



## **CITY OF BURBANK TRANSPORTATION STUDY GUIDELINES UPDATED 12/1/2020**

The City of Burbank Community Development Department has established the following procedures for the preparation of Transportation Study Reports in order to ensure consistency of analysis, the adequacy of information presented, and timely review by City staff. These guidelines are standards that implement goals and policies of the Burbank2035 General Plan Mobility Element, Specific Plans, the Complete Streets Plan, and the Bicycle Master Plan. It is highly recommended that any traffic consultant confer with City staff before beginning a study to establish the scope, align basic assumptions, and determine any variation from previous procedures to avoid unnecessary delay or revision.

### **TABLE OF CONTENTS**

- I.** Projects Requiring a Transportation Study
- II.** CEQA Transportation Policy Analysis
- III.** CEQA VMT Analysis
- IV.** CEQA Safety Analysis
- V.** Operations Analysis
- VI.** Travel Demand Model
- VII.** Trip Generation Calculations for VMT and Operations Analysis
- VIII.** Operational Improvements
- IX.** Transportation Demand Management
- X.** Transportation Study Review Process and Administrative Approval

### **I. PROJECTS REQUIRING A TRANSPORTATION STUDY**

#### Local City of Burbank Transportation Study Requirements

The Burbank Municipal Code requires that development projects that 1) are of statewide, regional, or area-wide significance; 2) are residential projects in multi-family zones; 3) are non-residential projects within 150 feet of single family zoned property, or 4) require a discretionary approval by the Planning Board or City Council, shall undergo environmental assessment pursuant to CEQA because such projects may significantly impact the environment.

As part of the initial review of a proposed project that meets one of these three criteria, Community Development Department staff will determine whether a project is likely to 1) cause a significant impact to the City's transportation system pursuant to CEQA and 2) impose operational roadway deficiencies in a manner that is contrary to the Burbank2035 General Plan. In making this determination, staff will conduct an initial assessment of the project's transportation characteristics to determine if a transportation impact or operational roadway deficiency is likely.

### Transportation Impact Checklist

A project is likely to have a transportation impact on the environment if the answer to any of the following questions is yes:

- A. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- B. Would the project conflict or be inconsistent with CEQA Guidelines 15064.3(b) related to increased Vehicle Miles Traveled?
- C. Would the project substantially increase hazards due to geometric design features or incompatible uses?
- D. Would the project result in inadequate emergency access?

In addition to CEQA impacts, a project is likely to impose a roadway operational deficiency contrary to the Burbank2035 General Plan if the answer to the following question is yes:

- E. Would the project result in a roadway operational deficiency that would be contrary to the Burbank2035 General Plan?

If the answer to any of the above five questions is yes, then a more detailed transportation study is required and these guidelines shall be used for studies prepared to analyze a project's impact on transportation and circulation.

### Transportation Study Screening Process

For each proposed Project's initial assessment, City staff will apply the following screening criteria to answer questions A through E above to determine if a project requires a transportation study.

- A. If the project's initial assessment shows that it satisfies one of the following criteria, then that project shall be presumed not to have a transportation impact due to conflicting with a program, plan, ordinance or policy:
  - 1. The project is not requesting a discretionary approval
  - 2. The project
    - a. is in conformance with the Burbank2035 General Plan and SCAG Regional Transportation Plan / Sustainable Communities Strategy; AND
    - b. does not impact an existing or planned bicycle, or pedestrian facility identified in the General Plan, Bicycle Master Plan, or Complete Streets Plan; AND
    - c. does not impact existing or planned transit facilities or policies.

*If none of these criteria are satisfied, than a CEQA transportation policy analysis is required.*

- B. If the project's initial assessment shows that it satisfies one of the following criteria, then that project shall be presumed not to have a CEQA transportation impact under

15064.3(b) and therefore does not require a more detailed transportation analysis of the project's impact on Vehicle Miles Traveled:

1. The project is a "small project" that generates less than 110 daily trips
2. The project is a residential, retail, office, or mixed-use project within ½ mile of an existing major transit stop or existing stop along a high-quality transit corridor (as defined by the OPR technical advisory<sup>1</sup>) and:
  - a. does not have a FAR less than 0.75
  - b. does not include more parking than is required by the Burbank Municipal Code
  - c. is consistent with the RTP/SCS
  - d. does not replace affordable housing units with a smaller number of moderate- or high-income units
3. The project is a 100-percent affordable housing or affordable housing mixed use infill project
4. The project consists of one or more neighborhood-serving retail uses that total 50,000 square feet or less. The determination that a retail use is neighborhood-serving shall be made by the Community Development Department and may include retail, restaurant, or commercial service uses that generally serve the local area.
5. The project does not include a land use, project feature, or location that suggests it could have an impact on Vehicle Miles Traveled despite meeting criteria 1 through 4.

*If none of these criteria are satisfied, than a CEQA VMT Analysis is required.*

- C. If the project's initial assessment shows that it satisfies all the following criteria, then the project shall be presumed to not have a transportation impact due to substantially increasing hazards due to geometric design features or incompatible uses:
1. The project is not adding or removing new access points to the street system, realigning city streets, or introducing new vehicle trips to an existing deficient access point
  2. The project is not introducing new conflicts between vehicles, bicycles, and pedestrians
  3. The project is expected to add less than 25 AM or PM peak hour trips to any Caltrans off ramp.
  4. A project design feature does not substantially increase hazards due to geometric design features or incompatible uses, as determined by the Community Development Department or Public Works Department

*If one or more of these criteria are not satisfied, then a CEQA Safety Analysis is required.*

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<sup>1</sup> Governor's Office of Planning and Research (2018) *Technical Advisory on Evaluating Transportation Impacts in CEQA*

D. If the project's initial assessment shows that it satisfies the following criteria, then the project shall be presumed to not have a transportation impact resulting in inadequate emergency access.

1. The project does not affect emergency vehicle circulation or increase emergency response times

*If this criteria is not satisfied, then a CEQA Safety Analysis is required.*

E. In addition to items A through D above related to CEQA, if a project is expected to generate more than 50 AM or PM peak hour vehicle trips, an Operations Analysis may be required at the discretion of the Community Development Department to ascertain if the project will introduce a roadway operational deficiency that is incompatible with the Burbank2035 General Plan.

*If this trip generation criteria is satisfied, then an Operational Analysis may be required.*

## **II. CEQA TRANSPORTATION POLICY ANALYSIS**

If a project is expected to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, then a transportation policy analysis must be prepared to identify mitigation measures or changes to project design features to minimize these impacts. Potential policy impacts could include:

- Interfering with existing bicycle facilities, or precluding the construction of future bicycle facilities identified in the Bicycle Master Plan or Complete Streets Plan.
- Failing to conform to Burbank2035 General Plan Mobility Element Table M-2 Sidewalk Standards, failing to account for sidewalk policies in specific plans, or reducing sidewalk/parkway widths below the standards specified in Burbank2035
- Introducing barriers to pedestrian circulation or impacting existing pedestrian paths of travel, pedestrian amenities, or pedestrian improvements called out in the General Plan, Specific Plans, or Complete Streets Plan
- Impacting existing or future transit facilities, or impacting transit service

## **III. CEQA VMT ANALYSIS**

In 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update which included revised guidelines that implement Senate Bill 743. This update changed the way the City of Burbank evaluates a project's transportation impacts under CEQA. If a project contribution to lowering the level of service, it is no longer considered a CEQA transportation impact. The City of Burbank measures vehicle miles traveled (VMT) caused by a project and determines if a project's VMT exceeds certain thresholds of significance.

The City of Burbank is currently undertaking a process to update its transportation impact thresholds and procedures to conform to SB 743 as well as the City's Burbank2035 General Plan. However, because state law no longer allows congestion-based analyses to determine CEQA impacts and instead requires adopting VMT measurements and thresholds, all projects that require CEQA transportation analysis prior to adopting formal updated CEQA thresholds

and standards will be analyzed according to OPR’s “Technical Advisory on Evaluating Transportation Impacts in CEQA.” The City of Burbank has established interim transportation impact thresholds based on OPR guidance, including the suggested project screening criteria, thresholds of significance, and potential mitigation measures. Projects that require a transportation CEQA VMT analysis shall follow the procedures outlined below.

**A. SIGNIFICANT TRAFFIC IMPACT THRESHOLDS**

If a project is not screened out from VMT analysis it is considered to have a significant transportation impact if the project’s VMT exceeds the following thresholds:

**Table 1: Project-Level Thresholds of Significance**

Project Type	Threshold of Significance
Residential	Project VMT exceeds a level of 15 percent below existing Los Angeles County VMT per capita.
Office & Industrial	Project VMT exceeds a level of 15 percent below existing Los Angeles County VMT per employee.
Retail	For projects that are not neighborhood-serving (e.g. not less than 50,000 s.f.), Project causes a net increase in total VMT, after accounting for the VMT of any existing uses.
Mixed Use	For mixed-use projects, if any residential, office, or retail use component of the mixed-use project causes a significant impact as calculated by the applicable individual land use methodology, after accounting for internal capture.
Other projects	For land uses that differ significantly from any of the uses described above, quantifiable threshold shall be developed specific to the project.

**Table 2: Cumulative-Level Thresholds of Significance**

Project Type	Threshold of Significance
All	Project is consistent with the goals, policies, development standards, and densities of the Burbank2035 General Plan, Specific Plans, Complete Streets Plan, Bicycle Master Plan, or other applicable transportation plans AND the project is consistent with the RTP/SCS

For calculating thresholds of significance, the City of Burbank shall be consulted to determine the applicable tool or methodology that shall be used.

**B. ITEMS TO BE INCLUDED IN THE VMT ANALYSIS**

The following items must be included in the CEQA VMT analysis unless waived by the Community Development Department; the consultant is encouraged to discuss and/or submit major study components for review prior to submittal of the draft Transportation Study report:

Components of Analysis

1. VMT Metrics

Study should identify applicable VMT metric, based on the project’s use or mix of uses (residential, office, retail, mixed-use, or other).

2. VMT Thresholds

Study shall identify and calculate applicable VMT threshold of significance as determined by the City’s interim thresholds of significance in Table 3.

**Table 3: VMT Thresholds of Significance**

Project Type	Project Threshold
Residential	Project home-based VMT per capita shall not exceed a level of 15 percent below the average County home-based VMT per capita as calculated from the SCAG Travel Demand Model. Project base year figures can be interpolated between the base year and horizon year of the model.
Office & Industrial	Project home-based work VMT per employee shall not exceed a level of 15 percent below the average County home-based work VMT per employee as calculated from the SCAG Travel Demand Model. Project base year figures can be interpolated between the base year and horizon year of the model.
Retail	For projects that are not neighborhood-serving (e.g. not less than 50,000 s.f.), project shall not increase net total VMT.
Mixed Use	For mixed-use projects, baseline shall be established separately for each independent residential, office, or retail use component of the project as described above.
Other projects	For land uses that differ significantly from any of the uses described above, baseline shall be developed specific to the project.

3. Forecast of Project VMT Effects

Study shall forecast the project’s VMT effects as applicable depending on the land use of the project. The project’s VMT effects should be determined as follows:

**Table 4: Project VMT**

Project Type	VMT Measurement
Residential	At the discretion of the City, Project VMT per capita shall be derived: <ol style="list-style-type: none"> <li>1) by multiplying the project’s trip generation by the average Burbank home-based trip length determined from the SCAG Travel Demand Model and dividing by the Project’s residential population. Residential population shall be calculated by multiplying number of units by the average household size as reported in the Burbank2035 General Plan FEIR or other source as determined by the City; OR</li> <li>2) directly through use of the SCAG Travel Demand Model to calculate project VMT and dividing by residential population.</li> </ol>

Office & Industrial	At the discretion of the City, Project VMT per employee shall be derived: 1) by multiplying the project's trip generation by the average Burbank home-based work trip length determined from the SCAG Travel Demand Model and dividing by the project's expected employees. Employment estimate shall be calculated by multiplying the project adjusted gross square footage (in 1,000s) by the appropriate employment factor from the Burbank2035 General Plan FEIR or other source as determined by the City; OR 2) directly through use of the SCAG Travel Demand Model to calculate project VMT and dividing by number of employees.
Retail	For projects that are not neighborhood-serving (e.g. not less than 50,000 s.f.), the SCAG Travel Demand Model shall be used to compare total City or County VMT generated with and without the project.
Mixed Use	For mixed-use projects, VMT per capita or total VMT should be calculated for each independent residential, office, or retail use component.
Other projects	For land uses that differ significantly from any of the uses described above, project VMT threshold shall be determined specific to the project.

4. Identify Significant Impacts

Project Level Impacts: Study shall compare the project VMT efficiency metric or total VMT calculated (as described in Table 4) to the VMT threshold identified in Table 3 to determine the project would result in a significant impact.

Cumulative Impacts: Study shall ascertain whether the project is consistent with the goals, policies, development standards, and densities of the Burbank2035 General Plan and related planning/policy documents AND the project is consistent with the RTP/SCS.

5. Develop Mitigation Measures

Based on the results of the aforementioned analysis, if project's VMT exceeds an applicable project or cumulative significant impact threshold, the study should propose feasible mitigation measures to reduce the project impact to a less than significant level.

6. In all cases above, the City may determine, for specific projects, that alternative travel demand models, data sources, or VMT calculation methods may be more appropriate when determining project impacts.

To help illustrate the components included in the analysis, the following information shall be included in the Transportation Study:

### Maps Illustrating the following:

- Project Location / study area
- Site Plan Map
- Existing street system including number of lanes, Mobility Element classification designation, speed limits and other transportation features
- Existing public transit service, bicycle network, and relationship to high quality transit corridors or major transit centers

### Tables Illustrating:

- Project land use assumptions by phase
- Project trip generation by phase, and generation rates; truck trip generation may be required for commercial projects
- Project VMT and/or VMT efficiency metric (e.g. VMT per capita, etc.)
- VMT Threshold
- Identification of any significant impacts

## **C. VMT MITIGATION MEASURES**

Mitigation measures may include on-site or off-site VMT reduction strategies, project design changes, or actions to reduce vehicle travel demand such as TDM or pricing strategies. Quantification of VMT, TDM, or pricing strategies may be obtained from the Quantifying Greenhouse Gas Mitigations Measures, CAPCOA 2010 or other recent studies. Study should include sufficient documentation to quantify the effect that the proposed mitigation will have on reducing project VMT to a level that is less than significant. The study must show that implantation of the mitigation measure is feasible and should clearly define who is responsible to implement the mitigation. Below, further information is provided on considerations for specific mitigation strategies.

### Transit Capacity and Access Improvements

- Transit mitigation measures should include a comprehensive transit program that clearly describes how the proposed improvement will reduce project VMT. Any transit system capacity mitigations should also clearly identify how expansions will be implemented and funded. All transit mitigations must be coordinated with relevant transit providers.
- Transit measures and programs include: contribution of equipment or funds to increase capacity of existing systems, local transit shuttles provided by the applicant between the project site and appropriate regional transit centers, or provisions of facilities or equipment which expedite transit flow (e.g. bus priority, HOV lanes, etc.). The study must clearly demonstrate how the proposed improvement will reduce project VMT.

### Pedestrian and Bicycle Improvements

- If project characteristics or location provide the opportunity for increased travel via pedestrian or bicycle modes, or increased trip capture between adjacent land uses, a



reduction in project VMT may be granted in exchange for pedestrian or bicycle improvements.

- Pedestrian improvements include provision for wider sidewalks, removal of pedestrian obstacles in the public right of way to foster more walking, improvement of a pedestrian linkage to a transit center, better site access from the street, reorientation of buildings to the front of the street (with parking located behind), constructing pedestrian amenities, or other design changes to encourage walking.
- Bicycle improvements include providing short-term bicycle parking, commuter bicycle storage, shower facilities, changing facilities, or on-street bicycle infrastructure (bicycle lanes).
- Consideration will also be given to projects that implement policies, programs, or projects in the Complete Streets Plan or Bicycle Master Plan.

#### TDM Programs

- TDM programs may be considered as mitigation for project VMT if the proposed TDM program meets the guidelines and standards outlined in Section VIII of these guidelines. Generally, TDM programs must contain well-defined goals, establish clear monitoring programs, and describe the incentives or penalties instituted to ensure compliance. TDM programs will only be considered as mitigation measures if they demonstrate programs or policies above and beyond those items required by the City's Transportation Demand Management Ordinances.

#### Mitigation Monitoring Program for Inclusion in Environmental Document

- The necessary components of each mitigation measure in the mitigation monitoring plan should be stated separately for inclusion in the environmental document.

#### Mitigation Alternatives and Infeasible Mitigation Measures

- In certain circumstances there may be alternative mitigation measures to alleviate significant impacts. Where appropriate, the study may include a discussion of these alternative mitigations and provide a summary of why certain mitigations were rejected as infeasible.

### **IV. CEQA SAFETY ANALYSIS**

Projects that require a transportation CEQA Safety Analysis shall include the following elements below.

#### **A. SITE ANALYSIS AND CIRCULATION**

The evaluation of a project's site access and circulation must include a review of site design features which may impact local traffic safety, including the following items:

- Location and design of access points and driveways, including optimal spacing based on sight distances
- Vehicle queuing, both entering from the street and leaving the site. Recommendations on driveway lane configurations should be included
- Internal circulation and parking
- Service and docking plans, including loading zones or bays used for truck delivery service
- Parking design
- Pedestrian and bicycle circulation, including:
  - connections between the street and the proposed site
  - circulation within on-site parking lots
  - conformance with BMC 10-1-2301 Transportation Demand Management Ordinance
  - Conformance with City of Burbank parking and access standards, including Americans with Disabilities Act requirements.

All site plans must be approved by the Community Development Department. Access points to adjoining public streets must be approved by the Public Works Department.

## **B. FREEWAY QUEUING ANALYSIS**

Projects that require a transportation analysis because they add 25 or more AM or PM peak hour trips to a Caltrans off ramp shall provide a Caltrans Freeway Queuing Analysis to demonstrate that the project does not create unsafe vehicle queuing condition on a Caltrans facility. To satisfy this requirement, the City may accept an analysis performed in conformance with the LADOT Transportation Assessments Interim Guidance for Freeway Safety Analysis.

## **V. OPERATIONS ANALYSIS**

While the evaluation of congestion and delay caused by a proposed project is no longer analyzed as part of the transportation analysis under CEQA, the Burbank2035 General Plan still has a goal of maintaining LOS D at the city's intersections to ensure there is adequate transportation operational efficiency on the City's roadway network. Thus, regardless of whether projects require a transportation analysis under CEQA, projects that expect to generate more than 50 AM or PM peak hour trips may be required to prepare an Operations Analysis to help determine if a project's expected traffic generation is compatible with the Burbank2035 General Plan and does not cause a roadway operational deficiency. Changes to delay, and possible improvements to reduce this delay, are not considered impacts under CEQA, and are not included in the project's environmental document. However, the operations analysis may identify specific circulation improvements to improve vehicle operations, and the legislative body approving the project (Planning Board or City Council) may wish to require the project to provide these improvements as conditions of approval if a legal nexus can be established or if the project is a Planned Development. This section describes the requirements for completing a General Plan Operations Analysis.

## **A. STUDY AREA BOUNDARIES**

All critical intersections and roadway facilities within the primary influence area of the proposed development are to be evaluated. This primary influence area should be considered based upon the proposed project trip generation, the network of surrounding streets, and expected project distribution.

Critical intersections and street segments include:

- All study intersections included as study intersections in the Burbank2035 General Plan that are located within 1 mile of the project site should be included (additional General Plan study intersections may be included at the request of the Community Development Department)
- All signalized intersections immediately surrounding the project site
- Any local, residential street that is expected to carry project traffic (50 or more daily trips)
- Any location identified by the Community Development Department within one mile of the project site that may have particular operational characteristics that could cause operational deficiencies, such as intersections that currently operate at LOS D, E, or F during one or more peak hours;
- Any non-signalized intersection surrounding the project site or that carries project traffic between the project site and the nearby arterial street system or freeway ramp, as identified by the Community Development Department
- All project access points, including uncontrolled intersections, stop-controlled intersections, T-intersections, and driveways intersecting with public streets. These locations should be analyzed as if they were intersections.

## **B. STUDY PERIODS**

The peak travel in Burbank generally occurs during the weekday morning and evening peak hours, therefore traffic studies for all office, commercial, and residential uses shall identify and analyze traffic impacts during the AM and PM peak hours as determined by a count of roadway traffic. In some instances, the Community Development Department may require evaluation of other critical time periods or extended time periods, based on the site location and proposed uses. To capture peak hour conditions, traffic counts shall be collected during the morning hours between **7:00 and 10:00 AM** and evening hours between **4:30 and 7:30 PM**. Larger commercial or retail projects that are located in commercial zones may be asked to analyze traffic during Saturdays. If this analysis is required, counts shall be taken between 12:00 PM and 3:00 PM or as defined by the Community Development Department.

Average Daily Traffic (ADT) on neighboring arterial streets should also be measured to determine general traffic characteristics, to confirm peak hours of ambient traffic in the study area, and to calculate appropriate peak hour K-factor for the surrounding street network.

Local residential streets in the project study area that are identified as critical street segments will be evaluated for both AM and PM peak hour and daily (ADT) traffic conditions for Existing, Future without Project, and Future with Project.

### **C. LEVEL OF SERVICE EVALUATION**

Intersection Level of Service (LOS) is the primary measurement of roadway vehicle operational characteristics. When determining LOS, the following guidelines shall be followed:

The latest Transportation Research Board Highway Capacity Manual Level of Service Methodology shall be used to analyze traffic operating conditions at signalized and unsignalized study intersections.

Intersection delay shall be calculated and summarized in a table showing a weekday AM and PM peak hour LOS at study intersections for existing, future without project, and future with project conditions. Change in intersection delay between 1) existing, future without project, and future with project conditions should be noted. Attach in a separate appendix detailed work sheets for each study intersection. Average control delay (all-way stop control) or minor approach control delay (two-way stop control), in seconds, should be calculated for unsignalized intersections and included in the summary table.

Use the most recent traffic volume counts (measured within the last two years) conducted by the City of Burbank if available; or conducted by a qualified traffic data collection firm if City counts are not available. *Due to COVID19, historical counts older than 2 years may be used if more recent counts that represent typical pre-COVID conditions are unavailable*

Assumed unmarked lanes (such as functional/de-facto right turn only lanes) will be allowed in the capacity calculation if the lane is a minimum of 19 feet wide and a minimum of 100 feet long. Bus stops, driveway aprons, and red-curb may be included in the 100-foot length calculation.

The City of Burbank should be consulted to obtain a list of programmed street improvements for study intersections for use in the Future without Project scenario HCM (delay) calculations.

The analysis methodology for freeway segments (if required) must be approved by the City of Burbank

A traffic signal warrant analysis, consistent with the latest California Manual of Uniform Traffic Control Devices, shall be included for any unsignalized intersection that meets the significant impact threshold.

Additional traffic impact analysis may be required in special circumstances such as:

- Holidays or special events
- Summer weekend activities for recreational uses or near recreational areas
- Freeway analysis

- University or school expansions
- Swing shifts
- Developments with special visitor, employee, or shopping hours or days (e.g. Saturday analysis for shopping centers)
- Alternative projects as determined by another City Department or adjacent jurisdiction

Any alternative assumptions or methodologies deemed necessary by specific project conditions must be approved by the Community Development Department.

#### **D. TRIP DISTRIBUTION FOR OPERATIONAL ANALYSIS**

The trip distribution is generally dependent upon population, employment, shopping opportunities, and accessibility to the site. For large developments, it is recommended that the project traffic distribution be derived based on an assignment of the Citywide Travel Demand Model for the Traffic Analysis Zone in which the project is located. Output from the Travel Demand Model should be used as a guideline for approximate geographic distribution. Local distribution near the project site should be manually assigned based upon the factors discussed above as well as street network characteristics near the project site. Project distributions must be approved by the Community Development Department.

#### **E. ITEMS TO BE INCLUDED IN THE OPERATIONS ANALYSIS**

The following items must be included in the traffic report unless waived by the Community Development Department; the traffic consultant is encouraged to discuss and/or submit major Transportation Study components for review prior to submittal of the draft Transportation Study report:

##### Components of Analysis

1. Existing Conditions at all study intersections and ADT locations
2. Project trip distribution
3. Project trip assignments at all study intersections and ADT locations
4. Future without Project Scenario
  - a. Identification of all future entitled projects or projects under construction
  - b. Identification of an appropriate ambient growth factor to account for regional traffic
  - c. Cumulative project traffic distribution and assignment at all study intersections and ADT locations (City's travel demand model may be used to assist with distribution and/or assignment)
5. Future with Project Scenario
6. Comparison of intersection delay and LOS for Existing, Future without Project, and Future with Project
7. For all study intersections, identification of improvements for any locations that exceed LOS D under future plus project conditions, and the project contributes to the increase in delay. These are improvements to be considered as project conditions of approval if a project nexus can be established.

8. Identification of improvements for any project access points that exceed LOS D under future plus project conditions. These improvements will be considered as conditions of approval or as changes to the project description, as appropriate.
9. Tables Illustrating:
  - Project land use assumptions by phase
  - Project trip generation by phase, and generation rates; truck trip generation may be required for commercial projects
  - Cumulative project trip generation, and generation rates
  - Level of Service definitions for signalized and unsignalized intersections
  - Level of Service for all analyzed scenarios
  - Changes in Level of Service for any improvements identified
10. Appendices including
  - Diagrams illustrating study intersection geometries (including lane configurations, functional right turn lanes, traffic control, signal timing, etc.)
  - Level of Service worksheets for all analyzed scenarios
  - Traffic Counts
  - Traffic signal warrant worksheets (if applicable)
11. Maps Illustrating the following:
  - Project location / study area
  - Analyzed Intersections (numbered)
  - Site plan map
  - Location of related projects
  - Existing turning movement traffic volumes for AM and PM peak hour, ADT's for local residential streets identified in study area (if applicable)
  - Project trip distribution percentages
  - Project turning movement traffic volumes, Project ADT's for local residential streets identified in study area (if applicable)
  - Future turning movement traffic volumes without the project (Future without Project), ADT's for local residential streets identified in study area (if applicable)
  - Total future turning movement traffic volumes with project (Future with Project), ADT's for local residential streets identified in study area (if applicable)
  - Existing street system including number of lanes, general parking restrictions in study area, median type, intersection control device type
  - Existing Public Transit Service
  - Existing Level of Service at analyzed intersections
  - Planned and programmed street improvements in study area
  - Future Level of Service without project at analyzed intersections
  - Future Level of Service with project at analyzed intersections, including Level of Service with mitigations, if required

## **VI. TRAVEL DEMAND MODEL**

Computerized traffic models are planning tools used to simulate future traffic conditions and develop traffic projections based on development growth patterns. The City has developed a detailed Citywide Travel Demand Model that is capable of generating Daily, AM Peak Hour, and PM Peak Hour traffic forecasts, as well as estimates of trips. The model is capable of simulating cumulative traffic conditions and traffic conditions with the proposed project. The model, however, may not be appropriate simulating trip lengths or VMT for the purposes of conducting VMT analysis without further refinement. For VMT analysis, the SCAG 2016 RTP/SCS or later travel demand model should be used unless otherwise discussed with the City. For assistance and fees for Travel Demand Model use, contact the Community Development Department. The City travel demand model may be used to assist Consultant in developing trip distribution.

If project horizon year is five years or more and/or the project is expected to generate more than 500 peak hour trips, the use of a travel demand model is recommended for the Operational Analysis. The model can be used to generate existing and future travel patterns to support the traffic analysis. Please consult with the Community Development Department if a travel demand model is used.

## **VII. TRIP GENERATION CALCULATIONS FOR VMT AND OPERATIONAL ANALYSIS**

Use the latest edition of ITE's Trip Generation Handbook for trip generation rates/formulas. Use of San Diego Association of Governments (SANDAG) Trip Generation rates may also be used if applicable ITE rates are not appropriate. If other than a latest edition of ITE Trip Generation rates are used, then they must be approved by the Community Development Department. Guidelines outlined in the Trip Generation Handbook should be consulted for appropriate applicability of ITE rates or equations.

If the project is located in the Media District Specific Plan area and it is of a media related use, the rates specified in Media District Specific Plan shall be used. These rates may also be used for media-related uses outside of the MDSP plan area with approval from the Community Development Department.

If the project is a restaurant, coffee bar, or other use where prepared food products are purchased for consumption, please refer to the "*City of Burbank Restaurant Trip Generation Guidelines*" for guidance on trip generation rates for these uses.

Truck trip generation rates should be estimated for commercial projects. Rates should be discussed with Community Development Department staff based upon current industry references to truck generation.

Certain discounts may be applied to trip generation. These include internal trip reduction for mixed-use developments and/or pass-by trip reduction for retail/commercial developments. Any trip discounts shall be supported in a latest edition of ITE Trip Generation Handbook and will require approval by the Community Development Department.

Unique types of development may require trip generation studies of similar facilities in order to determine actual trip rates to use in the project traffic analysis. Such rates must be approved by the Community Development Department.

## VIII. OPERATIONAL IMPROVEMENTS

The Operations Analysis may identify locations where the project's traffic causes increase in delay beyond that specified by the Burbank2035 General Plan. While not considered CEQA mitigations, the Operations Analysis can include improvements that reduce a project's contribution to intersection delay and may be the responsibility of the project if an adequate nexus can be established between the project and the improvement. **These physical improvements are not mitigation measures that address impacts under CEQA and may only be warranted if a legal nexus to the project can be established, or as part of a planned development.**

All proposed improvements must be described and illustrated. Improvement description should identify type of improvement (widening, restriping, signal modification) and improvement impacts e.g. parking removal or right-of-way acquisition. For improvements that require physical changes to the roadway, preliminary, conceptual-level drawings must be submitted as exhibits to the Transportation Study that show roadway and right of way dimensions, extent of improvements, proposed lane widths, parking removal, and other pertinent information to allow the Community Development Department and Public Works Department to verify the feasibility of the improvement. Estimate of preliminary cost of improvements may be required.

Note that the improvements must comply with basic engineering standards and State of California Highway Design guidelines. All improvements are subject to approval by the Community Development Department and Public Works Department.

**All proposed improvements must be evaluated to ensure they are compatible with the Goals and Policies of the Burbank2035 General Plan.** The Burbank2035 General Plan Transportation Analysis Report (page 43-45) includes a framework for how to evaluate improvements for consistency with Burbank2035.

**Any improvements that require changes to traffic signal timing or phasing must be evaluated using the latest HCM methodology to ensure that identified improvements demonstrate an operational improvement.**

Improvements to address operational deficiencies could include the following:

1. Street intersection flaring and other physical roadway improvements
  - Physical improvements may include intersection flaring, right-turn pockets, or other measures to improve operations at intersections. Additional through lanes on arterial roadways are generally NOT accepted per Burbank2035 and may also trigger secondary VMT impacts.



- Study must demonstrate that physical improvements are physically feasible and must meet minimum City and Caltrans Design Manual standards. Conceptual-level designs must be submitted for any physical changes to the roadway.
  - Resultant sidewalk widths shall be adequate for current and expected pedestrian demand and should be compatible with standards outlined in the General Plan Mobility Element.
  - All improvements must be evaluated to determine that they do not increase VMT or disturb existing or planned transit, bicycle, and pedestrian networks.
2. Street Re-striping and Parking Removal
- Striping improvements and parking removal recommendations must be approved by the Community Development Department. While these improvements are generally preferable to widening, care must be taken to ensure that secondary impacts (loss of street parking) are also addressed. The Operations Analysis should quantify the amount of street parking removal required and assess the ability of the surrounding neighborhood to absorb any parking loss.

## **IX. TRANSPORTATION DEMAND MANAGEMENT VMT MITIGATION**

Transportation Demand Management (TDM) is a transportation program that attempts to manage demand on the transportation system by diverting users of single-occupancy vehicles to alternative transportation modes, or shifting the time that travel is made to a time outside peak hours. The City of Burbank encourages development of comprehensive TDM programs as part of an overall strategy to reduce trips. However, all TDM programs proposed to be used as mitigation measures for significant impacts must be approved by the Community Development Department prior to finalization of the Transportation Study.

New development projects in the Media District Specific Plan and Burbank Center Plan areas are required by ordinance to implement TDM programs and participate in the Burbank Transportation Management Organization. The City's TDM ordinances establish tiered TDM program requirements based upon the size of the development. TDM programs required as part of the City's trip reduction ordinances cannot be used as a mitigation measure to reduce vehicle trips. However, TDM programs above and beyond those required by statute will be considered. The following items shall be considered when TDM is proposed as a mitigation measure:

If TDM is claimed as a mitigation measure, the TDM program must be documented in the Transportation Study and shall include at least the following elements:

- Statement of measurable goals to be achieved
- Key elements of the program
- Estimated number of trips to be reduced
- Schedule and responsibilities for implementation and funding
- Detailed description of monitoring program performance
- Contingency plan and/or financial penalties for failure to achieve goals

TDM mitigation measures should include a discussion of alternative mitigations needed to the roadway network if the TDM program was not implemented or fails to achieve its stated trip

reduction goal. This comparison information may be used to determine the level of monitoring or penalties assessed for failure to achieve the TDM goal. If the TDM alternative is extensive roadway improvements, a higher level of guarantee may be needed to ensure that TDM goals are met.

If the project site is under single ownership or control, is uniquely located so as to permit accurate monitoring of all site trips, and a large trip reduction goal is proposed, the City of Burbank may recommend a trip-cap agreement. Such an agreement typically places a cap on total vehicle trips entering or exiting the site during peak travel hours and includes a trip monitoring and contingency plan.

If the project site is under single ownership or control, is uniquely located so as to permit accurate monitoring of all site trips, and a large trip reduction goal is proposed, the City of Burbank may recommend a trip-cap agreement. Such an agreement typically places a cap on total vehicle trips entering or exiting the site during peak travel hours and includes a trip monitoring and contingency plan.

If a project applicant proposes to reduce vehicle trips through establishment or contribution to a transit system, full description of the transit program and an analysis of its projected effect on reducing vehicle trips to the study area must be included in the Transportation Study. In addition, a letter of support from the related transit service provider must be submitted documenting the agency's commitment to operating the proposed expanded service. The transit program description shall contain elements similar to the TDM program described above.

Large developments shall analyze and document mode split in comparable developments in the City and illustrate the future mode split assumptions and goals.

## **X. TRANSPORTATION STUDY REVIEW PROCESS AND ADMINISTRATIVE APPROVAL**

It is a policy of the City of Burbank that traffic studies produced by a project applicant, or by a consultant working on behalf of a project applicant, will not be accepted. All traffic studies shall be conducted by City of Burbank Transportation and Planning Division staff, or a consultant hired by the City of Burbank through a Request for Proposals process and subsequently working as the City's representative. This policy is to ensure all analysis and review of traffic impacts is done in an independent and impartial fashion. Any consultant or services hired by the City of Burbank on behalf of a project applicant shall be paid for in full by the project applicant, plus an additional 15% administrative fee for review by City staff. There is an additional fee for rental of the City's Travel Demand Model. Please consult the City's adopted fee structure for further information on fees charged as part of the development process.

Any Transportation Study performed as part of the environmental review of a development application must follow the Transportation Study guidelines as described herein and shall be prepared under the guidance of, and sealed by, a Professional Engineer registered in the State of California to practice either Traffic or Civil Engineering. Traffic studies should be conducted in accordance with industry guidelines and best-practices. The City will work diligently to provide

a timely review, and traffic consultants must respond to the City's request for information and necessary revisions in a timely manner. Failure by the consultant to submit required background information, text and/or analysis changes, and mitigations in a timely manner will result in delay of the Transportation Study review process.

An administrative draft report shall be distributed to Community Development Department and Public Works Department for review and comment. During this review, the report will be reviewed for accuracy, completeness, and adequacy of assumptions made throughout the report. Mitigation measures recommended in the report and assumed impacts will also be reviewed. Should the report not meet the satisfaction of the City, the report will be returned with appropriate comments for further evaluation. All traffic impact studies must be approved by the Community Development Department prior to inclusion in any project environmental documents or presented at project hearings or community meetings.

The following City staff contacts should be consulted throughout the Transportation Study process. These individuals are responsible for ensuring timely review of traffic studies for their respective departments:

David Kriske, Assistant Community Development Director  
Transportation Division  
Community Development Department  
818.238.5250