Western Riverside Council of Governments
Public Works Committee

AGENDA

Thursday, October 9, 2025
2:00 PM

Western Riverside Council of Governments
3390 University Avenue, Suite 200
Riverside, CA 92501

Remote Meeting Locations:

City of Calimesa
City Hall
908 Park Avenue
Calimesa, CA 92320

March Joint Powers Authority
March Inland Port Airport
17405 Heacock Street
Moreno Valley, CA 92551

County of Riverside Administrative Center
4080 Lemon Street, 8th Floor
Riverside, CA 92501

Members of the public are welcome to participate remotely from any location. Committee member participation is limited to locations that are listed on the published agenda.

Public Zoom Link
Meeting ID: 847 9291 7247
Passcode: 096143

Dial in: 669 444 9171 U.S.

In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in the Public Works Committee meeting, please contact WRCOG at (951) 405-6706. Notification of at least 48 hours prior to meeting time will assist staff in assuring that reasonable arrangements can be made to provide accessibility at the meeting. In compliance with Government Code Section 54957.5, agenda materials distributed within 72 hours prior to the meeting which are public records relating to an open session agenda item will be available for inspection by members of the public prior to the meeting at 3390 University Avenue, Suite 200, Riverside, CA, 92501.

In addition to commenting at the Committee meeting, members of the public may also submit written comments before or during the meeting, prior to the close of public comment to lfelix@wrcog.us.

Any member of the public requiring a reasonable accommodation to participate in this meeting in light of this announcement shall contact Lucy Felix 72 hours prior to the meeting at (951) 405-6706 or lfelix@wrcog.us. Later requests will be accommodated to the extent feasible.

The Committee may take any action on any item listed on the agenda, regardless of the Requested Action.

1. CALL TO ORDER (Jason Farag, Chair)

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. PUBLIC COMMENTS

At this time members of the public can address the Committee regarding any items within the subject matter jurisdiction of the Committee that are not separately listed on this agenda. Members of the public will have an opportunity to speak on agendized items at the time the item is called for discussion. No action may be taken on items not listed on the agenda unless authorized by law. Whenever possible, lengthy testimony should be presented to the Committee in writing and only pertinent points presented orally.

5. CONSENT CALENDAR

All items listed under the Consent Calendar are considered to be routine and may be enacted by one motion. Prior to the motion to consider any action by the Committee, any public comments on any of the Consent Items will be heard. There will be no separate action unless members of the Committee request specific items be removed from the Consent Calendar.

A. Action Minutes from the August 14, 2025, Public Works Committee Meeting

Requested Action(s):

1. Approve the Action Minutes from the August 14, 2025, Public Works Committee meeting.

6. REPORTS / DISCUSSION

Members of the public will have an opportunity to speak on agendized items at the time the item is called for discussion.

A. TUMF Construction Cost Index Adjustment for 2025

Requested Action(s):

1. Recommend that the Executive Committee approve the implementation of an automatic Construction Cost Index adjustment for all TUMF land uses tied to the September 2025 indices of the National Association of Realtors and Engineering News Record (ENR) with a cap at 5% on any annual adjustments.

B. TUMF Program Status Overview

Requested Action(s): 1. Receive and file.

C. Compass IoT Demonstration

Requested Action(s): 1. Receive and file.

D. Assembly Bill 98 Activities Update

Requested Action(s): 1. Receive and file.

E. Updates on Recent Court Cases Involving Vehicle Miles Traveled Screening

Requested Action(s): 1. Receive and file.

7. REPORT FROM THE DEPUTY EXECUTIVE DIRECTOR
Chris Gray

8. ITEMS FOR FUTURE AGENDAS
Members are invited to suggest additional items to be brought forward for discussion at future Committee meetings.

9. GENERAL ANNOUNCEMENTS
Members are invited to announce items / activities which may be of general interest to the Committee.

10. NEXT MEETING
The next Public Works Committee meeting is scheduled for Thursday, December 11, 2025, at 2:00 p.m., in **WRCOG's new office at 1955 Chicago Avenue, Riverside.**

11. ADJOURNMENT

Public Works Committee

Action Minutes

1. CALL TO ORDER

The meeting of the WRCOG Public Works Committee was called to order by Chair Savat Khamphou at 2:00 p.m. on Thursday, August 14, 2025, at WRCOG's office.

2. PLEDGE OF ALLEGIANCE

Jason Farag led Committee members and guests in the Pledge of Allegiance.

3. ROLL CALL

- City of Banning - Nathan Smith
- City of Beaumont - Robert Vestal
- City of Calimesa - Michael Thornton
- City of Canyon Lake- Stuart McKibbin
- City of Corona - Rosalva Ureno
- City of Hemet - Noah Rau
- City of Lake Elsinore - Yu Tagai
- City of Menifee - Nick Fidler
- City of Moreno Valley - Melissa Walker
- City of Perris - John Pourkazemi
- City of Riverside - Gil Hernandez
- City of San Jacinto - Stuart McKibbin
- City of Temecula - Ron Moreno
- City of Wildomar - Jason Farag
- County of Riverside - Dennis Acuna
- March IPAA - Lauren Sotelo
- Riverside County Transportation Commission (RCTC) - Jillian Guizado

Absent:

- City of Eastvale
- City of Jurupa Valley
- City of Murrieta
- City of Norco
- Riverside Transit Agency

4. SELECTION OF PUBLIC WORKS COMMITTEE CHAIR, VICE-CHAIR, AND 2ND VICE-CHAIR POSITIONS FOR FISCAL YEAR 2025/2026

A. Leadership Selection for Fiscal Year 2025/2026 and Recognition of Outgoing Chair

Action:

1. Selected Jason Farag as Public Works Committee Chair, Nick Fidler as Vice-Chair, and Jenny Chan as 2nd Vice-Chair for Fiscal Year 2025/2026.

RESULT:	**APPROVED AS RECCOMMENDED**
MOVER:	Calimesa
SECONDER:	Moreno Valley
AYES:	Banning, Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Perris, Riverside, San Jacinto, Temecula, Wildomar, County of Riverside, March IPAA, RCTC

5. PUBLIC COMMENTS

There were no public comments.

6. CONSENT CALENDAR

RESULT:	**APPROVED AS RECOMMENDED**
MOVER:	Calimesa
SECONDER:	County of Riverside
AYES:	Banning, Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Perris, Riverside, San Jacinto, Temecula, Wildomar, County of Riverside, March IPAA, RCTC

A. Action Minutes from the May 8, 2025, Public Works Committee Meeting

Action:

1. Approved the Action Minutes from the May 8, 2025, Public Works Committee meeting.

7. REPORTS / DISCUSSION

A. Update on the Coachella Valley Association of Governments' Implementation of a Regional Traffic Signal Coordination Project

Action:

1. Received and filed.

B. Update on the Due Diligence of a Regional Traffic Signal Coordination / Intelligent Transportation Systems Program

Action:

1. Received and filed.

C. TUMF Program Status Overview

Action:

1. Received and filed.

D. Regional Streetlight Program Annual Update

Action:

1. Received and filed.

8. REPORT FROM THE DEPUTY EXECUTIVE DIRECTOR

Chris Gray, Deputy Executive Director, reported that WRCOG is beginning work on an updated fee comparison study, which will be the fourth iteration of work in this area. There are also upcoming virtual workshops on the VMT Program. These workshops will be on September 18, 2025, from 1 p.m. - 2:30 p.m. and September 24, 2025, from 10 a.m. - 11:30 a.m.

9. ITEMS FOR FUTURE AGENDAS

There were no items for future agendas.

10. GENERAL ANNOUNCEMENTS

Chair Farag gave recognition to Past Chair Savat Khamphou for his leadership.

11. NEXT MEETING

The next Public Works Committee meeting is scheduled for Thursday, October 9, 2025, at 2:00 p.m., in WRCOG's office at 3390 University Avenue, Suite 200, Riverside.

12. ADJOURNMENT

The meeting was adjourned at 3:17 p.m.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: TUMF Construction Cost Index Adjustment for 2025

Contact: Cameron Brown, Program Manager, cbrown@wrcog.us, (951) 405-6712

Date: October 9, 2025

Recommended Action(s):

1. Recommend that the Executive Committee approve the implementation of an automatic Construction Cost Index adjustment for all TUMF land uses tied to the September 2025 indices of the National Association of Realtors and Engineering News Record (ENR) with a cap at 5% on any annual adjustments.

Summary:

The TUMF Program is subject to periodic adjustment to reflect changes in construction costs to ensure the Program continues to provide sufficient funding to mitigate the regional transportation impacts of new development. The proposed adjustment is based on a blended index of the National Association of Realtors (NAR) Index and the Engineering News Record (ENR) Construction Cost Index (CCI). For 2025, the combined indices reflect an increase of 2.6%, which will be applied to the current adopted fee levels. WRCOG staff also recommends moving to an annual automatic CCI adjustment based on the combined NAR/ENR Indices with a cap at 5%.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to maintain the fiscal integrity of the TUMF Program by adopting a standard cost escalation methodology. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our subregion).

Discussion:

Background

The TUMF Program is a regional fee program designed to fund transportation infrastructure improvements. By automatically adjusting TUMF rates based on changes in construction, labor, and land costs as measured by established indices, the CCI ensures that the fee schedule remains aligned with actual market conditions and maintains the Program's purchasing power for critical transportation projects.

The historical implementation of automatic CCI adjustments to the TUMF fee has demonstrated clear benefits for both the financial health of the TUMF Program and the ability of member agencies to deliver critical infrastructure. Past CCI adjustments have served as an essential mechanism to bridge the gap between infrequent Nexus Study updates, ensuring that fee schedules remain aligned with the actual increases in construction, labor, and land costs. Applying these indices to the TUMF schedule resulted in increases of funding, which helped maintain the purchasing power of the Program and helped member agencies with project completion. Without these adjustments, agencies face limitations in funding, potentially leading to project delays or the need to seek alternative funding sources, which could be less reliable or more burdensome.

The TUMF Administrative Plan calls for a CCI adjustment to be brought forth to the Executive Committee on an annual basis. These adjustments occur in years where there is not already a TUMF Nexus Study update. The Executive Committee most recently adopted a comprehensive Nexus Study and Fee Schedule in September 2024, which became effective April 1, 2025. This new fee schedule. which is established at every Nexus Study update. included a 50% increase in Single-family residential fees. Multi-family and Industrial rates saw smaller increases while the commercial uses of Retail and Service remain unchanged. With no CCI adjustment since 2021 and rising labor and materials costs, the recent increase was the largest increase ever done in the Program.

Present Situation

A CCI adjustment would ensure the following:

- Fee levels keeps pace with increases in cost of constructing transportation projects.
- Avoids large increases at comprehensive TUMF Nexus Study updates.

To ensure that fee levels remain consistent with actual construction costs, staff have developed a blended CCI using the National Association of Realtors - Median Sales Price of Existing Single Family Homes (NAR MAEHP) and Engineering New Record (ENR) CCI indices. This blended approach provides a balanced, industry-recognized, measure of annual cost increases in transportation and building construction. The current indices can be found in Attachment 1 to this Staff Report.

As of September 2025, the blended index reflects a 2.6% increase. Applying this adjustment results in the following updated TUMF Fee Schedule, effective July 1, 2026:

Land Use Type	2024 Nexus Study Fee Schedule	CCI Adjustment
Single-family Residential < 1800 sf (DU)	$12,380	$12,705
Single-family Residential 1801-2299 sf (DU)	$13,927	$14,292
Single-family Residential 2300-2699 sf (DU)	$15.476	$15,881
Single-family Residential > 2700	$19,344	$19,851
Multi-family Residential (DU)	$7,816	$8,021
Industrial (SF)	$2.33	$2.39
Retail (SF)	$7.72	$7.92
Service (SF)	$4.89	$5.02
Class A/B Office (SF)	$2.45	$2.51

This adjustment provides consistency and predictability to the Program, while ensuring that the “fair share” principle under AB 1600 continues to be met. This increase also is consistent with the administrative framework outlined in the TUMF Administrative Plan, which directs staff to monitor construction cost trends annually and recommend adjustments to the Executive Committee to maintain the fiscal integrity of the Program.

The financial impact of CCI adjustments has been positive and relatively modest in terms of development costs, while significantly enhancing the TUMF Program’s ability to fund necessary transportation improvements. Analyses have shown that CCI-driven fee increases typically result in only a nominal rise in overall development costs—often less than 0.1% of the total cost of a new home—while generating approximately 3% - 5% additional revenue for the TUMF Program annually. This additional revenue is crucial for keeping pace with escalating project costs and avoiding larger, more disruptive fee increases during periodic Nexus Study updates. Moreover, the CCI adjustment process is objective, transparent, and based on well-established indices, which reduces political friction and provides predictability for both developers and agencies.

WRCOG recommends adjusting the CCI implementation process so that any adjustments are implemented automatically. Under this process, the CCI would be calculated based on the combined September indices of the NAR and ENR. Once the CCI has been calculated, the fee increase would be implemented on July 1 of the following year. This process ensures that fee revenues keep pace with actual costs, reduce administrative and political burdens, and support the timely and reliable delivery of critical infrastructure projects—advantages that are not consistently realized with annual, separately approved, fee increases. Since there will be a 9-month period between calculation of the CCI and the implementation, developers will have more than adequate notice of the fee increase.

Prior Action(s):

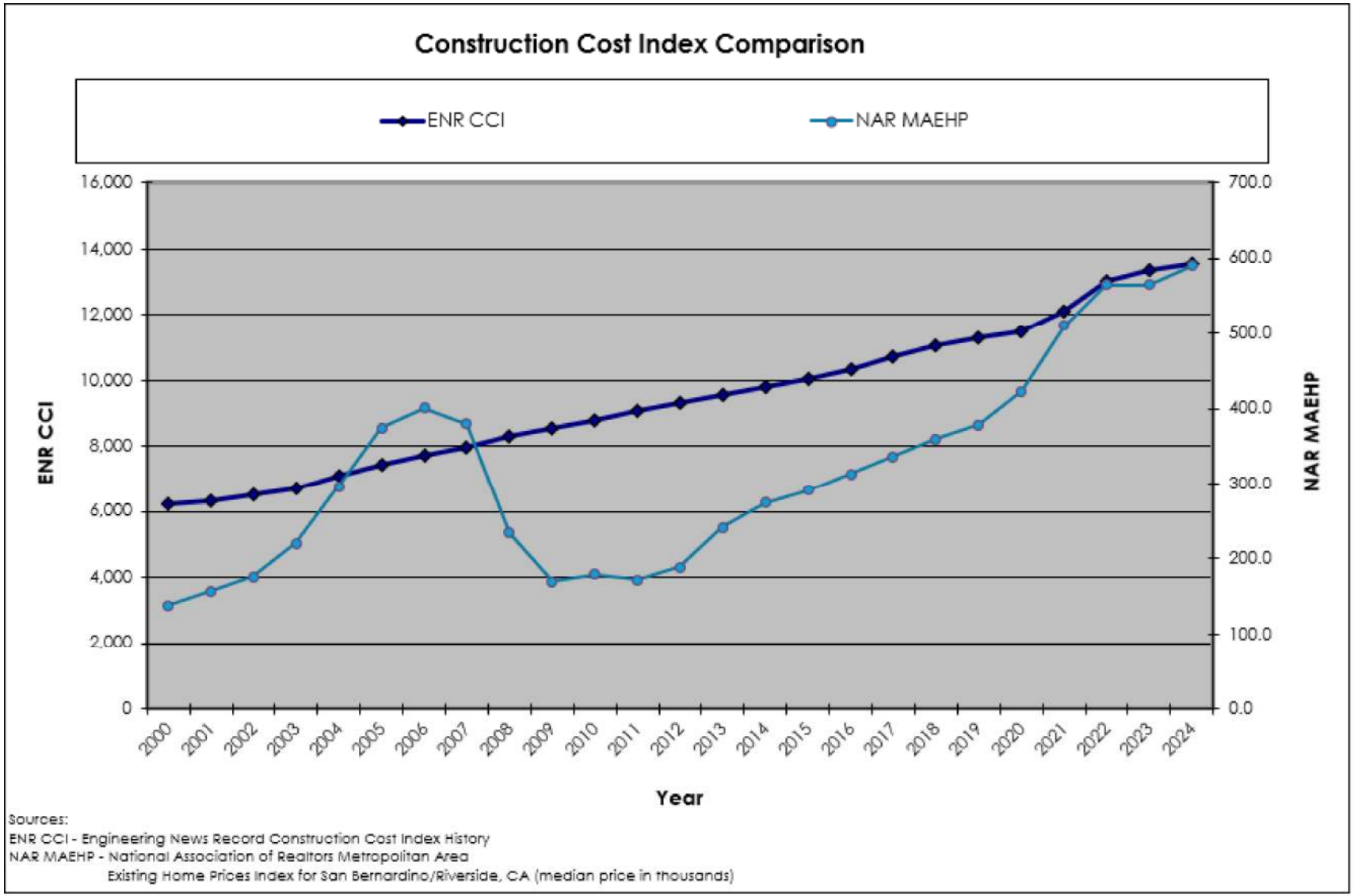
None.

Financial Summary:

Funding for TUMF activities is included in the Fiscal Year 2025/2026 budget under the TUMF Program (1148) in the General Fund (110). 4% of all TUMF collections are allocated for administrative purposes.

Attachment(s):

Attachment 1 - 2025 CCI Graph



Sources:
ENR CCI - Engineering News Record Construction Cost Index History
NAR MAEHP - National Association of Realtors Metropolitan Area
Existing Home Prices Index for San Bernardino/Riverside, CA (median price in thousands)

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: TUMF Program Status Overview

Contact: Cameron Brown, Program Manager, cbrown@wrcog.us, (951) 405-6712

Date: October 9, 2025

Recommended Action(s):

1. Receive and file.

Summary:

The TUMF Program funds regional roadway improvements by collecting mitigation fees from new development and staff provides regular updates on collections, reimbursements, and credit agreements. As it stands, in Fiscal Year (FY) 2025/2026, TUMF collections have been $11.3M, and nearly $20.7M has been reimbursed for major infrastructure projects, while also supporting $1.3M in developer Credit Agreements that fulfilled obligations. Program highlights include the approval of the FY 2025/2026 Transportation Improvement Programs (TIPs), and release of the TUMF Program's '150 Projects and Counting' report.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide an update on the status of the TUMF Program with regards to collections and reimbursements on projects. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our sub-region).

Discussion:

Background

The TUMF Program is designed to provide funding towards capacity enhancing projects on regional arterials and collectors within the WRCOG subregion. Revenue is collected on all residential and non-residential development in the subregion as a mitigation towards additional traffic created. This revenue is used towards capacity enhancing projects within the subregion which is allocated to both public and private infrastructure development.

Present Situation

Collections and project reimbursements occur on a continual basis as developments proceed, and

infrastructure work is completed. As of October 2025, the TUMF Program has collected $11,292,203.83. The largest amount of collections from a city was from Menifee at $4.4M.

Concurrently, WRCOG has reimbursed $20,694,370.16 in invoices for FY 2025/2026. Significant reimbursements were made in the Hemet / San Jacinto Zone for the SR-79 Realignment Project, the City of Riverside for Third Street Grade Separation, and the City of Eastvale for the Limonite Avenue Bridge. Reimbursements have exceeded collections for the first time in several years.

WRCOG is also tracking the progress of several developer Credit Agreements that are actively clearing TUMF obligations through credit. As of October, WRCOG has cleared $1.2M in TUMF obligations. These obligations are met by the developer constructing TUMF facilities as part of their conditions of approval.

As of September 8, 2025, all Zones have had their Fiscal Year 2025/2026 TIPs approved, with many agencies submitting missing agreements or amendments. With approved TIPs, agencies need to enter into new Reimbursement Agreements or Reimbursement Agreement Amendments to access any additional funds allocated in the new TIPs. Since adoption, nine Agreements or Agreement Amendments have been approved by the Executive Committee.

Prior Action(s):

None.

Financial Summary:

Funding for TUMF activities is included in the Fiscal Year 2025/2026 budget under the TUMF Program (1148) in the General Fund (110). 4% of all TUMF collections are allocated for administrative purposes.

Attachment(s):

None.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Compass IoT Demonstration**

Contact: **Angus McDonald, Compass IoT, Co-founder, angus@compassiot.com.au, 61-410-007-585**

Date: **October 9, 2025**

Recommended Action(s):

1. Receive and file.

Summary:

This presentation will focus on advanced "Big Data" tools to support WRCOG's member agencies in transportation planning, with a particular focus on connected vehicle data.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to familiarize WRCOG member agencies with Compass IoT, which could assist them with various planning efforts. This item supports WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our region).

Discussion:

WRCOG is implementing advanced "Big Data" tools to support member agencies in transportation planning, with a particular focus on connected vehicle data. WRCOG has purchased a license with Compass IoT, which leverages vehicle-based location data sourced directly from major vehicle manufacturers and commercial vehicle operators. This data is intended to provide a scalable, regional view of travel patterns, data on local roads, speed, vehicle behavior, safety, origin, and destination analysis. WRCOG encourages its member agencies to use the new tool and to reach out to WRCOG staff for analytical support and training as needed.

Prior Action(s):

None.

Financial Summary:

WRCOG's license with Compass IoT was funded between the TUMF Program (Fund 110, Program

Code 1148) and the LTF Program (Fund 210). These licensing fees are included in the Agency's Fiscal Year 2025/2026 budget under their respective funds.

Attachment(s):

None.

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: **Assembly Bill 98 Activities Update**

Contact: **Taylor Libolt Varner, Policy Specialist, Amplify Communities, tliboltvarner@amplifycommunities.org, (909) 639-1857**

Date: **October 9, 2025**

Recommended Action(s):

1. Receive and file.

Summary:

Assembly Bill (AB) 98, signed into law in 2024, established new design and build standards for logistics uses, and stakeholders have since worked on technical corrections and amendments to improve its clarity and application. This update will review Senate Bill (SB) 415, the clean-up bill, highlighting key revisions such as clarified definitions, a safe harbor provision, alternative compliance pathways, and expected implementation timelines.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide an update on AB 98 and SB 415. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #1 (Serve as an advocate at the regional, state, and federal level for the Western Riverside subregion).

Discussion:

Background

AB 98 has a number of provisions related to the siting of warehouse facilities and the designation of truck routes. There is an effort to seek feedback and input on technical corrections, gather suggested amendments, and build consensus among stakeholders to improve the Bill's clarity and application. This presentation will focus on these opportunities.

In addition, WRCOG has completed development of an implementation guide to comply with AB 98. The goal of the guide is to provide a checklist to comply with the Bill's requirements and to provide sample ordinances, design handbooks, etc.

Present Situation

Work on this implementation guide began in December, 2024. Updates on this guide and status updates of legislation work has been presented to the Planning Directors Committee on a regular basis since February 2025. A final implementation guide on AB 98 is attached. In addition, a report on the clean up bill, SB 415, will be presented.

Prior Action(s):

August 21, 2025: Technical Advisory Committee received and filed.

August 14, 2025: The Planning Directors Committee received and filed.

Financial Summary:

This item is for informational purposes only; therefore, there is no fiscal impact.

Attachment(s):

Attachment 1 - AB 98 Implementation Guidance

Fehr & Peers

AB 98 Implementation

Guidance for Local Agencies

Prepared for:

Western Riverside Council of Governments &
San Bernardino County Transportation Authority

Submitted on:

September 10, 2025

Table of Contents

Appendices

List of Tables

AB 98 Overview

Assembly Bill 98 – Warehouse Standards (AB 98, 2024) legislation is intended to focus on three key components of warehouse developments – (1) warehouse development standards, such as locating loading areas and other truck-serving components away from sensitive receptors, (2) requirement for local agencies to update their circulation elements to incorporate a truck route map, that also needs to be available in a GIS format, identifying truck routes and locating them away from sensitive receptors, and (3) a requirement that, if a warehouse development displaces housing that the housing be replaced under specific requirements. Although all agencies must update their circulation elements before January 1, 2028, agencies within a defined "warehouse concentration region" must update their circulation elements by January 1, 2026, which leaves a very short timeframe for complying with the legislative requirements.

An overview of the legislative requirements is described in detail below:

Development Standards

AB 98 prescribes various statewide warehouse design and build standards that go into effect on January 1, 2026. The legislation applies to any proposed new or expanded "logistics use" development, defined as:

> *"a building in which cargo, goods, or products are moved or stored for later distribution to business or retail customers, or both, that does not predominantly serve retail customers for onsite purchases, and heavy-duty trucks are primarily involved in the movement of the cargo, goods, or products. "Logistics use" does not include any of the following:*
>
> *(1) Facilities where food or household goods are sold directly to consumers and are accessible to the public.*
>
> *(2) A building primarily served by rail to move cargo goods or product.*
>
> *(3) (A) A Strategic Intermodal Facility.*
>
> *(B) For purposes of this subdivision, "Strategic Intermodal Facility" means a project that satisfies all of the following requirements:*
>
> *(i) Logistics facilities, including warehousing and transloading facilities, served by rail.*
>
> *(ii) Intermodal freight transport services.*
>
> *(iii) All facility structures and related rail operations are located within a single site footprint."*

The law specifies standards for building and site design that go above and beyond the California Green Building Code. AB 98 in its entirety is provided as **Appendix A**.

AB 98 Zoning Regulation Guidance

The following is a brief list of "things to know" about AB 98 ahead of updating a jurisdiction's zoning regulations.

- AB 98 provides crucial definitions for “logistics uses” and “sensitive receptors.”
- AB 98 uses the threshold of 250,000 square feet to regulate logistics uses (i.e., logistics uses under and over 250,000 square feet are regulated differently).
- AB 98 is expected to be amended through subsequent legislation to clean up some of the ambiguous requirements, but that legislation is not anticipated to be adopted until late 2025.
- Special zoning regulations apply to jurisdictions within the “warehouse concentration region” defined by the legislation as follows:
    - Unincorporated Riverside County
    - Unincorporated San Bernardino County
    - City of Chino
    - City of Colton
    - City of Fontana
    - City of Jurupa Valley
    - City of Moreno Valley
    - City of Ontario
    - City of Perris
    - City of Rancho Cucamonga
    - City of Redlands
    - City of Rialto
    - City of Riverside
    - City of San Bernardino
- AB 98 only applies to logistic uses that have sensitive receptors within 900 feet of the loading bay.
- AB 98 does not apply to logistics use developments that are mixed-use developments that may create sensitive receptors on the site of the new logistics use development.
- AB 98 zoning regulations applies to all jurisdictions beginning January 1, 2026.

The following information provides an overview of key updates that local agencies should make to their municipal codes. Please note, a detailed checklist and sample illustrations are provided as **Appendix B** and are intended to provide guidance to local agencies to ensure compliance and consistency with the design standards requirements of AB 98.

Definitions

AB 98 provides definitions that should be incorporated into local zoning codes either by adding the definition or referencing the definition contained in California Government Code §65098(d). If the definition is added directly to the code, it is recommended that additional language state that Government Code supersedes the zoning code to avoid potential conflicts should subsequent legislation change the definition.

Conflict and Implementation Checklist

AB 98 uses different square footages for regulating logistics uses, whereby logistics uses larger than 250,000 square feet are regulated differently. Local zoning codes that use square footage thresholds

other than 250,000 square feet will conflict with AB 98 standards. As such, it is recommended to remove any square footage threshold that is not consistent with the State's defined 250,000 square feet threshold to ensure consistency with AB 98 requirements.

California Government Code §65098.6 requires a two-for-one replacement for any demolished residential housing unit that occurs to construct a logistics use. It also includes a requirement for relocation assistance to displaced residents. As such, local jurisdictions must amend their zoning codes to add these housing requirements or reference the noted Government Code.

Setbacks for truck loading "bays" are specifically defined in in AB 98. As such, a local agency's zoning code may require the addition of a definition for Truck Loading Bay which is different than a Loading Dock. A loading bay refers to any space on a site where goods are loaded to/from a truck. A parking space on the edge of the site used for this purpose would be required to conform with the setback standards of 300-500 feet from sensitive receptors as defined in the legislation.

New buffer requirements for facilities that are planned within 900 feet of a sensitive receptor is now required per AB 98. The setback ranges from 50 to 100 feet. Planned facilities in the Warehouse Concentration Region require 100-foot buffers, as do sites over 250,000 square feet proposed on a site that is not zoned industrial. Local agencies should understand these nuances and incorporate the requirements into their zoning codes.

Truck Route Requirements

The AB 98 truck route requirements described herein have been codified in Section 65098.2.7 and Section 65302.02. Excerpts from the legislation relevant to the implementation guidance provided in this document are provided below.

> ***65098.2.7.***
>
> *(a) The purpose of this section is to ensure that **logistics use developments**, beginning January 1, 2026, are sited in locations that minimize adverse impacts on residential communities and enhance transportation efficiency. This is achieved by restricting logistics use development to roadways that are suited to handle the associated traffic and that predominantly serve commercial uses.*
>
> *(b) (1) Any new logistics use development shall be sited on roadways that meet the following classifications:*
>
> *(A) Arterial roads.*
>
> *(B) Collector roads.*
>
> *(C) Major thoroughfares.*
>
> *(D) Local roads that predominantly serve commercial uses.*
>
> *(2) For purposes of this chapter, local roads shall be considered to predominantly serve commercial uses if more than 50 percent of the properties fronting the road within 1,000 feet are designed for commercial or industrial use according to the local zoning ordinance.*

(c) A waiver may be granted where siting on the designated roadways pursuant to subdivision (b) is impractical due to unique geographic, economic, or infrastructure-related reasons. The waiver shall be approved by the city, county, or city and county, provided that the applicant demonstrates all of the following:

(1) There is no feasible alternative site that exists within the designated roadways.

(2) A traffic analysis has been completed and submitted to the local approving authority.

(3) The site is an existing industrial zone.

(4) The proposed site will incorporate mitigations to minimize traffic and environmental impacts on residential areas to the greatest extent feasible.

65098.3.

(a) Anti-idling signs indicating a three-minute heavy-duty truck engine idling restriction shall be posted at logistics use developments along entrances to the site and at the truck loading bays.

(b) Signs shall be installed at all heavy-duty truck exit driveways directing truck drivers to the truck route as indicated in the truck routing plan, as described in Section 65098.4, and in the state highway system.

65302.02.

Pursuant to Section 65302, jurisdictions within the Warehouse Concentration Region must comply with the following by January 1, 2026, and all other agencies must comply by January 1, 2028:

(a) Identify and establish specific travel routes for the transport of goods, materials, or freight for storage, transfer, or redistribution to safely accommodate additional truck traffic and avoid residential areas and sensitive receptors, as defined by Section 65098.

*(b) Maximize the use of interstate or state divided highways as preferred routes for truck routes. The county or city shall also **maximize use of arterial roads**, major thoroughfares, and predominantly commercially oriented local streets when state or interstate highways are not utilized. Truck routes shall comply with the following:*

> *(1) **Major or minor collector streets and roads** that predominantly serve commercially oriented uses **shall be used for truck routes only when strictly necessary** to reach existing industrial zones.*
>
> *(2) Trucks shall be routed via transportation **arteries that minimize exposure** to sensitive receptors.*

(d) The county or city shall provide for posting of conspicuous signage to identify truck routes and additional signage for truck parking and appropriate idling facility locations.

*(e) The county or city shall make truck routes publicly available in geographic information system (GIS) format and **share GIS maps of the truck routes** with warehouse operators, fleet operators, and truck drivers.*

General Plan Mobility/Circulation Element

The following section provides guidance on how to evaluate, identify, and incorporate AB 98–compliant truck routes into general plan circulation elements by the AB 98 implementation deadline.

Truck Route Analysis & Identification

The United States Department of Transportation (USDOT) established truck size and weight standards pursuant to the 1982 Surface Transportation Assistance Act (STAA). The California Motor Vehicle Code also contains size and weight standards for "California Legal" trucks. STAA trucks are slightly longer and require more turning radius than California Legal trucks. In California, STAA routes must be approved by Caltrans, appropriately signed, and are strictly enforced. From a lay-person's perspective, there is little difference between the two truck types. They are both seen as "big rigs". Most of the trucks that are the focus of AB 98 are California Legal trucks, which are permitted on all roadways unless expressly prohibited by state or local regulations. AB 98 aims to limit where all heavy-duty trucks, including California Legal trucks, travel by requiring local agencies to designate, post signage, and enforce truck routes on local roadways.

The first step in designating truck routes is understanding where trucks are traveling in local communities, and why. The next step is to consider future land use and zoning that may require truck access. And the final step is to identify and implement the most direct, yet least impactful, local truck routes. If changes to the General Plan are necessary to reflect revised or new truck routes, a General Plan amendment will be required, which will trigger the California Environmental Quality Act (CEQA). The following steps are recommended for updating or establishing local truck routes.

STEP 1: CONFIRM EXISTING TRUCK ROUTES (IF NO TRUCK ROUTES EXISTS, SKIP TO STEPS 3 AND 4)

This first step entails reviewing the general plan and/or researching local ordinances to identify existing truck routes. If the truck routes are contained in the General Plan, the jurisdiction need only confirm that the truck routes meet the AB 98 requirements (see Step 5). If the general plan does not contain designated truck routes, but truck routes were previously adopted by ordinance, a general plan amendment will be required to incorporate the truck routes, but the CEQA process may be more streamlined. For jurisdictions that do not have designated truck routes either in the general plan or by ordinance, a CEQA impact analysis may be required. It is recommended that local agencies consult the CEQA approach with a CEQA practitioner, CEQA legal counsel, and/or the agency's attorney (City Attorney/County Council (or similar)).

STEP 2: LAND USE ANALYSIS

This step entails a review of existing land uses to determine where truck-served uses are located, what roads provide direct access to those facilities, and the proximity of sensitive receptors to roads used to access truck-served facilities. The general plan land use map is a good place to start, particularly if its availably in GIS and can be overlayed with existing truck routes (if designated), but in addition, some land uses defined as sensitive receptors by AB 98 occur in commercial districts, such as daycare facilities. These also need to be considered in the truck routing decision-making process.

STEP 3: ROADWAY CLASSIFICATIONS OF EXISTING TRUCK ROUTES

A GIS map has been developed for SBCTA and WRCOG member agencies that compiles and documents existing truck routes in the SBCTA and WRCOG jurisdictional areas and can be accessed at: https://fehrandpeers.maps.arcgis.com/apps/mapviewer/index.html?webmap=3182123c01ec4416ab84a99856aaccc6

In addition, the Caltrans Local Truck Routes web page provided the starting point for this GIS mapping effort:

https://dot.ca.gov/programs/traffic-operations/legal-truck-access/local-truck-routes.

Some of the information, particularly on the Caltrans' local truck routes webpage, is outdated. Local jurisdictions are encouraged to review the truck route data posted on the site and provide Caltrans with any necessary updates. Routes shown on the webpage were compared to current general plans and ordinances for each agency (as found on city websites) and incorporated into the WRCOG/SBCTA GIS truck route map.

AB 98 references roadway classifications. It is our understanding that the classifications refer to Caltrans road functional classifications, rather than general plan roadway classifications. For this reason, the WRCOG/SBCTA GIS truck route layer includes both local agency and Caltrans functional classifications. Where the classifications are the same, the map shows the truck route in blue. Where the classifications contrast, the truck route is shown in red. For local agency truck routes that are located on roadways with a local classification of arterial but Caltrans classification of collector or local, it is recommended that agencies initiate reclassification with Caltrans (see Step 4).

STEP 4: RECLASSIFICATION OF ROADWAYS

The Federal Highway Administration (FHWA) identifies functional classification as a key criterion for identifying where to invest federal funds with priority given to arterials at the local level. Caltrans, in coordination with FHWA, has a process for local agencies to request reclassification of local roadways. The FHWA designation is based on existing lane miles and average annual daily traffic (AADT) volumes. This differs from local general plan roadway classifications. At the local level, general plans consider future land use and traffic projections. For this reason, roadway classifications at the local and federal levels may differ for a time until development occurs, traffic volumes increase, and a request for reclassification is approved.

AB 98 requires that a county or city …"shall maximize interstate or state divided highways as preferred routes for truck routes. The county or city shall also maximize use of arterial roads…" For local agencies that have designated truck routes on locally designated arterials, and Caltrans shows it as a collector or local road, it is recommended that the city or county submit a request to Caltrans to reclassify the road by visiting the Caltrans Functional Classification webpage at:

https://dot.ca.gov/programs/research-innovation-system-information/office-of-highway-system-information-performance/functional-classification

STEP 5: ALTERING OR CREATING A NEW TRUCK ROUTE

The next step in this process is to understand where trucks are traveling and if they are using designated truck routes or not. It is also important to understand how trucks travel throughout the

region so that neighboring jurisdictions can work together to identify preferred truck routes. For this exercise, Fehr & Peers utilized Geotab data collected from telematics devices in freight vehicles that monitor vehicle speeds, near-misses, hard-braking occurrences, etc. for the primary purpose of contacting emergency responders when a crash is detected. Unlike modeled datasets, Geotab is based on observed data to show where, when, and how freight moves through a roadway network both locally and regionally. Since Geotab only purchases data from manufacturers of heavy-duty trucks, it is a sample of the overall vehicle fleet, typically encapsulating between one and twenty-five percent of the total truck fleet operating on a roadway. Using Geotab data for a 60-day period (May and June 2024), two different dashboards were created, one for San Bernardino County and one for Riverside County. Links to the two dashboards are provided below:

San Bernardino County:
https://www.arcgis.com/apps/dashboards/8120f0262a914c589f50fb0b81dbffde

Riverside County:
https://fehrandpeers.maps.arcgis.com/apps/dashboards/58a241e8e29f4e1695f91959893fd7c3

The intent of this data is two-fold: (1) to confirm that trucks are currently utilizing designated truck routes, and (2) to identify how trucks are operating on non-truck routes. The latter is useful for investigating changes to existing truck routes or adding new truck routes.

Once a jurisdiction has reviewed the Geotab data, if changes to the truck route network are needed, Geotab can be used to assist with identifying where to collect traffic counts. For example, if a city currently has a designated truck route that is on a roadway fronted primarily by homes, schools, and other sensitive receptors, the truck route is shown in Geotab as red (carrying a significant amount of truck traffic). If there is a parallel route with fewer sensitive receptors that the city would like to use instead, the city should collect traffic counts on the existing and the proposed truck route. These counts will assist the city with analyzing potential effects of the truck route change, such as noise, vibration, air quality, and safety benefits to residents along the existing route, and potential impacts created by shifting trucks to the proposed route.

In addition to the environmental impacts identified above, the design and structural section of the roadways should also be considered. Heavy-duty trucks have a maximum weight limit of 80,000 pounds (40 tons). Truck routes should be designed to support this much heavier weight. In addition, California Legal trucks require a turning radius of 50 feet. Intersecting truck routes should be designed to accommodate this.

STEP 6:

The sixth and final step is preparing a matrix that combines the information gathered in the prior steps.

1. Locations of existing truck routes (if applicable) within and adjacent to the jurisdiction
2. General plan and Caltrans functional classifications of designated truck routes
3. Truck utilization of existing and/or proposed truck routes
4. Truck classification counts: it is recommended that counts be collected if:
    a. Existing truck routes operate on routes fronted by more than 50% sensitive uses
    b. Existing truck routes are being eliminated resulting in a potential shift of truck traffic to parallel roadways
    c. New truck routes are being proposed

5. Designated truck route roadway design standards should be updatedto accommodate heavy-duty trucks

For jurisdictions that have designated truck routes and can substantiate that the routes comply with AB 98, it is recommended that they document the following findings:

1. Truck routes are designated on arterials;
2. Designated truck routes provide the most direct access to truck-generating land uses;
3. Designated truck routes avoid sensitive receptors to the greatest extent feasible; and,
4. Trucks are utilizing the designated truck routes and avoiding use of non-truck routes.

Tables 1 and 2 below provide examples for collecting and analyzing information to assist with confirming, changing, or creating new truck routes.

Table 1. Roadway Characteristics (Example)

Truck Route Segment	GP Functional Classification	Caltrans Functional Classification	Distance to State Highway or Interstate	Connects to Truck Route in Adjacent Jurisdiction	Pavement designed for trucks	Turning radius of intersecting truck route	Truck Volumes	GP Functional Classification
Main St from A to B	Arterial	Collector	0.5 miles	Yes	Yes	50 feet	1,200	Arterial

Table 2. Land Use and Active Transportation Characteristics (Example)

Truck Route Segment	Percentage of Sensitive Receptors fronting segment	Provides direct access to truck-generating land uses	Fronted by or only access to Logistics Use	Class II Bike Lane	Bicycle Volumes	Transit Corridor with stops	Sidewalks	Pedestrian Volumes
Main St from A to B	30%	Yes	Yes	No	0	No	Yes	10

Appendix A. AB 98

Assembly Bill No. 98[1]

CHAPTER 931

An act to add Section 65302.02 to, and to add Chapter 2.8 (commencing with Section 65098) to Division 1 of Title 7 of, the Government Code, and to add Sections 40458.5 and 40522.7 to the Health and Safety Code, relating to land use.

[Approved by Governor September 29, 2024. Filed with Secretary of State September 29, 2024.]

LEGISLATIVE COUNSEL'S DIGEST

AB 98, Juan Carrillo. Planning and zoning: logistics use: truck routes.

(1) Existing law, the Planning and Zoning Law, sets forth various requirements relating to the review of development project permit applications and the issuance of development permits for specified classes of development projects.

This bill, beginning January 1, 2026, would prescribe various statewide warehouse design and build standards for any proposed new or expanded logistics use developments, as specified, including, among other things, standards for building design and location, parking, truck loading bays, landscaping buffers, entry gates, and signage. The bill would except from those design and build standards certain existing logistics use developments, proposed expansions of a logistics use development, and property currently in a local entitlement process to become a logistics use, under prescribed conditions. The bill would require a facility operator, prior to the issuance of a certificate of occupancy, to establish and submit for approval by a city, county, or city and county a truck routing plan to and from the state highway system based on the latest truck route map of the city, county, or city and county, as prescribed. The bill would require a facility operator to enforce the plan. The bill would provide for the revision of the plan in specified circumstances.

The bill would prohibit a city, county, or city and county from approving development of a logistics use that does not meet or exceed the standards outlined in the bill. The bill would require a city, county, or city and county to condition approval of a logistics use on 2-to-1 replacement of any demolished housing unit that was occupied within the last 10 years unless the housing unit was declared substandard by a building official, as specified, and payments to displaced tenants if residential dwellings are affected through purchase, as prescribed. The bill would define terms for these purposes.

(2) The Planning and Zoning Law requires the legislative body of each county and city to adopt a comprehensive, long-term general plan for the physical development of the county or city and specified land outside its boundaries that includes, among other specified mandatory elements, a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan. Existing law requires, upon

[1] Assembly Bill 98 accessed online on September 4, 2025 at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202320240AB98

any substantive revision of the circulation element, that the legislative body modify the element to address specified additional issues.

This bill would require a county or city, by January 1, 2028, except as provided, to update its circulation element, as prescribed, including identifying and establishing specific travel routes for the transport of goods, materials, or freight for storage, transfer, or redistribution to safely accommodate additional truck traffic and avoid residential areas and concentrations of sensitive receptors, as defined. The bill would establish specific standards for truck routes. The bill would require a county or city to provide for posting of conspicuous signage to identify truck routes and additional signage for truck parking and appropriate idling facility locations. The bill would require a county or city to make truck routes publicly available and share maps of the truck routes with warehouse operators, fleet operators, and truck drivers. The bill would authorize the Attorney General to enforce these provisions, as provided, including by imposition of a fine of up to $50,000 every 6 months if the required updates have not been made.

(3) Existing law provides for the creation of the South Coast Air Quality Management District in those portions of the Counties of Los Angeles, Orange, Riverside, and San Bernardino included within the area of the South Coast Air Basin, as specified. Existing law provides that the south coast district is governed by a board consisting of 13 members and requires the district to adopt rules and regulations to carry out the south coast district air quality management plan that are not in conflict with state and federal laws and rules and regulations.

This bill would require the south coast district to establish a process for receiving community input on how any penalties assessed and collected for violation of the Warehouse Indirect Source Rule are spent, as specified. The bill would require the south coast district, subject to an appropriation for this express purpose, to, beginning on January 1, 2026, and until January 1, 2032, deploy mobile air monitoring systems within the Counties of Riverside and San Bernardino to collect air pollution measurements in communities that are near operational logistics use developments. The bill would require the south coast district to use the data collected to conduct an air modeling analysis to evaluate the impact of air pollution on sensitive receptors from logistics use development operations and to submit its findings to the Legislature on or before January 1, 2033. The bill would also require the district to submit an interim report to the Legislature on or before January 1, 2028, to evaluate the impact of air pollution on sensitive receptors, as defined, from logistics use development operations in the Counties of Riverside and San Bernardino, as provided.

(4) By modifying the duties of local agencies with regard to the approval of logistics use development and requiring the revision of the circulation element of a general plan, the bill would impose a state-mandated local program.

(5) The bill would include findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

(6) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Digest Key

Vote: MAJORITY Appropriation: NO Fiscal Committee: YES Local Program: YES

Bill Text

The people of the State of California do enact as follows:

SECTION 1.

Chapter 2.8 (commencing with Section 65098) is added to Division 1 of Title 7 of the Government Code, to read:

CHAPTER 2.8. Warehouse Design and Build Standards

65098.

As used in this chapter:

(a) "21st century warehouse" means a logistics use that meets all of the following:

(1) Complies with or exceeds all requirements of the most current building energy efficiency standards specified in Part 6 (commencing with Section 100) of Title 24 of the California Code of Regulations and the California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations), including, but not limited to, the following requirements related to:

(A) Photovoltaic system installation and associated battery storage.

(B) Cool roofing.

(C) Medium- and heavy-duty vehicle charging readiness.

(D) Light-duty electric vehicle charging readiness and installed charging stations.

(2) Has skylights in at least 1 percent of the roof area, or equivalent LED efficient lighting.

(3) Provides conduits and electrical hookups at all loading bays serving cold storage. Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay.

(4) Ensures that any heating, ventilation, and air-conditioning is high-efficiency.

(5) (A) Ensures that all classes of forklifts used on site, pursuant to State Air Resources Board's Zero-Emission Forklifts regulation, as drafted, shall be zero-emission by January 1, 2030, to the extent operationally feasible, commercially off-the shelf available, and adequate power available on site.

(B) (i) If not operationally feasible, commercially off-the shelf available, or if there is inadequate power available on site, the cleanest technology commercially available shall be used.

(ii) Cost shall not be a factor in determining operational feasibility pursuant to this subparagraph.

(6) (A) Ensures that equipment used on site utilizing small off-road engines shall be zero-emission, to the extent operationally feasible, commercially off-the shelf available, and adequate power available on site.

(B) (i) If not operationally feasible, commercially off-the shelf available, or if there is inadequate power available on site, the cleanest technology commercially available shall be used.

(ii) Cost shall not be a factor in determining operational feasibility pursuant to this subparagraph.

(C) Should any equipment used on site utilizing small off-road engines be contracted out, the logistics use facility shall preferentially contract for services utilizing zero-emission small off-road engines.

(b) "Expansion of an existing logistics use" means the expansion of an existing logistics use by 20 percent or more of the existing square footage. Office space shall not be included as part of the existing square footage or in the square footage for the 20-percent expansion threshold.

(c) "Heavy-duty truck" means a class 7 or class 8 truck. As used in this subdivision:

(1) "Class 7 truck" means a truck with a gross vehicle weight rating of 26,001 to 33,000 pounds.

(2) "Class 8 truck" means a truck with a gross vehicle weight rating of greater than 33,000 pounds.

(d) "Logistics use" means a building in which cargo, goods, or products are moved or stored for later distribution to business or retail customers, or both, that does not predominantly serve retail customers for onsite purchases, and heavy-duty trucks are primarily involved in the movement of the cargo, goods, or products. "Logistics use" does not include any of the following:

(1) Facilities where food or household goods are sold directly to consumers and are accessible to the public.

(2) A building primarily served by rail to move cargo goods or product.

(3) (A) A Strategic Intermodal Facility.

(B) For purposes of this subdivision, "Strategic Intermodal Facility" means a project that satisfies all of the following requirements:

(i) Logistics facilities, including warehousing and transloading facilities, served by rail.

(ii) Intermodal freight transport services.

(iii) All facility structures and related rail operations are located within a single site footprint.

(e) "Sensitive receptor" means one or more of the following:

(1) A residence, including, but not limited to, a private home, apartment, condominium unit, group home, dormitory unit, or retirement home.

(2) A school, including, but not limited to, a preschool, prekindergarten, or school maintaining kindergarten or any of grades 1 to 12, inclusive.

(3) A daycare facility, including, but not limited to, in-home daycare.

(4) Publicly owned parks, playgrounds, and recreational areas or facilities primarily used by children, unless the development of the park and recreation areas are included as a condition of approval for the development of a logistics use.

(5) Nursing homes, long-term care facilities, hospices, convalescent facilities, or similar live-in housing.

(6) Hospitals, as defined in Section 128700 of the Health and Safety Code.

(f) "Small off-road engines" means spark-ignition engines rated at or below 19 kilowatts.

(g) "Tier 1 21st century warehouse" means a logistics use that meets all of the following:

(1) Complies with or exceeds all requirements of the most current building energy efficiency standards specified in Part 6 (commencing with Section 100) of Title 24 of the California Code of Regulations and the California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations), including, but not limited to, the following requirements related to:

(A) (i) Photovoltaic system installation and associated battery storage.

(ii) For purposes of the photovoltaic system installation requirement in clause (i), all warehouse square footage should be considered conditioned space.

(B) Cool roofing.

(C) Medium- and heavy-duty vehicle charging readiness.

(D) Light-duty electric vehicle charging readiness and installed charging stations.

(2) Has skylights in at least one percent of the roof area, or equivalent LED efficient lighting.

(3) Has a microgrid-ready switchgear system capable of supporting distributed energy resources.

(4) Is advanced smart metering ready.

(5) Has a minimum of 50 percent of all passenger vehicle parking spaces preinstalled with conduit and all necessary physical infrastructure to support future charging of electric vehicles.

(6) Has a minimum of 10 percent of all passenger vehicle parking spaces installed with electric vehicle charging stations.

(7) Provides conduits and electrical hookups at all loading bays serving cold storage. Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay.

(8) Ensures that any heating, ventilation, and air-conditioning is high-efficiency.

(9) (A) Ensures that all classes of forklifts used on site, pursuant to State Air Resources Board's Zero-Emission Forklifts regulation, as drafted, shall be zero-emission by January 1, 2028, to the extent operationally feasible, commercially off-the shelf available, and adequate power available on site.

(B) (i) If not operationally feasible, commercially off-the shelf available, or if there is inadequate power available on site, the cleanest technology commercially available shall be used.

(ii) Cost shall not be a factor in determining operational feasibility pursuant to this subparagraph.

(10) (A) Ensures that equipment used on site utilizing small off-road engines shall be zero-emission, to the extent operationally feasible, commercially off-the shelf available, and adequate power available on site.

(B) (i) If not operationally feasible, commercially off-the shelf available, or if there is inadequate power available on site, the cleanest technology commercially available shall be used.

(ii) Cost shall not be a factor in determining operational feasibility pursuant to this subparagraph.

(C) Should any equipment used on site utilizing small off-road engines be contracted out, the logistics use facility shall preferentially contract for services utilizing zero-emission small off-road engines.

(h) "Warehouse concentration region" includes the Counties of Riverside and San Bernardino and the Cities of Chino, Colton, Fontana, Jurupa Valley, Moreno Valley, Ontario, Perris, Rancho Cucamonga, Redlands, Rialto, Riverside, and San Bernardino.

65098.1.

(a) Commencing January 1, 2026, any proposed new or expanded logistics use development 250,000 square feet or more where the loading bay is within 900 feet of a sensitive receptor that is utilizing a site zoned for industrial use or any site where an application was submitted to the jurisdiction by September 30, 2024, to rezone as industrial and the rezone to industrial was ultimately approved shall comply with all of the following:

(1) Include all Tier 1 21st century warehouse design elements described in subdivision (g) of Section 65098.

(2) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors, to the extent feasible.

(3) Locate truck loading bays a minimum of 300 feet from the property line of the nearest sensitive receptor to the nearest truck loading bay opening using a direct straight-line method.

(4) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

(5) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.

(6) Include buffering and screening to mitigate for light and noise, as described in Section 65098.2.

(b) Commencing January 1, 2026, except as provided for in subdivision (c), any proposed new or expanded logistics use development that is on land that is not zoned industrial, whether developed or undeveloped, or land that needs to be rezoned, where the loading bay is within 900 feet of a sensitive receptor, shall comply with all of the following:

(1) If the logistics use development is 250,000 square feet or more it shall include all Tier 1 21st century warehouse design elements described in subdivision (g) of Section 65098. If the logistics use

development is less than 250,000 square feet it shall include all 21st century warehouse design elements described in subdivision (a) of Section 65098.

(2) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors, to the extent feasible.

(3) Locate truck loading bays a minimum of 500 feet from the property line of the nearest sensitive receptor to the nearest truck loading bay opening using a direct straight-line method.

(4) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

(5) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.

(6) Include buffering and screening to mitigate for light and noise, as described in Section 65098.2.

(c) Commencing January 1, 2026, any proposed new or expanded logistics use development that is on land that is not zoned industrial, whether developed or undeveloped, or land that needs to be rezoned, and is located in the warehouse concentration region, shall comply with all of the following:

(1) If the logistics use development is 250,000 square feet or more it shall include all Tier 1 21st century warehouse design elements described in subdivision (g) of Section 65098. If the logistics use development is less than 250,000 square feet it shall include all 21st century warehouse design elements described in subdivision (a) of Section 65098.

(2) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors, to the extent feasible.

(3) Locate truck loading bays a minimum of 500 feet from the property line of the nearest sensitive receptor to the nearest truck loading bay opening using a direct straight-line method.

(4) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

(5) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.

(6) Include buffering and screening to mitigate for light and noise, as described in Section 65098.2.

(d) Commencing January 1, 2026, any proposed new or expanded logistics use development less than 250,000 square feet where the loading bay is within 900 feet of a sensitive receptor that is utilizing a site zoned for industrial use or any site where an application was submitted to the jurisdiction by September 30, 2024, to rezone as industrial and the rezone to industrial was ultimately approved shall comply with all of the following:

(1) Orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors, to the extent feasible.

(2) Locate truck entry, exit, and internal circulation away from sensitive receptors. Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line.

(3) Include buffering and screening to mitigate for light and noise, as described in Section 65098.2.

(4) Complies with or exceeds all requirements of the most current building energy efficiency standards specified in Part 6 (commencing with Section 100) of Title 24 of the California Code of Regulations and the California Green Building Standards Code (Part 11 of Title 24 of the California Code of Regulations), including, but not limited to, the following requirements related to:

(A) Photovoltaic system installation and associated battery storage.

(B) Cool roofing.

(C) Medium- and heavy-duty vehicle charging readiness.

(D) Light-duty electric vehicle charging readiness and installed charging stations.

(5) Provides conduits at loading bays equal to one truck per every loading bay serving cold storage. Idling or use of auxiliary truck engine power to power climate control equipment shall be prohibited if the truck is capable of plugging in at the loading bay.

(6) Ensures that any heating, ventilation, and air-conditioning is high-efficiency.

(7) Have a separate entrance for heavy-duty trucks accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

(e) (1) Except as provided in paragraph (2), on or before January 1, 2028, a city, county, or city and county shall update its circulation element to include truck routes, as specified in Section 65302.02.

(2) On or before January 1, 2026, all cities and counties in the warehouse concentration region shall update its circulation element to include truck routes, as specified in Section 65302.02.

65098.1.5.

(a) (1) Notwithstanding any other provision of law, any existing logistics use development in existence as of September 30, 2024, shall not be subject to the requirements described in paragraph (3) of subdivision (a) of, paragraph (3) of subdivision (b) of, or paragraph (3) of subdivision (c) of Section 65098.1, as applicable, if a new sensitive receptor is constructed, established, or permitted after the effective date of this chapter.

(2) Notwithstanding any other provision of law, if, by September 30, 2024, a proposed expansion of a logistics use development is in a local entitlement process, then the proposed expansion shall not be subject to the requirements described in paragraph (3) of subdivision (a) of, paragraph (3) of subdivision (b) of, or paragraph (3) of subdivision (c) of Section 65098.1, as applicable, if a sensitive receptor is constructed, established, or permitted after the effective date of this chapter.

(3) Notwithstanding any other provision of law, if, by September 30, 2024, a property is currently in a local entitlement process to become a logistics use, then the proposed logistics use development shall not be subject to the requirements described in paragraph (3) of subdivision (a) of, paragraph

(3) of subdivision (b) of, or paragraph (3) of subdivision (c) of Section 65098.1, as applicable, if a sensitive receptor is constructed, established, or permitted after the effective date of this chapter.

(b) (1) Any new logistics use developments that require the rezoning of land and must undergo a municipal entitlement process shall not be subject to the requirements described in paragraph (3) of subdivision (a) of, paragraph (3) of subdivision (b) of, or paragraph (3) of subdivision (c) of Section 65098.1, as applicable, if the start of the entitlement process for the logistics use began before any sensitive receptor started its own entitlement or permitting process, unless the proposed sensitive receptor was an existing allowable use according to local zoning regulations.

(2) During a logistics use development's entitlement process for a new or expanded logistics use, if a new sensitive receptor is proposed or established within the distances required by paragraph (3) of subdivision (a) of, paragraph (3) of subdivision (b) of, or paragraph (3) of subdivision (c) of Section 65098.1, as applicable, then those distance requirements shall not apply to the logistics use development so long as the logistics use development was not already subject to those requirements prior to the new sensitive receptor being proposed or established.

(c) This chapter shall not apply to any logistics projects that were subject to a commenced local entitlement process prior to September 30, 2024.

(d) The protection afforded by this section shall remain in effect from the time of the initial application submission through the completion of the entitlement process, including any necessary rezoning actions and through the development period. If no development activity occurs within five years of entitlement approvals, the protections shall be waived.

(e) This chapter shall not apply to a logistics project that received an approval by a local agency prior to the effective date of this chapter. For purposes of this subdivision, "approval" shall have the same meaning as set forth in subdivision (a) of Section 15352 of Chapter 3 of Division 6 of Title 14 of the California Code of Regulations.

65098.2.

(a) Any new logistics use facility within 900 feet of a sensitive receptor shall have a buffer as follows:

(1) If the logistics use development is subject to the requirements of subdivision (a) or (d) of Section 65098.1, the buffer shall be 50 feet in width measured from the property line of all adjacent sensitive receptors that fully screen the project from the sensitive receptor.

(2) If the logistics use development is subject to either subdivision (b) or subdivision (c) of Section 65098.1, the buffer shall be 100 feet in width measured from the property line of all adjacent sensitive receptors that fully screen the project from the sensitive receptor.

(b) Buffer areas shall include a solid decorative wall, landscaped berm and wall, or landscaped berm 10 feet or more in height, drought tolerant natural ground landscaping with proper irrigation, and solid-screen buffering trees as described in subdivision (c).

(c) Trees shall be used as part of a solid-screen buffering treatment and planted in two rows along the length of the property line adjacent to the sensitive receptor. Trees used for this purpose shall be evergreen, drought tolerant, to the extent feasible, composed of species with low biogenic emissions, of a minimum 36-inch box size at planting, and spaced at no greater distance than 40 feet on center. Palm trees shall not be utilized.

65098.2.5.

The entry gates into the loading truck court for a new or expanded logistics use facility shall be positioned after a minimum of 50 feet of total available stacking depth inside the property line. The stacking depth shall be increased by 70 feet for every 20 loading bays beyond 50 loading bays, to the extent feasible.

65098.2.7.

(a) The purpose of this section is to ensure that logistics use developments, beginning January 1, 2026, are sited in locations that minimize adverse impacts on residential communities and enhance transportation efficiency. This is achieved by restricting logistics use development to roadways that are suited to handle the associated traffic and that predominantly serve commercial uses.

(b) (1) Any new logistics use development shall be sited on roadways that meet the following classifications:

(A) Arterial roads.

(B) Collector roads.

(C) Major thoroughfares.

(D) Local roads that predominantly serve commercial uses.

(2) For purposes of this chapter, local roads shall be considered to predominantly serve commercial uses if more than 50 percent of the properties fronting the road within 1000 feet are designed for commercial or industrial use according to the local zoning ordinance.

(c) A waiver may be granted where siting on the designated roadways pursuant to subdivision (b) is impractical due to unique geographic, economic, or infrastructure-related reasons. The waiver shall be approved by the city, county, or city and county, provided that the applicant demonstrates all of the following:

(1) There is no feasible alternative site that exists within the designated roadways.

(2) A traffic analysis has been completed and submitted to the local approving authority.

(3) The site is an existing industrial zone.

(4) The proposed site will incorporate mitigations to minimize traffic and environmental impacts on residential areas to the greatest extent feasible.

65098.3.

(a) Anti-idling signs indicating a three-minute heavy-duty truck engine idling restriction shall be posted at logistics use developments along entrances to the site and at the truck loading bays.

(b) Signs shall be installed at all heavy-duty truck exit driveways directing truck drivers to the truck route as indicated in the truck routing plan, as described in Section 65098.4, and in the state highway system.

65098.4.

Prior to the issuance of a certificate of occupancy, a facility operator shall establish and submit for approval to the planning director or equivalent position for the city, county, or city and county a truck routing plan to and from the state highway system based on the latest truck route map of the city, county, or city and county. The truck routing plan shall describe the operational characteristics of the use of the facility operator, including, but not limited to, hours of operation, types of items to be stored within the building, and proposed truck routing to and from the facility to designated truck routes that, to the greatest extent possible, avoid passing sensitive receptors. The truck routing plan shall include measures, such as signage and pavement markings, queuing analysis, and enforcement, for preventing truck queuing, circling, stopping, and parking on public streets. The facility operator shall be responsible for enforcement of the truck routing plan. A revised truck routing plan shall be submitted to the planning director or equivalent position prior to a business license being issued by the city, county, or city and county for any new tenant of the property. The planning director or equivalent position shall have discretion to determine if changes to the truck routing plan are necessary, including, but not limited to, any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.

65098.5.

(a) A city, county, or city and county shall not approve development of a logistics use that does not meet or exceed the standards outlined in this chapter.

(b) This section shall not be construed to restrict the existing authority of a city, county, or city and county to deny a logistics use facility altogether.

65098.6.

A city, county, or city and county shall condition approval of a logistics use on the following:

(a) Two-to-one replacement of any demolished housing unit that was occupied within the last 10 years, unless the housing unit was declared substandard by a building official, pursuant to Section 17920.3 of the Health and Safety Code, prior to purchase by the developer. For each housing unit demolished, regardless of market value of the unit, two units of affordable housing for persons and families of low or moderate income, as defined in Section 50093 of the Health and Safety Code, that are deed-restricted shall be built within the jurisdiction. Funds from any fee imposed for the replacement of demolished housing units shall be placed in a housing-specific set-aside account and shall be used for housing within three years of collection.

(b) If residential dwellings are affected through purchase, the developer shall be required to provide any displaced tenant with an amount equivalent to 12 months' rent at the current rate.

65098.7.

Nothing in this chapter shall be construed to supersede mitigation measures required by the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

65098.8.

The Legislature finds and declares that the movement and storage of freight and the impact of this activity on public health and communities across the state as set forth in this chapter is a matter of

statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, this chapter applies to all cities, including charter cities.

65098.9.

The provisions of this chapter shall not apply to a logistics use development if it meets both of the following:

(a) The logistics use development is a mixed-use development that may create sensitive receptors on the site of the new logistics use development.

(b) There are no existing sensitive receptors within 900 feet of the loading bay.

SEC. 2.

Section 65302.02 is added to the Government Code, to read:

65302.02.

By January 1, 2028, except as provided for in subdivision (h), a county or city shall update its circulation element, as required by subdivision (b) of Section 65302, to do all of the following:

(a) Identify and establish specific travel routes for the transport of goods, materials, or freight for storage, transfer, or redistribution to safely accommodate additional truck traffic and avoid residential areas and sensitive receptors, as defined by Section 65098.

(b) Maximize the use of interstate or state divided highways as preferred routes for truck routes. The county or city shall also maximize use of arterial roads, major thoroughfares, and predominantly commercially oriented local streets when state or interstate highways are not utilized. Truck routes shall comply with the following:

(1) Major or minor collector streets and roads that predominantly serve commercially oriented uses shall be used for truck routes only when strictly necessary to reach existing industrial zones.

(2) Trucks shall be routed via transportation arteries that minimize exposure to sensitive receptors.

(3) On and after January 1, 2028, all proposed development of a logistics use development, as defined in subdivision (d) of Section 65098, shall be accessible via arterial roads, major thoroughfares, or roads that predominantly serve commercially oriented uses.

(A) The purpose of this section is to ensure that logistics use developments are sited in locations that minimize adverse impacts on residential communities and enhance transportation efficiency. This is achieved by restricting logistics use developments to roadways that are suited to handle the associated traffic and that predominantly serve commercial uses.

(B) For purposes of this section, local roads shall be considered to predominantly serve commercial uses if more than 50 percent of the properties fronting the road within 1000 feet are designated for commercial or industrial use according to the local zoning ordinance.

(c) The county or city may consult with the Department of Transportation and the California Freight Advisory Committee for technical assistance.

(d) The county or city shall provide for posting of conspicuous signage to identify truck routes and additional signage for truck parking and appropriate idling facility locations.

(e) The county or city shall make truck routes publicly available in geographic information system (GIS) format and share GIS maps of the truck routes with warehouse operators, fleet operators, and truck drivers.

(f) The city or county shall provide opportunities for the involvement of citizens, California Native American Indian tribes, public agencies, public utility companies, and civic, educational, and other community groups through public hearings and any other means the planning agency deems appropriate, consistent with Section 65351.

(g) The city or county shall make a diligent effort to achieve public participation of all economic segments of the community in the development of the changes required pursuant to this section.

(h) The warehouse concentration region, as defined in Section 65098, shall implement the provisions of this section by January 1, 2026.

(i) The Attorney General may enforce this section.

(1) The Attorney General may impose a fine against a jurisdiction that is in violation of this section of up to fifty thousand dollars ($50,000) every six months if the required updates have not been made.

(2) Upon appropriation by the Legislature, any fines collected shall be distributed by the Attorney General and returned to the local air quality management district in which the fine was imposed and be used for the district's efforts to improve air quality.

SEC. 3.

Section 40458.5 is added to the Health and Safety Code, to read:

40458.5.

(a) Subject to an appropriation for this express purpose, the south coast district shall, beginning on January 1, 2026, and until January 1, 2032, deploy mobile air monitoring systems within the Counties of Riverside and San Bernardino to collect air pollution measurements in communities that are near operational logistics use developments.

(b) The south coast district shall use the data collected pursuant to subdivision (a) to conduct an air modeling analysis to evaluate the impact of air pollution on sensitive receptors, as defined in Section 65098 of the Government Code, from logistics use development operations in the Counties of Riverside and San Bernardino, including relative pollution concentrations from logistics use developments at varying distances from sensitive receptors.

(c) The south coast district shall submit its findings to the Legislature on or before January 1, 2033. On or before January 1, 2028, the south coast district shall submit an interim report to evaluate the impact of air pollution on sensitive receptors, as defined in Section 65098 of the Government Code, from logistics use development operations in the Counties of Riverside and San Bernardino, including relative pollution concentrations from logistics use developments at varying distances from sensitive receptors. This report shall be used to assess the effectiveness of setbacks on public health.

(d) (1) The requirement for submitting a report imposed pursuant to subdivision (c) is inoperative on January 1, 2040, pursuant to Section 10231.5 of the Government Code.

(2) A report to be submitted pursuant to subdivision (c) shall be submitted in compliance with Section 9795 of the Government Code.

SEC. 4.

Section 40522.7 is added to the Health and Safety Code, to read:

40522.7.

The south coast district shall establish a process for receiving community input on how any penalties assessed and collected for violations of the Warehouse Indirect Source Rule are spent. The south coast district shall ensure a wide range of community groups are included in the process and that groups represent the geographic areas where there are high numbers of warehouse facilities.

SEC. 5.

No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

Appendix B. Southern California Association of Governments (SCAG) Geotab Technical Guidance

Overview

Geotab's Altitude platform is a roadway analytics tool built using data from telematics devices in freight vehicles. Unlike modeled datasets, Geotab is based on observed data to show where, when, and how freight moves through a roadway network both locally and regionally. Geotab data is a sample of the overall vehicle fleet, typically encapsulating 1-25%. Geotab can be used to guide truck route planning efforts by efficiently providing big data based on real-world activity at a low cost. This guide is intended to help agency staff determine the most appropriate data needs for their projects and understand the necessary inputs when making a request.

How the Geotab Subscription Works

Geotab data is accessible through SCAG's regional subscription by submitting a request through the Streetlight Online Request form. Analyses are typically delivered within 1-3 weeks of a submittal. The standard Geotab subscription determines access to three main components of the platform:

- Geography – Which counties, cities, or other geographic zones can be analyzed.
- Time Period – What months of data are able to be accessed.
- Analysis Types – Which specific analytics tools and queries are available, including the ability to filter analyses by vehicle weight class (e.g., Class 1-8 or Light-, Medium, and Heavy-Duty Trucks) and vehicle type (e.g., Truck, Multi-Purpose Vehicles, Bus, etc.).

The SCAG Geotab subscription offers access to all analysis types and all geography types within the SCAG region, with data ranging from January 1st, 2022, to December 31st, 2024.

Analysis Capabilities

The core analytical capabilities fall into four major modules for truck route planning: Traffic Analysis, Origin/Destination (O/D), Regional Travel Metrics, and Stop Analytics (Table 1). Each offers various analysis tools that can provide a variety of outputs as needed. The full catalogue of analysis requests available are detailed as "queryTypes" on the Altitude API Guide. Additionally, for hands-on, self-guided tours of specific types of analyses, refer to the Altitude Product Demo page.

Table 3. Geotab Analysis Modules

Module	Description	Use Cases	Spatial Scale
Traffic Analysis 	Evaluates truck movement along corridors or within zones, with metrics on speed, travel times, and harsh driving events.	• Identify potential bottlenecks that could undermine truck route efficiency • Compare corridor efficiency (travel time reliability, speed variability, total observations)	Corridor / road segment scale
Origin/ Destination (O/D) 	Analyzes freight demand and trip patterns between zones or generators, including route compliance and common O/D pairs.	• Assess route compliance according to designated truck routes between freight generators • Determine top freight generating O/D pairs within an area to support routing decisions • Determine trip distances and flows	Area zones (e.g., Census Geographies, TAZs, City Boundaries) to regional
Regional Travel Metrics 	Provides regional freight demand/activity trends by industry, vehicle class, or geography. Includes counts and fuel economy.	• Identify high-demand freight corridors • Quantify freight demand/generation • Track freight trends over time	Multi-corridor / multi-segment
Stop Analysis 	Identifies stop locations, durations, idling, and trip distances before/after stops. Highlights dwelling or parking patterns.	• Detect ruck parking/idling hot spots • Identify rest area coverage gaps • Support enforcement/signage	Point locations / clusters

Note: Each analysis module allows for truck metrics to be pulled annually, seasonally, daily, and hourly.

Defining a Truck Trip

Unlike personal autos, trucks often operate as multi stop tours (pickups, deliveries, staging, fueling, breaks) that blur where one "trip" begins and ends. The right definition depends on your use case

(O/D analysis, truck parking demand analytics, capacity calculations, etc.). Table 2 provides a breakdown of common trip definitions.

Table 2. Trip Definitions

Trip Definition	Description
Dwell-Threshold (stop-based) Segmentation	End a trip when the device shows little/no movement for a set period and distance (e.g., *no movement >5 m for ≥5 minutes; min trip length ≥3 minutes and ≥500 m*). This is a widely used rule in commercial platforms; it's simple and scalable but can split long-haul legs at brief fuel/rest stops.
Ignition / Hours of Service (HOS) Segmentation	Bound trips with engine on/off or driver duty-status changes. This aligns with operational reality and curbs over-splitting, but availability varies by provider and policy. This rule is clear but it can ignore Less than Truck Loads (LTL) activities, where they have a short stop for delivery or pick up while the engine is on.
Geofence-to-Geofence (facility-anchored) trips	Define trips as movements between polygons (e.g., warehouse ↔ customer, yard ↔ port gate). This is powerful for OD analysis and trip generation, because it explicitly credits activity to known sites; however, it can miss mid-stream activity unless you model intermediary geofences (fuel, staging).
Tour Linking (leg consolidation)	Start with stop-based legs, then link adjacent legs into a single tour when intermediate stops are short (e.g., fueling) or "non-productive." This preserves long-haul continuity and is feasible when persistent vehicle IDs exist (e.g., datasets where IDs remain stable over multiple days).

In platforms like Geotab, users have the flexibility to define the trip:

- **Single Trips** – defined when a vehicle starts moving until it stops with ignition turned off, idles for 3 minutes and 20 seconds, or is shifted to park for 30 seconds.
- **Chained Trips** – defined as connected consecutive trips, ignoring stops that are shorter than a defined threshold.

Requesting Geotab Data

Prior to making a data request through the StreetLight Online Request form, users should follow these general preparation steps to ensure that they receive the most relevant and valuable data in a timely manner:

1. **Define the Planning Objective –** What question(s) should the analysis answer?
2. **Define the Analysis Type and Function** – Determine the most suitable analysis module by reviewing the available analysis modules described in Table 1. Once an analysis module is selected, review the list of query types that are available under that module as defined in the Altitude API Guide.
3. **Determine the Geography of the Analysis** – Determine the geographic scope for the analysis. The allowable geographic inputs include standard Census geographics (e.g., Census Tracts, Census Block Groups) and individual road segments. When requesting data at the segment level, filter your data by road type, as defined by OpenStreetMap (e.g., motorway, primary, secondary, trunk, tertiary). For more information on OpenStreetMap road types, visit the OpenStreetMap Highway Wiki.
4. **Determine the Time of the Analysis** – Determine the temporal resolution of the analysis by specifying specific date, day, and time ranges. The output will be a sum of observations within the specified date, day, and time range.
    a. **Date Range** – specify the Date From and Date To range (e.g., 2024-01-01 to 2024-01-31).
    b. **Days** – isolate specific days of the week (e.g., individual days, weekdays, all days).
    c. **Time Range** – specify the Time From and Time To range (e.g., 00:00:00 to 23:59:59)
5. **Apply Additional Filters** – Determine additional filters to narrow the data output. Additional filters to consider include vehicle class, road class, and industry.
6. **Consider Journey Definitions** – Geotab allows users to filter by journeys which are defined as single trips or consecutive chained trips. Refer to Table 2 for more specific trip definitions, and definitions of allowable trip definitions within the Geotab platform.

Example Request – Origin/Destination

To request Origin-Destination data from one more zones within the SCAG region, as well as the observed counts by segments, and top routes between zones, use the following analysis parameters in your request:

1. **Planning Objective** – Produce an Origin-Destination matrix showing where Heavy-Duty Trucks trips travel to/from for the major logistics center south of Mission Boulevard in the City of Ontario. Additionally, identify the top routes between major O/D pairs.
2. **Define the Analysis Type and Function**
    a. **Module** – Origin/Destination (O/D)
    b. **Query Type** – Get Origin/Destination Matrix
3. **Determine the Geography of the Analysis**
    a. **Origin Zones** – provide the Census Geographies (Census FIPS code) for all origin zones of interest.

b. **Destination Zones** – provide the Census Geographies (Census FIPS code) for all destination zones of interest. Alternatively, specify all Census Geographies within the SCAG region to return a broader set of destinations.

4. **Determine the Time of the Analysis** – provide O/D for all of January, on weekdays, for the entire day.
    a. **Date Range** – Time From: 2024-01-01, Time To: 2024-01-31
    b. **Days** – Weekdays (Monday – Friday)
    c. **Time Range** – All Day (00:00:00 to 23:59:59)
5. **Apply Additional Filters**
    a. **Truck Classification** – Heavy-Duty Trucks

Example Request – Segment-Level Observed Counts

To request segment-level observed counts for a specific area, city, or county, use the following analysis parameters in your request:

1. **Planning Objective** – Identify highly traveled roadway segments for Heavy-Duty truck trips that start or end within the City of Riverside.
2. **Define the Analysis Type and Function**
    a. **Module** – Regional Travel Metrics
    b. **Query Type** – Get Observed Counts
3. **Determine the Geography of the Analysis**
    a. **Zone(s)** – City of Riverside (FIPS Code 06065).
    b. **Road Type(s)** – Motorway, primary, secondary, tertiary
4. **Determine the Time of the Analysis** – provide O/D for all of January, on weekdays, for the entire day.
    a. **Date Range** – Time From: 2024-01-01, Time To: 2024-01-31
    b. **Days** – All Days (Monday – Sunday)
    c. **Time Range** – All Day (00:00:00 to 23:59:59)
5. **Apply Additional Filters**
    a. **Truck Classification** – Heavy-Duty Trucks

Interpreting and Visualizing Geotab Data

Truck movement data from Geotab is often highly detailed and dense data. This section provides a generalized process for interpreting, summarizing, and visualizing Geotab data in a digestible way that supports effective decision-making.

Understanding the Output

Regardless of the format, every dataset output will include a combination of one or more of the following depending on the analysis: spatial features, temporal characteristics, and vehicle or trip characteristics. To understand what is needed out of the output, users should consider the following basic methods of data aggregation and relate it back to the planning objective.

Geographic Aggregation – Outputs can be aggregated by spatial categories, such as by corridor, census tracts, or road class. Geographic aggregation can answer questions such as:

- Which roads have the highest truck usage or longest stop durations?
- Where are trucks speeding the most?

Temporal Aggregation – Outputs can be aggregated by month, day of week, or even hour of day. Temporal aggregation can answer questions such as:

- When are industrial areas most active?
- How does truck activity vary month-by-month?

Vehicle or Trip Aggregation – Outputs can be aggregated by vehicle or trip categories, such as vehicle class and industry to answer questions such as:

- How long do heavy-duty trucks travel on City roads compared to medium-duty trucks?
- How do top routes for heavy-duty trucks differ compared to medium-duty trucks between two major freight generators?

Understanding these aggregations and looking at them as a whole can reveal hidden patterns and answer advanced questions supporting truck route planning decisions, such as:

- On truck routes near sensitive receptors, where do trucks tend to speed during off-peak hours?
- Where are the hot spots for long-duration stops near sensitive receptors and when do they occur?

Visualizing the Data

The results gleaned from aggregating the data needs to be visualized to be digestible and compelling to stakeholders. Visualizations should answer the planning objectives or questions. Most visualizations will either be maps or charts.

Maps

Maps are the most intuitive way to reveal spatial patterns, hot spots, and illustrate how truck behavior interacts with land use and infrastructure. There are a variety of map types that can be used to

illustrate Geotab outputs. **Roadway-based line maps** are best for portraying volumes or speed values. By symbolizing with graduated colors or line-widths, users can identify heavily used corridors and speed bottlenecks. **Heat maps or hot spot maps** are best suited for portraying stop or idling related metrics, identifying significant staging areas or gaps in truck parking. **Interactive web maps or dashboards** can relay multiple metrics of truck behavior, consolidating relevant information to one location for stakeholders. Figure 1 and Figure 2 below showcase segment-level heavy-duty truck sample observations.

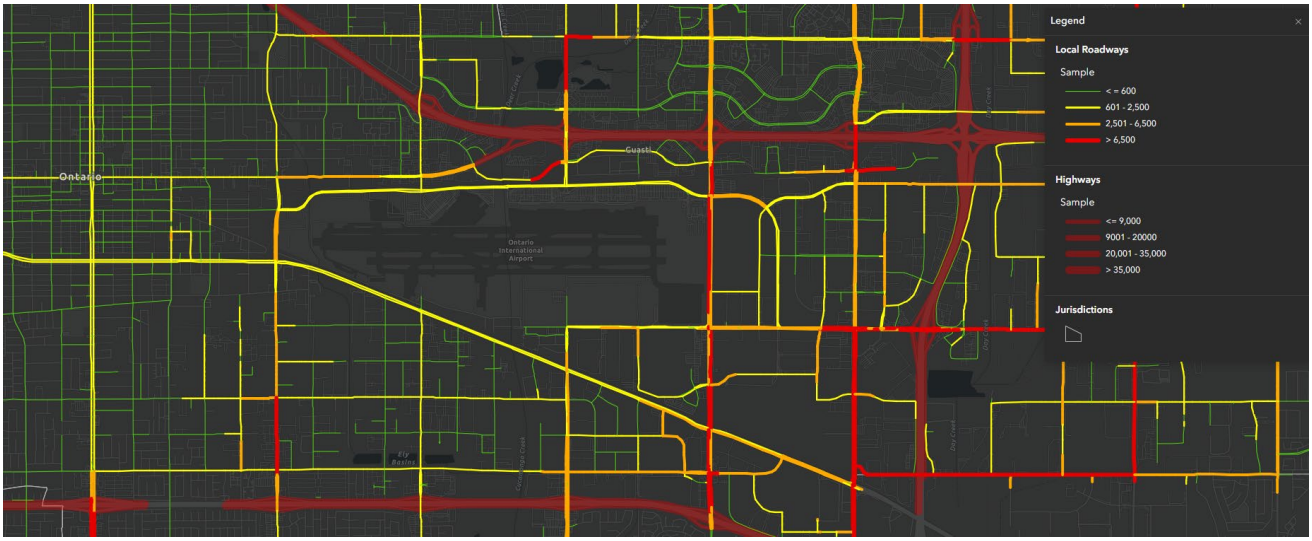


Figure 1. Heavy-duty truck sample observations in the City of Ontario

Figure 2. Heavy-duty truck sample observations in the City of Riverside

Charts

Charts can also support visualizing temporal trends and zone or corridor comparisons. Charts often complement map-based visualizations by providing supporting metrics on truck behavior. **Line charts**

can highlighting hourly or daily patterns in truck volumes or speeds, revealing peak freight periods. **Bar charts** can be used to effectively rank corridors, OD pairs, or zones by metrics such as trip count or travel time. Stacked bar charts can break down truck activity by vehicle class or industry type. **Histograms or box plots** are useful for understanding variation and outliers in metrics like speed and stop duration on specific corridors. Charts are also able to be included on web maps and dashboards.

Appendix C. Municipal Code Guidance

AB 98 Zoning Guidance

May 2025

Prepared by:

Lisa Wise Consulting, Inc.
939 S Broadway #611
Los Angeles, CA 90015

LWC

AB 98 Zoning Considerations

Things to Know About AB 98

The following is a brief list of “things to know” about AB 98 ahead of updating your jurisdiction’s zoning regulations. Some items will be reminders from the previous meeting.

- AB 98 provides crucial definitions for “logistics uses” and “sensitive receptors.”
- AB 98 uses the threshold of 250,000 square feet to regulate logistics uses (i.e., logistics uses under and over 250,000 square feet are regulated differently).
- AB 98 is expected to be amended.
- Special zoning regulations apply to jurisdictions within the warehouse concentration region. In the checklist, “warehouse concentration region" will be highlighted and bolded in **RED**. Warehouse concentration region includes:
    - Unincorporated Riverside County
    - Unincorporated San Bernardino County
    - City of Chino
    - City of Colton
    - City of Fontana
    - City of Jurupa Valley
    - City of Moreno Valley
    - City of Ontario
    - City of Perris
    - City of Rancho Cucamonga
    - City of Redlands
    - City of Rialto
    - City of Riverside
    - City of San Bernardino
- AB 98 only applies to logistics uses that have sensitive receptors within 900 feet of the loading bay.
- AB 98 does not apply to logistics use developments that are mixed-use developments that may create sensitive receptors on the site of the new logistics use development.
- AB 98 zoning regulations apply to all jurisdictions beginning January 1, 2026.

AB 98 Conflict and Implementation Checklist

The checklist below is a to-do list for reviewing your jurisdiction's zoning regulations in light of new standards under AB 98. **The goal of this checklist is to ensure local zoning regulations do not conflict with AB 98 and to implement or refer to AB 98 regulations.**

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Define "logistics use" per the definition under AB 98.**

The AB 98 definition of "logistics use" is found below and in California Government Code §65098(d).

> "Logistics use" means a building in which cargo, goods, or products are moved or stored for later distribution to business or retail customers, or both, that does not predominantly serve retail customers for onsite purchases, and heavy-duty trucks are primarily involved in the movement of the cargo, goods, or products. "Logistics use" does not include any of the following:
>
> (1) Facilities where food or household goods are sold directly to consumers and are accessible to the public.
>
> (2) A building primarily served by rail to move cargo goods or product.
>
> (3) (A) A Strategic Intermodal Facility.
>
> (B) For purposes of this subdivision, "Strategic Intermodal Facility" means a project that satisfies all of the following requirements:
>
> i. Logistics facilities, including warehousing and transloading facilities, served by rail.
>
> ii. Intermodal freight transport services.

Complete one of the following as appropriate:

- **Add** AB 98 definition for "logistics uses" in your local zoning regulations / **Edit** existing zoning code definition of "logistics uses" to match AB 98; OR
- Add **reference** stating that "logistics use" is defined in accordance with AB 98 (California Government Code §65098(d)).

Note: This definition may change in the future. If you choose to add the definition directly to the zoning code, it may be best to add that the Government Code definition supersedes.

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Define "sensitive receptor" per the definition under AB 98.**

The AB 98 definition of "sensitive receptor" is found below and in California Government Code §65098(e).

> "Sensitive receptor" means one or more of the following:
>
> (1) A residence, including, but not limited to, a private home, apartment, condominium unit, group home, dormitory unit, or retirement home.
>
> (2) A school, including, but not limited to, a preschool, prekindergarten, or school maintaining kindergarten or any of grades 1 to 12, inclusive.
>
> (3) A daycare facility, including, but not limited to, in-home daycare.
>
> (4) Publicly owned parks, playgrounds, and recreational areas or facilities primarily used by children, unless the development of the park and recreation areas are included as a condition of approval for the development of a logistics use.
>
> (5) Nursing homes, long-term care facilities, hospices, convalescent facilities, or similar live-in housing.
>
> (6) Hospitals, as defined in Section 128700 of the Health and Safety Code.

Edit Zoning Code definition to match AB 98 or ensure logistics uses are regulated using the AB 98 definition of "sensitive receptor."

Complete one of the following as appropriate:

- **Add** AB 98 definition for "sensitive receptor" in your local zoning regulations / **Edit** existing zoning code definition of "sensitive receptor" to match AB 98; OR
- Add **reference** stating that "sensitive receptor" is defined in accordance with AB 98 (California Government Code §65098(e)).

Note: This definition may change in the future. If you choose to add the definition directly to the zoning code, it may be best to add that the Government Code definition supersedes.

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Ensure local regulations create no conflict in regulating logistics uses based on square footage.**

AB 98 regulates logistics uses larger or smaller than 250,000 square feet differently. Because of this, local zoning that regulate logistics uses by a square footage threshold other than 250,000 square feet will conflict with AB 98 standards and cause complications in implementation. Jurisdictions must ensure that these regulations do not conflict with AB 98.

It may be easier to remove any square footage threshold that is not 250,000 square feet.

☐ **Require 2-to-1 replacement housing and/or rental assistance when appropriate.**

Local jurisdictions must condition approval of logistics uses on the following:

- 2-to-1 replacement of any demolished housing unit that was occupied within the last 10 years[1] prior to purchase by the developer.
    - For each housing unit demolished (regardless of market value of the unit) 2 units of affordable housing for persons and families of low or moderate income [2] that are deed-restricted shall be built within the jurisdiction.
    - Funds from any fee imposed for the replacement of demolished housing units shall be placed in a housing-specific set-aside account and shall be used for housing within three years of collection.
- If residential dwellings are affected through purchase, the developer shall be required to provide any displaced tenant with an amount equivalent to 12 months' rent at the current rate.

[1] Unless the housing unit was declared substandard by a building official, pursuant to Section 17920.3 of the Health and Safety Code

[2] As defined in Section 50093 of the Health and Safety Code.

Complete one of the following as appropriate:

- **Add** this AB 98 housing replacement/assistance requirement / **Edit** existing zoning code housing replacement/assistance requirement; OR
- Add **reference** to this housing replacement/assistance requirement (California Government Code §65098.6).

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Set back truck loading bays per AB 98.**

Truck loading bays must be set back 300-500 feet from sensitive receptors depending on size and zoning. You can decide to add these if you do not currently have any in your zoning regulations. Otherwise, simply add a reference to AB 98.

All logistics uses must orient truck loading bays on the opposite side of the logistics use development away from sensitive receptors to the extent feasible. In addition, the following regulations apply:

Truck Loading Bay Location Restrictions

Logistics Use Type	Site Type (Zone)	Truck Loading Bay Location	Reference
250,000 square feet or more	Site zoned for industrial use (or recently rezoned industrial) [1]	Min 300 ft from property line of nearest sensitive receptor to the nearest truck loading bay opening (using a direct straight-line method)	CA Gov't Code §65098.1(a)
	Site not zoned industrial / needs to be rezoned	Min 500 ft from property line of nearest sensitive receptor to the nearest truck loading bay opening (using a direct straight-line method)	CA Gov't Code §65098.1(b)
All sizes in WAREHOUSE CONCENTRATION REGION	Site not zoned industrial / needs to be rezoned	Min 500 ft from property line of nearest sensitive receptor to the nearest truck loading bay opening (using a direct straight-line method)	CA Gov't Code §65098.1(c)
Less than 250,000 square feet	Site zoned for industrial use (or recently rezoned industrial) [1]	n/a	CA Gov't Code §65098.1(d)

[1] Any site where an application to rezone to industrial was submitted to the jurisdiction by September 30, 2024. Only relevant for rezones that were ultimately approved.

Complete one of the following as appropriate:

- **Add** these truck loading bay location restrictions to your local zoning regulations / **Edit** existing zoning code truck loading bay location restrictions; OR
- Add **reference** to these requirements (see California Government Code references above).

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Regulate truck entrance, exit, and internal circulation location as appropriate.**

Truck entrances, exits, and internal circulation are regulated depending on size and zoning. The following regulations apply:

Truck Entrance, Exit, and Internal Circulation Requirements

Logistics Use Type	Land Type	Location Requirements	Reference
250,000 square feet or more	Site zoned for industrial use (or recently rezoned industrial) [1]	Require entry gates into the loading truck court to be positioned after a min of 50 feet of total available stacking depth inside the property line [2] Require a separate entrance for heavy-duty trucks [3] Locate entry, exit, and internal circulation away from sensitive receptors Heavy-duty diesel truck drive aisles shall be prohibited from being used on sides of the building that are directly adjacent to a sensitive receptor property line	CA Gov't Code §65098.1(a) & §65098.2.5
	Site not zoned industrial / needs to be rezoned		CA Gov't Code §65098.1(b) & §65098.2.5
All sizes in WAREHOUSE CONCENTRATION REGION	Site not zoned industrial / needs to be rezoned		CA Gov't Code §65098.1(c) & §65098.2.5
Less than 250,000 square feet	Site zoned for industrial use (or recently rezoned industrial) [1]		CA Gov't Code §65098.1(d) & §65098.2.5

[1] Any site where an application to rezone to industrial was submitted to the jurisdiction by September 30, 2024. Only relevant for rezones that were ultimately approved.

[2] The stacking depth shall be increased by 70 feet for every 20 loading bays beyond 50 loading bays, to the extent feasible.

[3] Accessible via a truck route, arterial road, major thoroughfare, or a local road that predominantly serves commercial oriented uses.

Complete one of the following as appropriate:

- **Add** these truck entrance, exit, and internal circulation location restrictions to your local zoning regulations / **Edit** existing zoning code truck entrance, exit, and internal circulation location restrictions; OR
- Add **reference** to these requirements (see California Government Code references above).

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Require buffers for new logistics uses within 900 feet of a sensitive receptor.**

AB 98 requires buffers for any new facility within 900 feet of a sensitive receptor as follows:

Logistics Use Buffers

Logistics Use Type	Land Type	General Buffer Requirement	Special Buffer Requirement, Min Width	Reference
250,000 square feet or more	Site zoned for industrial use (or recently rezoned industrial) [1]	Buffer area shall include: • A solid decorative wall, landscaped berm and wall, or landscaped berm 10 feet or more in height; • Drought tolerant natural ground landscaping with proper irrigation, and • Solid-screen buffering trees [1]	50 feet [1]	CA Gov't Code §65098.2
	Site not zoned industrial / needs to be rezoned		100 feet [1]	
All sizes in WAREHOUSE CONCENTRATION REGION	Site not zoned industrial / needs to be rezoned		100 feet [1]	
Less than 250,000 square feet	Site zoned for industrial use (or recently rezoned industrial) [1]		50 feet [1]	

[1] Trees shall be used as part of a solid-screen buffering treatment and planted in two rows along the length of the property line adjacent to the sensitive receptor. Trees used for this purpose shall be evergreen, drought tolerant, to the extent feasible, composed of species with low biogenic emissions, of a minimum 36-inch box size at planting, and spaced at no greater distance than 40 feet on center. Palm trees shall not be utilized.

[2] Measured from the property line of all adjacent sensitive receptors that fully screen the project from the sensitive receptor.

Complete one of the following as appropriate:

- **Add** these buffer requirements to your local zoning regulations / **Edit** existing zoning code buffer requirements; OR
- Add **reference** to these buffer requirements (see California Government Code references above).

AB 98 CONFLICT AND IMPLEMENTATION CHECKLIST

☐ **Require 10% of passenger vehicle spaces for large logistics uses to be installed with electric vehicle stations.**

AB 98 requires that every "Tier 1 21st Century warehouse" must have a minimum of "10 percent of all passenger vehicle parking spaces installed with electric vehicle stations."

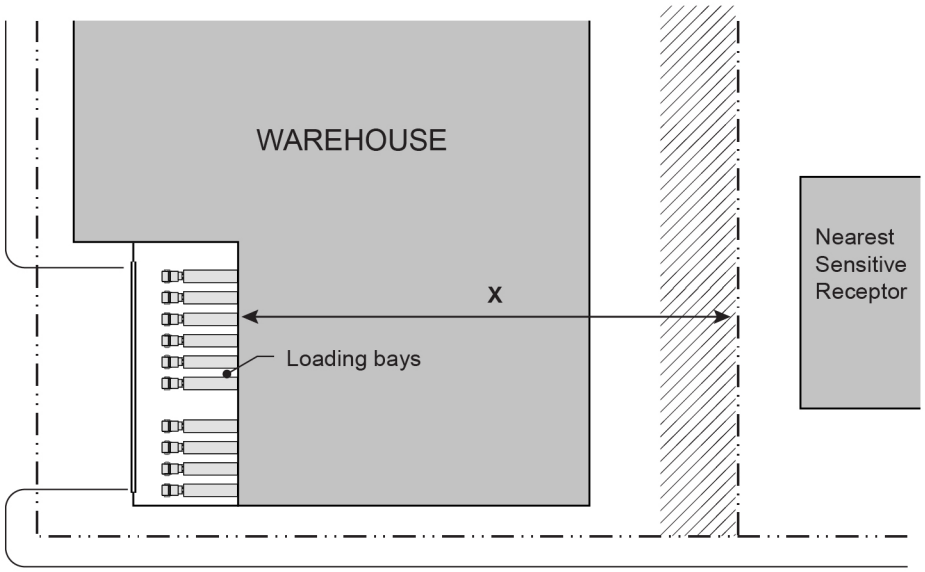
This requirement is contained in the definition of Tier 1 21st Century Warehouse.[1] This term, as a general rule of thumb, means a logistics use that is 250,000 square feet or larger.

[1] *California Government Code §65098(g)(6).*

Complete one of the following as appropriate:

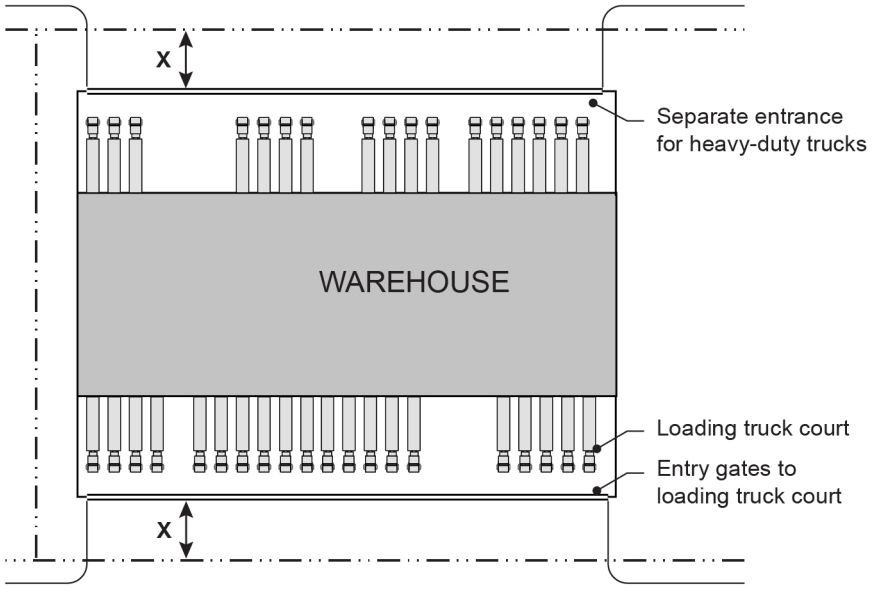
- **Add** this EV charging station requirement for all logistics uses 250,000 square feet or more / **Edit** any existing zoning code EV charging stations requirements that conflict with AB 98; OR
- Add **reference** to these EV charging station requirements (see California Government Code references\ above).

Graphic 1
Setbacks for Truck Loading Bays



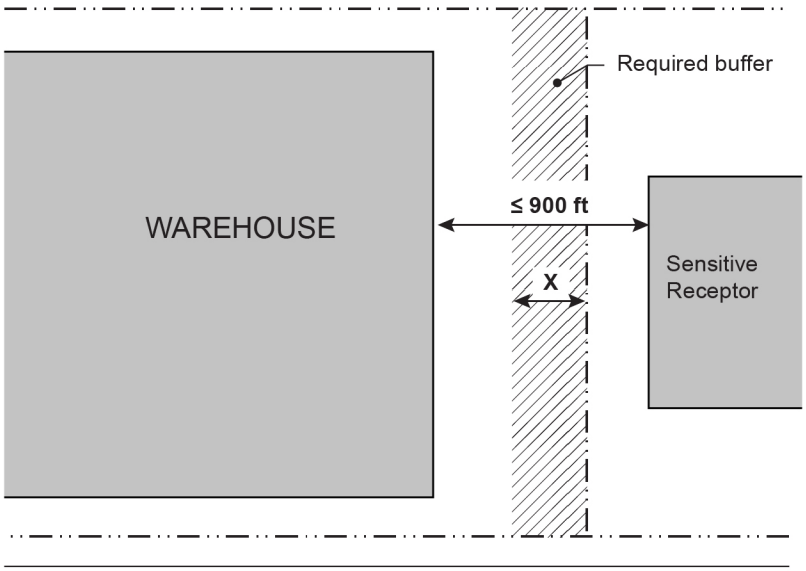
X = Min. 300 ft where warehouse is ≥250,000 sq ft and zoned for industrial use;
Min. 500 ft where warehouse site is ≥250,000 sq ft and not zoned for industrial use *or* is any size and located in the Warehouse Concentration Region

Graphic 2
Entry Gate Location (Cross Docking Example)



X = Min. 50 ft for <70 loading bays;
Min. 120 ft for 70-89 loading bays;
Min. 190 ft for 90-109 loading bays; etc.

Graphic 3
Buffering from Sensitive Receptors



X = Min. 100 ft where warehouse is ≥250,000 sq ft and not zoned for industrial use *or* is any size and located in the Warehouse Concentration Region; Min. 50 ft in all other cases

Western Riverside Council of Governments
Public Works Committee

Staff Report

Subject: Updates on Recent Court Cases Involving Vehicle Miles Traveled Screening

Contact: Delia Votsch, Associate, Fehr & Peers, d.votsch@fehrandpeers.com, (949) 308-6323

Date: October 9, 2025

Recommended Action(s):

1. Receive and file.

Summary:

This presentation will summarize recent court cases and decisions regarding Vehicle Miles Traveled (VMT) screening in order to provide more information for members to consider.

Purpose / WRCOG 2022-2027 Strategic Plan Goal:

The purpose of this item is to provide more information to members on recent court cases and decisions regarding VMT screening. This effort aligns with WRCOG's 2022-2027 Strategic Plan Goal #5 (Develop projects and programs that improve infrastructure and sustainable development in our subregion).

Discussion:

An update is being presented by Fehr & Peers staff on recent court cases and decisions regarding VMT screening in order to provide more information for members to consider. This presentation was also provided to the WRCOG Planning Directors Committee.

Prior Action(s):

None.

Financial Summary:

This item is for informational purposes only; therefore, there is no fiscal impact.

Attachment(s):

None.