i>	<i>C</i>	<i>C</i>

As shown in Table 2, the calculated existing levels of service (“**BEFORE**” condition) are Level of Service (LOS) ‘C’ (AM peak hour) and LOS ‘B’ (Midday and PM peak hours) at the Port Chicago

³ LOS is an index used to grade intersection operations. LOS is defined in terms of delay and ranges from LOS A (free-flow conditions) to LOS F (long delays). Delay represents a measure of driver discomfort, frustration, fuel consumption, and lost time. Specifically, LOS delay criteria are stated in terms of average stopped delay per vehicle typically during the AM and PM peak hours.

Highway/Willow Pass Road intersection. The existing levels of service are LOS 'C' (AM and PM peak hours) and LOS 'B' (Midday) at the Willow Pass Road/East Street intersection. With the truck trips added to the existing volumes ("AFTER" condition), the levels of service would remain acceptable and unchanged from existing conditions, as shown in Table 2.

Finding #2: Removal of the truck route designation from Farm Bureau Road would have no significant impact on the peak hour levels of service at critical intersections in downtown Concord.

- **Vehicle Queuing:** Field observations were conducted by Omni-Means and City staff of trucks turning left from Port Chicago Highway onto Willow Pass Road and then turning right from Willow Pass Road onto East Street to access Hwy 242 to the north. Although northbound East Street consists of only one lane of traffic to accept turning trucks from Willow Pass Road, this lane is wide enough to allow trucks of all sizes to perform this maneuver without difficulty, as confirmed through field observations. Nonetheless, the median island on East Street was recently modified by the City to provide a safer intersection for turning maneuvers of trucks and to accommodate the potential for increased truck traffic should the truck route designation be removed from Farm Bureau Road.

Field observations included an examination of vehicle queues on the Willow Pass Road segment from Port Chicago Highway to East Street. This segment consists of two westbound traffic lanes and is approximately 250 feet long, which provides enough storage capacity for ten vehicles per lane. The signalized intersections at both ends of this segment are coordinated to control the vehicle queue so that vehicles can turn left from Port Chicago Highway and move forward through the green light at East Street.

The observations of vehicle queues on this segment of Willow Pass Road suggest that westbound queues are generally contained within the storage length of this segment. However, vehicle queues do occasionally reach the storage capacity as they move forward on green at East Street during the AM or PM peak hour. The diverted trucks from Farm Bureau Road could add 40 vehicles onto this segment during these periods, or one to two vehicles per signal cycle.

This low increase in traffic demand is not expected to significantly affect traffic flow at this location and could be addressed via minor adjustments to the traffic signal timings. For example, signal timings could be adjusted to create more green time for westbound Willow Pass Road at East Street, just as the green light is initiated for vehicles entering the segment from northbound Port Chicago Highway. The adjusted signal timings will prevent additional traffic backups from occurring in the left-turn lanes of Port Chicago Highway especially during the AM peak period.

Finding #3: Removal of the truck route designation from Farm Bureau Road would have no significant impact on peak hour vehicle queuing on westbound Willow Pass Road between Port Chicago Highway and East Street.

Other Potential Impacts. In addition to the factors discussed above, the proposed removal of the truck route designation from Farm Bureau Road should also be considered against other prevailing factors including access to business/delivery destinations, network connectivity, ease of access to

REMOVAL OF TRUCK ROUTE DESIGNATION FROM FARM BUREAU ROAD

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adjacent freeways, school area safety, residential quality of life, and future connectivity to the Concord Reuse Project site. A summary review of these factors is provided in Table 3.

Table 3

Prevailing Factors	Potential effects of Proposed Removal of Truck Route Designation from Farm Bureau Road
Access to business/delivery destinations	No significant effect on the ability of truck operators to reach business or delivery destinations within the City of Concord or Clayton.
Network connectivity	No significant effect on network connectivity due to built-in redundancy of the existing truck route system.
Ease of access to adjacent freeways	No significant effect on truck access to/from Hwy 4, Hwy 242 or I-680.
School area safety	Positive effect on children safety by removing trucks from the walking route to Wren Avenue Elementary School.
Residential quality of life	Positive effect on adjacent neighborhoods by removing congestion, pollution, noise, vibrations, pavement wear-and-tear, and safety risks associated with truck traffic.
Future connectivity to the Concord Reuse Project (CRP) site	No significant effect on future access of trucks into the CRP site, as trucks are expected to access this site via Willow Pass Road near Hwy 4.

Finding #4: Removal of the truck route designation from Farm Bureau Road would have no significant impact or positive impact on access to business/delivery destinations, network connectivity, ease of access to adjacent freeways, school area safety, residential quality of life, and future connectivity to the CRP site.

Conclusion

Based on the above analysis and findings, staff has determined that the proposed removal of the truck route designation from Farm Bureau Road would result in a net benefit to the residential community along the Farm Bureau Road corridor and to the City at large, while also providing truck operators alternative means of access to destinations throughout the City from adjacent freeways.

Staff has also determined that the removal of Farm Bureau Road from the City’s truck route system should be categorically exempt from the requirement for preparation of an environmental document as provided for in Section 15301 of the California Environmental Quality Act (CEQA). This

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determination was based on the fact that this activity would fall within the class of projects that are operational in nature and involve no expansion of street use beyond existing conditions.

Currently, Farm Bureau Road is the only truck route in the City running almost exclusively through a residential area, with single-family homes directly fronting this street. Diverted trucks from Farm Bureau Road would be able to use an alternate route through downtown Concord (or possibly other alternate truck routes) to the freeway system without traveling through residential neighborhoods.

If approved by the City Council pursuant to Committee recommendations, CED staff will coordinate the removal of the truck route designation from Farm Bureau Road with the Concord Police Department so that once the appropriate signs prohibiting truck use on this street have been erected, a warning period not to exceed 30 days (or as otherwise directed by Council) would go into effect. During this warning period, commercial vehicles or any vehicle exceeding a maximum gross weight limit of three tons on Farm Bureau Road that are contacted by the Police Department will receive a warning but will not be ticketed. Truck use exceptions provided in the Concord Municipal Code would still apply to Farm Bureau Road when necessary to traverse to a destination for the purpose of loading or unloading.

Fiscal Impact

Pursuant to Committee recommendations, the City Council may remove the truck route designation from Farm Bureau Road by Resolution, which would be effective immediately upon its passage and adoption. The Resolution would authorize and direct staff to remove and install the appropriate signs on Farm Bureau Road and at gateway locations entering this street from Clayton Road and Willow Pass Road, to effectuate this Resolution. The cost to remove and install the appropriate signs should not exceed \$2,500 and will be covered through the FY 2013-14 operating budget for Signs & Markings and Transportation Planning.

The removal of the Farm Bureau Road designation as “Truck Route” is not expected to impede truck access to business destinations located within or outside of the City of Concord. As such, this action should have no impact on the economic conditions of the City or the region, or on interstate commerce.

If the City Council determined to keep the truck route designation on Farm Bureau Road, extensive road repair and maintenance work would be needed to continue to accommodate truck traffic. The estimated cost to add 2 ½” of Asphalt Concrete (AC) to the pavement section on Farm Bureau Road to accommodate the necessary Traffic Index design for commercial trucks may range from \$600,000 to \$750,000 (in 2014 dollars), depending on the final design of future street improvements. Therefore, removal of the truck route designation from Farm Bureau Road could result in substantial savings in the future when the street undergoes rehabilitation improvements. Moreover, the diversion of trucks to other designated truck routes through downtown Concord would not increase future costs to rehabilitate the downtown streets or the need to accelerate their implementation schedules.

The proposed re-designation of Farm Bureau Road to a non-truck route status would not impact the proposed sidewalk improvements or right-of-way requirements for the ongoing Safe Routes to School CIP (Capital Improvement Program) project on Farm Bureau Road between Willow Pass Road and Wren Avenue. It will, however, result in lower pavement costs to complete this project as explained above for non-truck routes.

REMOVAL OF TRUCK ROUTE DESIGNATION FROM FARM BUREAU ROAD

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Public Contact

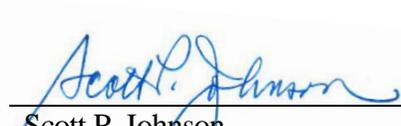
Posting of the Council Infrastructure and Franchise Committee Agenda provides public notice. Additionally, an Open House was held by Transportation staff on January 29, 2014 to provide an overview of this project's review schedule, as well as to provide an opportunity to obtain feedback and answer questions regarding the proposed removal of the truck route designation from Farm Bureau Road. The Open House was publicized to area residents and commercial businesses along the Farm Bureau Road corridor, as well as other potentially impacted businesses and stakeholders.

Many residents along Farm Bureau Road attended the Open House and expressed an overwhelming support for re-designating this street to a non-truck route status. They cited quality of life issues as a result of allowing trucks to use this residential street and how their lives have been negatively affected by this policy, some since 1968. Among the impacts cited were noise, pollution, safety, congestion, pavement wear-and-tear, and overall neighborhood discomfort. Additionally, they indicated that, sometimes, heavy trucks appear in groups on Farm Bureau Road as early as 4:00 a.m. and use the side of the road as a staging area before they proceed to their final destinations later in the morning.

To date, no feedback has been received by the City from the business community regarding this proposal.

Recommendation for Action

Staff recommends that the Infrastructure & Franchise Committee review the proposal to remove the truck route designation from Farm Bureau Road, provide comments and/or direction to staff, and direct the report to the City Council with their recommendations.



Scott P. Johnson
Assistant City Manager
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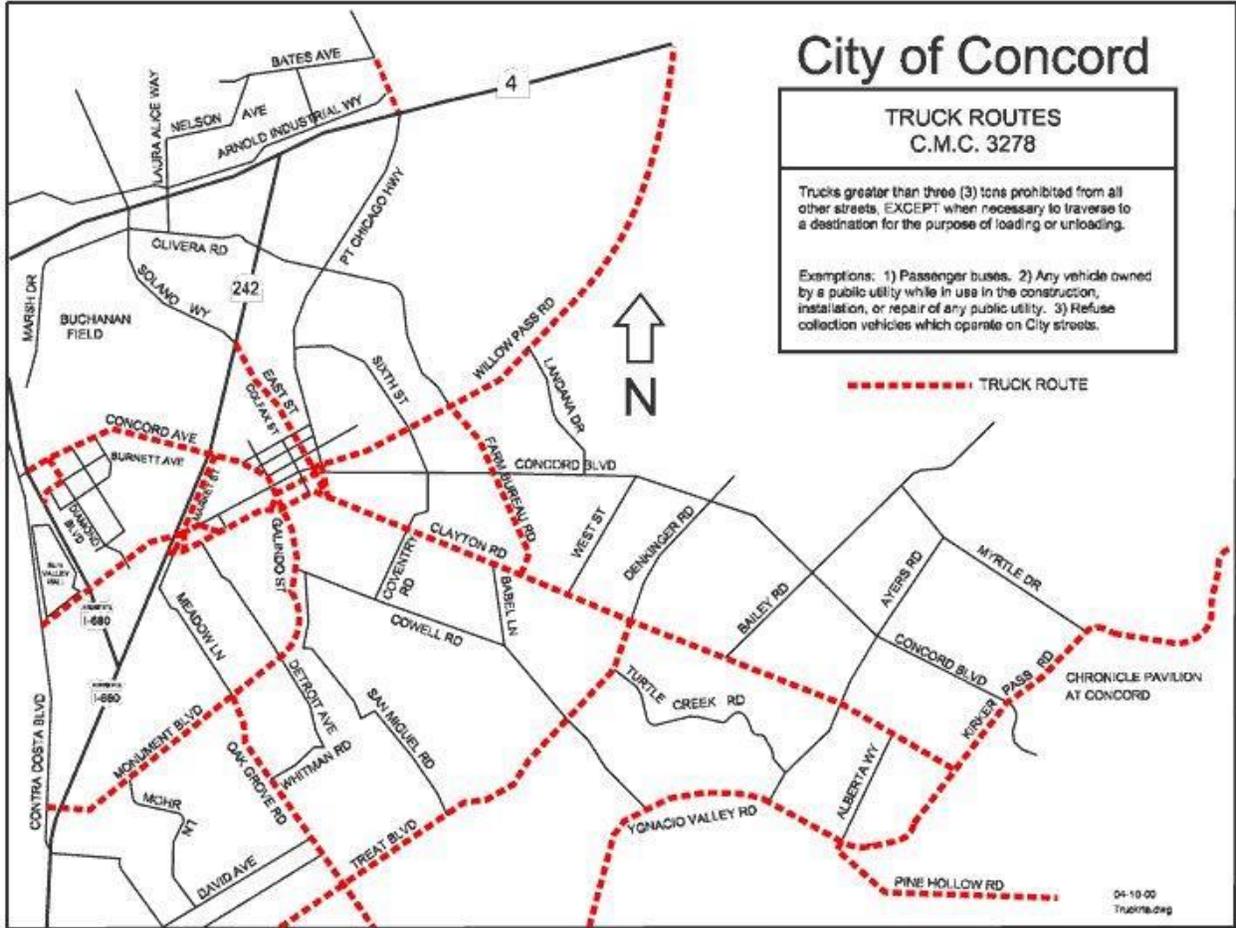
Prepared by: Ray Kuzbari
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ray.kuzbari@cityofconcord.org

Reviewed by: Victoria Walker
Director of Community & Economic Development
victoria.walker@cityofconcord.org

Enclosures:

Attachment 1 – City of Concord Truck Route Map

Attachment 1



**BEFORE THE CITY COUNCIL OF THE CITY OF CONCORD
COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA**

**A Resolution Amending the Traffic Resolution,
Section G, Truck Routes**

Resolution No. 14-3521.2

WHEREAS, the Director of Community and Economic Development has recommended that the Traffic Resolution be amended by deleting the truck route at the following location:

- 1. Deletion of Section G-20 – Farm Bureau Road between Willow Pass Road and Clayton Road; and

WHEREAS, the City Council, at its meeting of April 22, 2014, received information in the form of a staff report.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CONCORD DOES
RESOLVE AS FOLLOWS:**

Section 1. Section G (Truck Routes) of Resolution 3521 shall be amended by deleting Section G-20 - Farm Bureau Road between Willow Pass Road and Clayton Road.

Section 2. The Director of Community and Economic Development, or a designee, is authorized and directed to remove and install the appropriate signs to effectuate this Resolution.

Section 3. This Resolution shall become effective immediately upon its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of Concord on April 22, 2014, by the following vote:

AYES: Councilmembers -

NOES: Councilmembers -

ABSTAIN: Councilmembers -

ABSENT: Councilmembers -

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I HEREBY CERTIFY that the foregoing Resolution No. 14-3521.2 was duly and regularly adopted at a regular meeting of the City Council of the City of Concord on April 22, 2014.

Mary Rae Lehman, CMC
City Clerk

APPROVED AS TO FORM:

Mark S. Coon
City Attorney