# Implementation of VMT Analysis and Senate Bill 743 (SB 743)

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# What is VMT?

# Senate Bill 743 (SB 743)

## Does

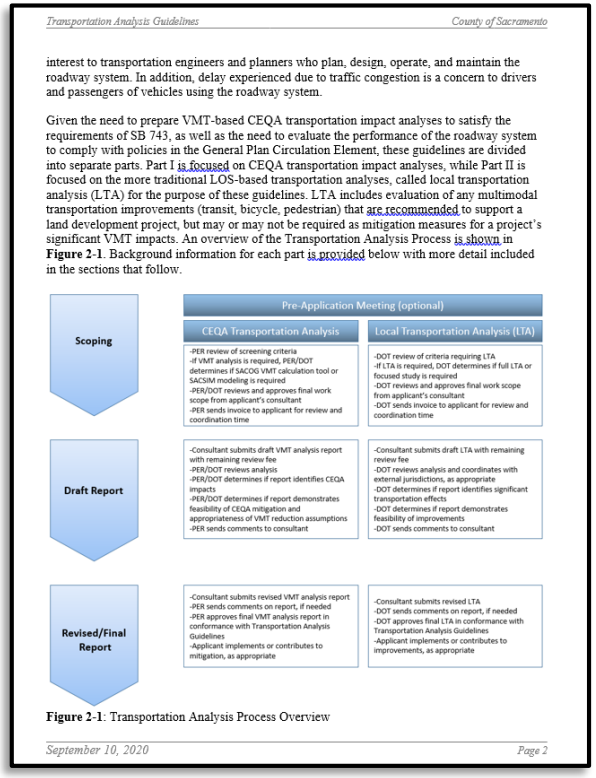
- Eliminate automobile delay and LOS from CEQA
- Suggest vehicle miles traveled (VMT) as a new metric for measuring transportation impacts for CEQA

## Does Not

- Mandate any particular metric or significance threshold
- Preclude the County exercising its police power outside of CEQA

# Path to Implementation

- SACOG Local Agency Working Group
  - 2019 - ongoing
- Updated Transportation Analysis Guidelines (TAG)
  - March - June 2020
- Approval of General Plan Amendment
  - Planning Commission: June 8, 2020
  - Board of Supervisors: October 6, 2020



*Transportation Analysis Guidelines* *County of Sacramento*

interest to transportation engineers and planners who plan, design, operate, and maintain the roadway system. In addition, delay experienced due to traffic congestion is a concern to drivers and passengers of vehicles using the roadway system.

Given the need to prepare VMT-based CEQA transportation impact analyses to satisfy the requirements of SB 743, as well as the need to evaluate the performance of the roadway system to comply with policies in the General Plan Circulation Element, these guidelines are divided into separate parts. Part I is focused on CEQA transportation impact analyses, while Part II is focused on the more traditional LOS-based transportation analyses, called local transportation analysis (LTA) for the purpose of these guidelines. LTA includes evaluation of any multimodal transportation improvements (transit, bicycle, pedestrian) that are recommended to support a land development project, but may or may not be required as mitigation measures for a project's significant VMT impacts. An overview of the Transportation Analysis Process is shown in **Figure 2-1**. Background information for each part is provided below with more detail included in the sections that follow.

| | Pre-Application Meeting (optional) | |
|---|---|---|
| | CEQA Transportation Analysis | Local Transportation Analysis (LTA) |
| Scoping | -PER review of screening criteria<br>-If VMT analysis is required, PER/DOT determines if SACOG VMT calculation tool or SACSIM modeling is required<br>-PER/DOT reviews and approves final work scope from applicant's consultant<br>-PER sends invoice to applicant for review and coordination time | -DOT review of criteria requiring LTA<br>-If LTA is required, DOT determines if full LTA or focused study is required<br>-DOT reviews and approves final work scope from applicant's consultant<br>-DOT sends invoice to applicant for review and coordination time |
| Draft Report | -Consultant submits draft VMT analysis report with remaining review fee<br>-PER/DOT reviews analysis<br>-PER/DOT determines if report identifies CEQA impacts<br>-PER/DOT determines if report demonstrates feasibility of CEQA mitigation and appropriateness of VMT reduction assumptions<br>-PER sends comments to consultant | -Consultant submits draft LTA with remaining review fee<br>-DOT reviews analysis and coordinates with external jurisdictions, as appropriate<br>-DOT determines if report identifies significant transportation effects<br>-DOT determines if report demonstrates feasibility of improvements<br>-DOT sends comments to consultant |
| Revised/Final Report | -Consultant submits revised VMT analysis report<br>-PER sends comments on report, if needed<br>-PER approves final VMT analysis report in conformance with Transportation Analysis Guidelines<br>-Applicant implements or contributes to mitigation, as appropriate | -Consultant submits revised LTA<br>-DOT sends comments on report, if needed<br>-DOT approves final LTA in conformance with Transportation Analysis Guidelines<br>-Applicant implements or contributes to improvements, as appropriate |

**Figure 2-1**: Transportation Analysis Process Overview

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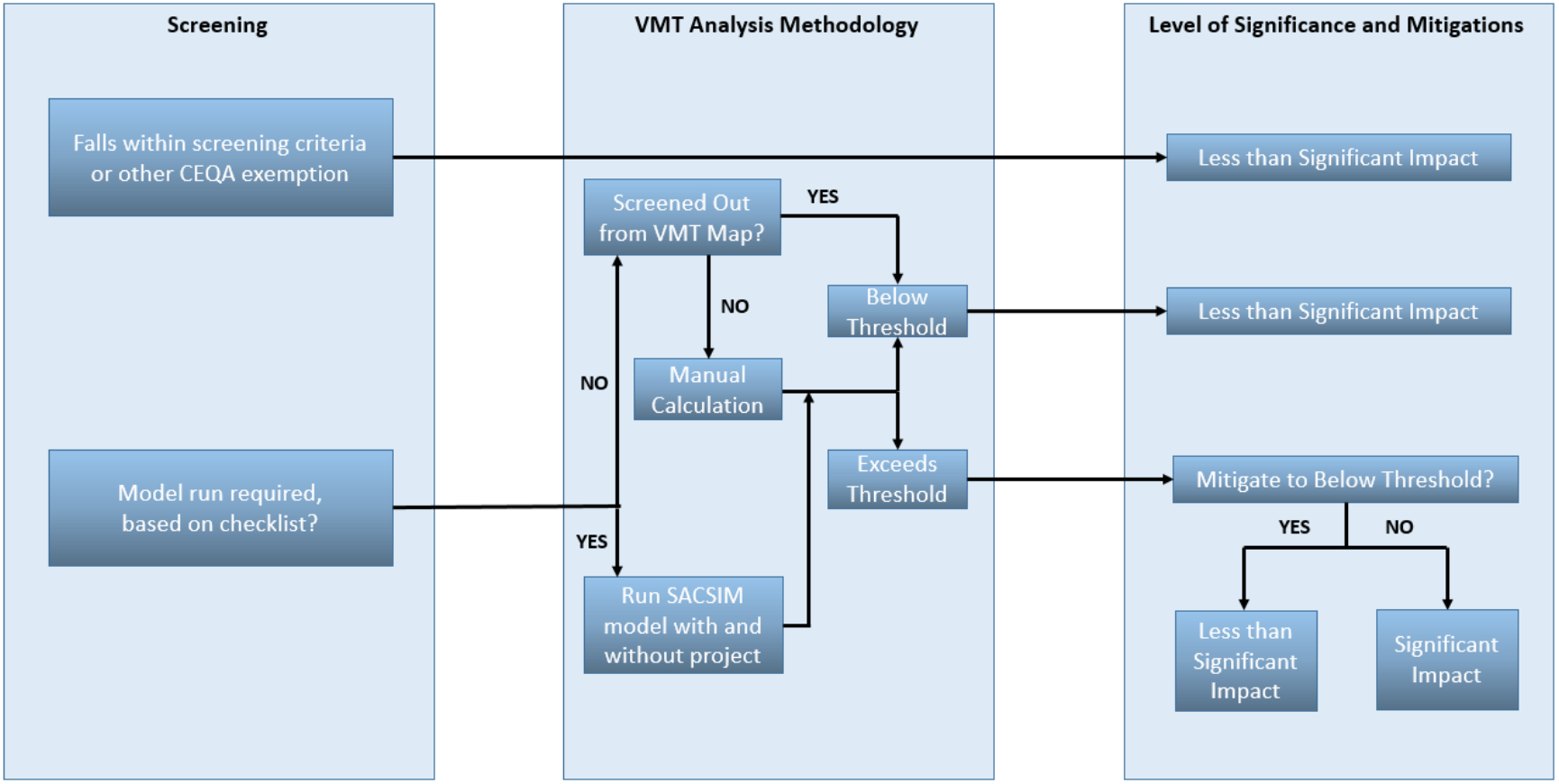
# VMT Reduction in 2030 General Plan

- 25% of Land Use Element policies focused on infill development
- LU-3: County's intent to focus investment of public resources on revitalization efforts within existing communities, especially within commercial corridors.
- New growth management policies (LU-119 and LU-120) developed with primary objective of reducing VMT
  - Higher densities to support transit
  - Infrastructure, including transit in place at the same time the project is developed
  - Jobs-housing balance reduces need for long commutes
  - Project design enables residents to walk, ride bicycle, or take transit to work and schools
  - Includes mixed-use development

# VMT Reduction in Draft Climate Action Plan

- GHG-11 - VMT Reductions
- GHG-12 - Transportation System Management Plans
- GHG-13 - Reduced Minimum Parking Standards
- GHG-14 - Improve Transit Access
- GHG-15 – Improve Pedestrian Network and Facilities
- GHG-16 – Implement Traffic Calming Measures
- GHG-17 – Improve Bicycle Network and Facilities
- GOV-EC-01 – Establish Employee Transportation Program
- GOV-EC-02 – Expand Transit Subsidy Program
- GOV-EC-03 – Determine Feasibility of Employee Shuttle System
- GOV-EC-04 – Expand Secure Bicycle Storage Facilities
- GOV-EC-05 – Provide Carpool-At-Work Incentives

# Process for a Land Development Project

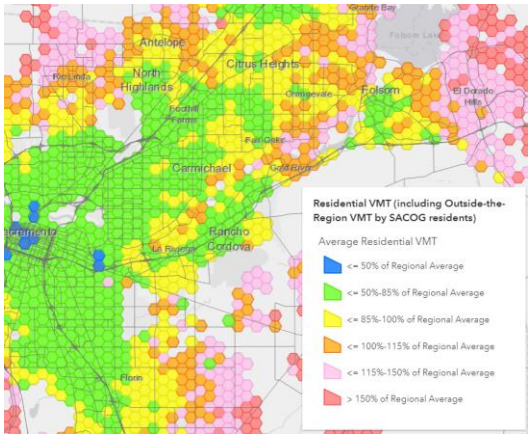





SACRAMENTO COUNTY

# Screening Criteria

1. Small Projects
2. Local Serving Retail
3. Local Serving Public Facilities/Services
4. Projects in VMT Efficient Areas
5. Transit Oriented Development
6. Affordable Residential Projects



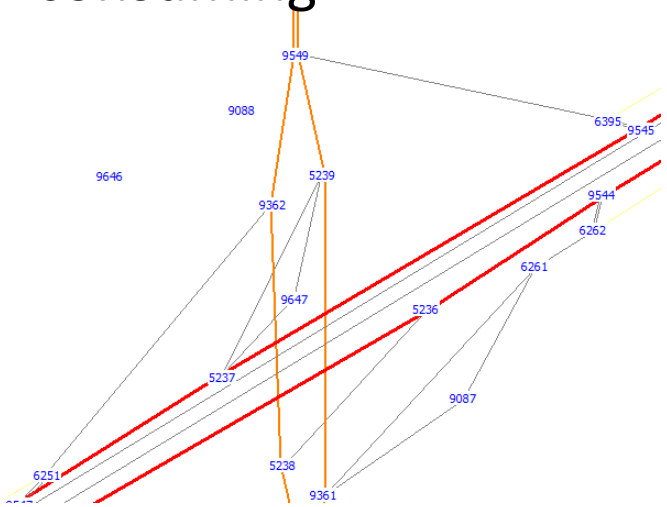

| Public, Civic, and Institutional Uses | Project Type |
|---|---|
| A. Assembly Uses | |
| 1. Places of Worship or Other Religious Institution | RPFS |
| 2. Private Social Center, Social Club, Fraternal Hall/Lodge | RPFS |
| B. Educational and Cultural Uses | |
| 1. Art Gallery, Art Studio | RET |
| 2. College, University | RPFS |
| 3. School, Private | RPFS |
| 4. School, K-12, Public | LPFS |
| 5. School, K-12, Private | RPFS |
| C. Government Uses | |
| 1. Government and Local Agency Buildings and Uses | LPFS or RPFS[2] |
| D. Parks and Open Space | |
| 1. Cemetery | RPFS |
| 2. Community Garden | LPFS |
| 3. Public Park | LPFS or RPFS[3] |
| 4. Wildlife Preserve | LPFS or RPFS[3] |
| 5. Market Garden | LPFS |
| E. Social Care Uses | |
| 1. Ambulance Service | LPFS |
| 2. Adult Day Care Center | LPFS |
| 3. Child Day Care Center | LPFS |

| Commercial Uses | Project Type |
|---|---|
| A. Commercial Service Uses | |
| 1. Animal and Pet Services | RET |
| 2. Business Services | RET |
| 3. Personal Services | RET |
| 4. Repair Services | RET |
| B. Eating/Drinking Uses | |
| 1. Bar/Tavern | RET |
| 2. Catering Service | RET |
| 3. Restaurant, Carry- out/Drive- through/Sit-down | RET |
| 4. On-Sale Alcoholic Beverages | RET |
| C. Entertainment / Recreation Uses | |
| 1. General Recreation Facility, Indoor | RPFS[5] |
| 2. General Recreation Facility, Outdoor | RPFS[5] |
| 3. Driving Range | RPFS[5] |
| 4. Adult Business | RET |
| 5. Arcade, Electronic, Mechanical, Video Games, or Computer Gaming Center | RET |
| 6. Boat Dock, Private | LPFS |
| 7. Campground | RPFS |
| 8. Card Room | RPFS |
| 9. Dancing in a Bar or Restaurant, Incidental | RET |

# Calculation Methods

## Travel Demand Model

- Estimates traffic and VMT from land use and transportation network
- Checklist
- Expensive and time-consuming




## Model-Based Calculation

- Use existing model data as proxy for development
- Requires consistency check

| 9 | z | tothh | wkrs | stugrd | stuhgh | stuuni | empedu | empfoo | empgov | empind | empmed | empofc | empret | empsvc | empoth | emptot | pop |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 31 | 144 | 155 | 0 | 0 | 0 | 0 | 2 | 15 | 14 | 0 | 19 | 3 | 22 | 0 | 76 | 351 |
| 1594 | 1615 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 180 | 18 | 0 | 397 | 22 | 75 | 0 | 718 | 0 |
| 1595 | 1616 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 18 | 0 | 3 | 0 | 30 | 0 |
| 1596 | 1617 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1597 | 1618 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1598 | 1619 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1599 | 1620 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600 | 1621 | 110 | 169 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 395 |
| 1601 | 1622 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1602 | 1623 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1603 | 1624 | 0 | 0 | 33 | 15 | 0 | 0 | 9 | 314 | 0 | 0 | 660 | 0 | 113 | 0 | 1098 | 0 |
| 1604 | 1625 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 8 | 883 | 0 | 239 | 9 | 144 | 0 | 1329 | 0 |
| 1605 | 1626 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 0 | 1949 | 0 | 472 | 19 | 261 | 0 | 2773 | 0 |
| 1606 | 1627 | 0 | 0 | 0 | 136 | 0 | 14 | 24 | 469 | 23 | 0 | 1141 | 0 | 210 | 0 | 1882 | 0 |
| 1607 | 1628 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 294 | 142 | 0 | 672 | 0 | 140 | 0 | 1268 | 0 |
| 1608 | 1629 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 145 | 285 | 0 | 606 | 57 | 177 | 0 | 1329 | 0 |
| 1609 | 1630 | 133 | 215 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 381 |
| 1610 | Total | 881799 | 973721 | 243154 | 99013 | 150731 | 63751 | 83770 | 119258 | 123677 | 65884 | 241128 | 129566 | 115891 | 3552 | 947765 | 2376811 |

# Significance Thresholds

| Table B-1<br>Residential Tour Lengths and VMT per Capita | | | | | | |
|---|---|---|---|---|---|---|
| Model Scenario | Average Round Trip Miles<br>Home-Based Tours of Residents | | | Average VMT per Capita<br>Home-Based Tours of Residents | | |
| | Commute | Non-Commute | All | Commute | Non-Commute | All |
| Regional Baseline | 28.1 | 21.8 | 23.7 | 6.3 | 11.3 | 17.6 |
| | | | | 85% of Regional 2016 | | 15.0 |

| Table B-2<br>Employee Commute Tour Lengths and VMT per Employee | | |
|---|---|---|
| Model Scenario | Average Round Trip Miles<br>Commute Tours of Workers | Average VMT per Capita<br>Commute Tours of Workers |
| Regional Baseline | 28.6 | 16.4 |
| | 85% of Regional 2016 | 13.9 |

# VMT Mitigation Measures

**Table 3-4**
**Example VMT Mitigation Measures**

| Category | Measure |
|---|---|
| **Parking** | • Limit or eliminate parking supply<br>• Unbundle parking costs<br>• Provide parking cash-out programs<br>• Price workplace parking |
| **Transit** | • Improve or increase access to transit<br>• Reduce transit headways<br>• Implement neighborhood shuttle<br>• Provide partially or fully subsidized transit passes |
| **ITS** | • Deploy management strategies (e.g., pricing, vehicle occupancy requirements) on roadways or roadway lanes.<br>• Implementing or funding intelligent transportation systems (ITS) strategies to improve passenger throughput on existing lanes. |
| **Education and Encouragement** | • Provide incentives or subsidies that increase the use of modes other than a single-occupancy vehicle<br>• Voluntary travel behavior change program<br>• Promotions and marketing |
| **Commute Trip Reductions** | • Implement or provide access to a commute reduction program<br>• Provide telework options<br>• Provide on-site amenities at places of work, such as priority parking for carpools and vanpools, secure bike parking, showers and locker rooms, and bicycle repair services<br>• Employer or association-sponsored vanpool, circulator, or shuttle<br>• Rideshare program<br>• Provide employee transportation coordinators at employment sites<br>• Provide a guaranteed ride home service to users of non-auto modes |

**Table 3-4**
**Example VMT Mitigation Measures**

| Category | Measure |
|---|---|
| **Shared Mobility** | • Provide car-sharing, bike sharing, and ride-sharing programs<br>• Shift single occupancy vehicle trips to carpooling or vanpooling by providing ride-matching services or shuttle services<br>• Other shared mobility devices<br>• School carpool program |
| **Active Transportation/ Neighborhood Enhancement** | • Orient the project toward transit, bicycle, and pedestrian facilities<br>• Improve pedestrian or bicycle networks<br>• Include outdoor bike parking<br>• Include secure bike parking and showers<br>• Traffic calming<br>• Shared use paths/paseos |
| **Project Changes** | • Locate the project in an area of the region that already exhibits low VMT.<br>• Locate the project near transit.<br>• Increase project density.<br>• Increase the mix of uses within the project or within the project's surroundings.<br>• Increase connectivity and/or intersection density on the project site.<br>• Increase access to common goods and services, such as groceries, schools, and daycare.<br>• Incorporate affordable housing into the project.<br>• Incorporate a neighborhood electric vehicle network. |

# Programmatic Mitigation Approaches

- Larger Projects: CSA10 benefit zone to fund trip-reducing services/ programs
  - Shuttle and transit services
  - Vanpool/carpool program
  - Guaranteed ride home
  - Bike/transit subsidies
  - Telecommuting/educational programs
  - Transportation coordinator
  - TMA membership to provide above
- Smaller Projects: currently exploring programmatic approaches
  - VMT impact fee program
  - VMT mitigation bank

| | Existing Zone No. 3 Boundary Estimated Expenditures |
|---|---|
| **Direct Costs** | |
| **Management** | |
| General Administration | $ 140,030 |
| Market Research/Survey | $ 20,000 |
| Marketing | 10,200 |
| ***Subtotal*** | $ ***170,230*** |
| **Programs** | |
| Community Shuttle | $ 171,850 |
| Car Sharing | 20,650 |
| Transit Pass Subsidy | 43,400 |
| Bike Subsidy | 35,280 |
| Interactive Kiosk | 18,620 |
| Walk to School | 1,120 |
| ***Subtotal*** | $ ***290,920*** |
| **Total Transportation Services** | **$ 461,150** |
| **District Administration Costs** | |
| CSA Administration [1] | $ 10,000 |
| County Tax Roll Levy Fee [2] | 23,900 |
| **Total District Administration Costs** | **$ 33,900** |
| **Total Levy** | |
| Total Expenditures | $ 495,050 |
| Contingency Fund Activity [3] | 133,577 |
| **Balance to Levy** | **$ 628,627** |
| **Parcel Statistics** | |
| Total Estimated Parcels Levied | 4,480 |
| Total Estimated Equivalent Dwelling Units (EDU) | 6,321.67 |
| Levy per EDU | $99.44 |
| **Maximum Levy per EDU** (FY 2015/16) | **$99.44** |

# Local Transportation Analysis

- Continues to be required for projects that generate more than 100 peak hour or 1,000 daily trips
- Ensures that General Plan Policies are enforced relating to:
  - Level of Service
  - Safety
  - Pedestrians
  - Bicyclists
  - Transit
- Requires improvements to address deficiencies, which are imposed as Conditions of Approval on a project.

# Early Experience

- Many residential projects that were below LOS thresholds now have significant VMT impacts
- Fully mitigating VMT impacts is challenging without a programmatic approach
- Screening is effective for small projects and locally-serving retail, service, and public facilities

# Resources

- Sacramento County Transportation Analysis Guidelines
  - https://sacdot.saccounty.net/Pages/Traffic-Studies.aspx
- SACOG SB 743 Technical Assistance (incl. screening maps)
  - https://www.sacog.org/sb-743-technical-assistance
- OPR SB 743 Resources
  - https://opr.ca.gov/ceqa/updates/sb-743/
- Caltrans SB 743 Implementation
  - https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743

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