SB 743 Implementation Guidelines for

City of Citrus Heights

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CITRUS HEIGHTS
CALIFORNIA

I. INTRODUCTION

This report presents recommendations for implementing Senate Bill (SB) 743 in the City of Citrus Heights.

Report Organization

This report is organized into the following chapters:

- *Chapter I (Introduction)* – describes background information on SB 743, relevant CEQA Guidelines, and a simple definition of Vehicle Miles Traveled (VMT).
- *Chapter II (Citrus Heights VMT Characteristics)* – describes the process undertaken to quantify the VMT of residents, workers, and visitors within the City.
- *Chapter III (Proposed VMT Thresholds of Significance for Land Use Projects)* – presents specific thresholds of significance the City may consider using when evaluating land use projects under CEQA including project types and locations that are presumed to cause less than significant impacts.
- *Chapter IV (Proposed VMT Thresholds of Significance for Transportation Projects)* – describes the process the City may consider taking when evaluating the VMT impacts associated with transportation projects.
- *Chapter V (Land Use Project Case Studies)* – presents a case study that demonstrate how the VMT impacts of land use projects (that do not fit neatly into an exempted area) may be evaluated under SB 743.
- *Chapter VI (Mitigation Measures and Plan Updates)* – discusses mitigation measure opportunities to offset the significance of significant land use or roadway project transportation impacts, and the need to update the significance criteria and VMT thresholds.

Background

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. These changes include elimination of *auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion* as a basis for determining significant impacts. The law directed the Governor's Office of Planning and Research (OPR) to update the CEQA Guidelines to include new criteria (e.g., metrics) for determining the significance of transportation impacts.

OPR selected VMT as the transportation impact metric, recommended its application statewide, and submitted updates to the CEQA Guidelines that were certified by the Natural Resources Agency in December 2018. The requirements of SB 743 became effective statewide on July 1, 2020.

To help aid lead agencies with SB 743 implementation, OPR produced the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). The *Technical Advisory* helps lead agencies think about the variety of implementation questions they face with respect to shifting to a VMT metric. The guidance is not a recipe for SB 743 implementation since lead agencies must still make their own specific decisions about methodology, thresholds, and mitigation.

OPR hosted a series of webinars in Spring 2020, in which they provided verbal interpretations and clarifications of the *Technical Advisory*. Fehr & Peers regularly attends these webinars and notes these staff interpretations such that their latest guidance is reflected in reports such as this.

Intent of SB 743

The following two legislative intent statements are contained in the SB 743 statute:

1) Ensure that the environmental impacts of traffic, such as noise, air pollution, and safety concerns, continue to be properly addressed and mitigated through the CEQA.

2) More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

These statements are important because they provide direction to OPR and to lead agencies. For OPR, the direction is largely about what the new metrics should achieve. For lead agencies, the direction is about expected changes in transportation analysis plus what factors to consider for significance thresholds.

SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e. the general plan), fee programs, or on-going network monitoring, but these metrics will not form a determination of significant impacts under CEQA. Cities or counties can still use vehicle LOS outside of the CEQA process if they determine it is an important part of their transportation analysis process. The most common applications will likely occur for jurisdictions wanting to use vehicle LOS to size roadways in their general plan or determine nexus relationships for their impact fee programs. Jurisdictions can also continue to condition projects to build transportation improvements through the entitlement process (i.e., conditions of approval) in a variety of ways, such as using general plan policy consistency findings.

Relevant CEQA Guidelines

This section presents the precise language (source: https://www.califaep.org/docs/2020_ceqa_book.pdf) contained in the most recent CEQA guidelines pertaining to this topic.

CEQA Section 15064.3 (Determining the Significance of Transportation Impacts)

(a) Purpose.

This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

(b) Criteria for Analyzing Transportation Impacts.

(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

Section 15064.3 defines VMT as "the amount and distance of automobile travel attributable to a project". It describes certain conditions (e.g., proximity to a transit stop) for land use projects that should be presumed to cause a less than significant transportation impact. It concludes that projects that decrease VMT compared to existing conditions should be presumed to have a less than significant transportation impact. Lastly, it establishes that agencies have discretion to choose the most appropriate methodology to evaluate a project's VMT provided that documentation and explanations are offered for methods and assumptions that were used in the estimation.

CEQA GUIDELINES SECTION 15064.7 (THRESHOLDS OF SIGNIFICANCE)

This section encourages public agencies to develop and publish thresholds of significance to be used in determining the significance of environmental effects.

> (a) A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.
>
> (b) Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence. Lead agencies may also use thresholds on a case-by-case basis as provided in Section 15064(b)(2).

Technical Advisory on Evaluating Transportation Impacts in CEQA

The 26-page *Technical Advisory* provides guidance for how professional planners and CEQA practitioners should approach SB 743 implementation including recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

Page 1 of the document states the following:

- The *Technical Advisory* does not alter lead agency discretion in preparing environmental documents subject to CEQA.
- The *Technical Advisory* should not be construed as legal advice.
- OPR is not enforcing or attempting to enforce any part of the recommendations.

Given the length, technical depth, and wide range of topics addressed in the *Technical Advisory*, it is not summarized here. However, it is cited frequently in the following chapters.

VMT Basics

This subsection presents a high level overview of what VMT is and what it is not.

1. By definition, one (1) VMT is defined as one mile driven by a vehicle (regardless of the number of occupants).
2. VMT is commonly expressed as a daily value (in miles).
3. Consistent with the *Technical Advisory,* VMT estimates are not truncated at political boundaries.
4. While VMT is a useful metric for quantifying the efficiency of a given mix of land uses and roadway network enhancements, it is not a direct measure of congestion or delay.

The following link provides a brief instructional video that defines typical trip purposes and how they translate into VMT: https://youtu.be/UE4TJItVdJ8.

II. CITRUS HEIGHTS VMT CHARACTERISTICS

This chapter describes the data collection process, analysis, and findings of an effort focused on quantifying the VMT of residents, workers, and visitors within Citrus Heights.

Rationale for Technical Approach

At the outset of this project, Fehr & Peers and City staff met to discuss the benefits and drawbacks of two distinct options for analyzing VMT within the City. Since the City does not have its own travel demand model, the two options are to rely on SACOG's model[1] or utilize big data.

Reliance on SACOG's model would mean several things including a choice by the City to attach itself to the modeling framework, which has both benefits and drawbacks. A major benefit would be consistency with SACOG modeling approaches. But a major drawback is the model itself[2]. Selection of the model would mean that the City would be anticipating consultants will apply the model on projects within the city, which would increase the cost and schedules to complete studies and limit the number of consultants who could prepare such studies given the model's complexity.

What is "Big Data"?

"Big Data" is used in a variety of disciplines such as retail/market studies, transportation, and economics. It uses anonymous location records from smart phones and in-vehicle navigation devices to understand travel behaviors, patterns, and user types.

Alternatively, reliance on big data (described to the right and in detail below) would link the City to this form of data/analysis and its lesser-known results. Although big data has been used for countless study purposes throughout the nation and beyond for over a decade, its use on this specific type of project has been relatively limited. However, the upside of this approach is

[1] The Sacramento Area Council of Governments (SACOGs) model is known as SACSIM, which is an activity-based model that estimates travel behavior throughout the entire region. It was used for SACOG's recently adopted 2040 MTP/SCS. The model is very sophisticated, requiring analysts to spend dozens of hours in training to understand how it works. The model is also quite time-intensive, requiring at least two days of staff time to make a simple land use change and then requiring another two days for the model to run on a high-speed computer. Since the model covers the entire SACOG six-county region, it does not contain local level granularity. Within Citrus Heights, it consists of 27 traffic analysis zones (TAZs), whereas a locally-calibrated model would have ten times as many zones.

[2] While the model has been proven to generate reasonable results under many circumstances, there are also cases where its VMT predictions do not match expectations or other data sources (e.g., Census data, California Household Travel Survey). More on these comparisons can be found at: https://www.streetlightdata.com/sb-743-vmt-solutions/

considerable: a very large dataset, greater geographic disaggregation within the City, and less time and costs to analyze future projects.

Upon weighing the pros and cons of each approach, the City and Fehr & Peers jointly decided that the big data option would be the most appropriate approach for the City. The chosen data source was Streetlight Data, Inc, whose data collection and processing are described in the following section.

Overview of StreetLight Data

StreetLight Data combines Location-Based Services (LBS) data with complex machine learning algorithms to understand travel behavior across the country[3]. However, for SB 743 purposes, a much more straightforward dataset is needed, which can be summarized as follows:

- Average VMT per device for Residents, Workers, and Visitors, disaggregated to the Census Block Group (CBG) level within the City of Citrus Heights.

Frequently Asked Questions (FAQs)

- ***What time periods do the data cover***? For the Resident and Worker datasets, the time period covered is all Tuesdays, Wednesdays, and Thursdays of 2019. Reported results are the average of all days. For the Visitor dataset, reported results are based on the average of monthly averages for all 12 months in 2019.
- ***How is/was the start/end location of a trip determined***? The trip starts (based on location records) once a device is traveling at a reasonable speed and ends once the device has not moved 5 meters within 5 minutes.
- ***How is the length of a trip determined***? Trip length is calculated based on LBS data from GPS satellites, with the trip length based on the most likely route taken.
- ***How is a "Resident" device determined***? Within a given CBG, a device is deemed to be associated with a resident if it is in the same location during most overnight hours.

[3] StreetLight Data processes approximately 40 billion anonymized location records per month from smart phones and navigation devices in connected cars and trucks and uses machine learning to transform these records into aggregated and normalized route-based travel patterns. Data is validated using permanent traffic counters and embedded sensors, and normalized with multiple data sources, including parcel data, digital road network data, and census information. This data is used in many different disciplines ranging from retail, economics, transportation, etc. In 2019-2020, Fehr & Peers used Streetlight Data to analyze travel behavior at and surrounding Sunrise Mall as part of the Sunrise Tomorrow Specific Plan.

- ***How is a "Worker" device determined***? Within a given CBG, a device is deemed to be associated with a worker if it is in the same location during most of the device's reported weekday hours.[4]
- ***How is a "Visitor" device determined***? A device that is recorded as traveling to a given CBG that is otherwise not classified as either a Resident or Worker device is then classified as a Visitor device.
- ***What is a Census Block Group and how many are in Citrus Heights***? A Census Block Group is one of several forms of geographic classification used by the US Census.[5] Citrus Heights has 61 CBGs (see **Figure 1**). Within the City, they average about 150 acres in size and contain about 1,400 persons.
- ***What type(s) of VMT are counted?*** Resident VMT considers all trips that have a trip origin or destination at a residence. Worker VMT considers strictly those trips that travel between the worksite and home (i.e., a stop at the gym or gas station on the way home would result in that trip being excluded). Visitor VMT includes all trips that have a trip origin or destination within the CBG.
- ***How is it determined whether the VMT is occurring in a vehicle versus another mode of travel (e.g., bus or biking***)? Streetlight Data has internal procedures built into their calculation processes to flag these different modes of travel (e.g., slow walking trips, systematic starts/stops associated with bus/rail vehicles). Because Citrus Heights does not have the type of diverse transit system found in a major city, this is not an issue for VMT in the city.
- ***How are trips that start/end within the same CBG treated?*** These trips are included, though they are typically quite short and represent a small percentage of overall trip-making.
- ***Are there any known technical shortcomings of the data source?*** Two potential areas of concerns were flagged. One pertains to a trip being double-counted if multiple passengers have apps in operation. The second pertains to household composition, specifically the effects of lesser versus greater ratios of devices per household member. Holding all else constant, a family of four with two driving age children, versus a family of four with no driving age children will have different VMT per device characteristics. However, as noted later, the VMT metrics are comparative in nature; thus, these issues are present in both the local data as well as the SACOG region data to which the local data is compared. After discussing this with Streetlight Data, it was concluded that no adjustments to the data were warranted to address these items given the comparative nature of the evaluation.

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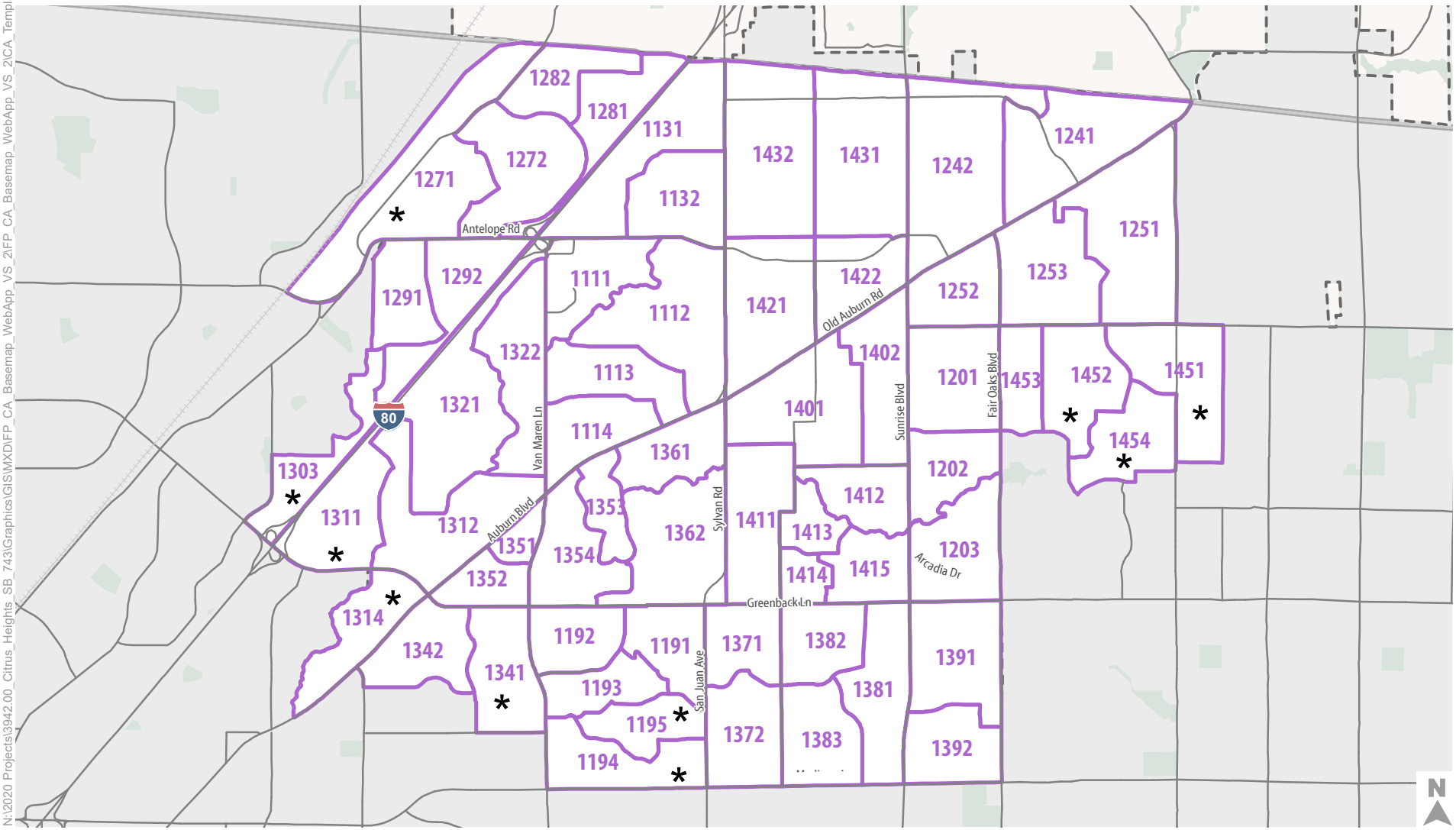
4 Streetlight Data, Inc. employed a process whereby persons that typically work at a worksite most weekdays for at least four to six hours are included in the dataset. Special care was taken to not accidentally classify students in this dataset (by removing middle and high schools from the data acquisition process).

5 Each CBG has an 11-digit code associated with it. Within Citrus Heights, the first seven digits of all CBGs are identical, and thus all CBG references moving forward are made only to the last four digits which vary.



* = CBG is comprised of land located both within Citrus Heights and unincorporated Sacramento County or Roseville. Maps that follow show only portions of these CBGs located within the City limits

County Boundaries
City Boundary
MajorRoads

Figure 1

Census Block Groups

- ***How do we know that the Streetlight Data is accurate***? This is a very important question, and one whose answer cannot be summarized in a single paragraph. The next section presents the Streetlight Data database and evaluates its summarized VMT estimates against various local data sources for reasonableness.

Citrus Heights VMT Characteristics

Appendix A contains the Streetlight dataset. **Table 1** compares the Citywide averages (weighted by number of residents and workers in each CBG) against SACOG regional averages.

Table 1: Summarized VMT Results for Citrus Heights

Traveler Type	Weighted Average VMT (Citrus Heights) [1]	SACOG Region Average
Residents	17.4 miles per day	20.1 miles per day
Workers	12.8 miles per day	18.1 miles per day
Visitors	16 miles per day (relational) [2]	20 miles per trip (relational) [2]

Note:

[1] Weighted average is among all CBGs based on relative number of residents and workers within each CBG.

[2] Visitors do not travel to a given CBG every day. Thus, a calculation of a visitor device VMT would reflect their frequency of visits, which is small when represented on an average daily basis. To provide a more intuitive statistic, the daily VMT per device was factored up such that the average SACOG region visitor made two daily trips (one inbound and one outbound). The results for each Citrus Heights CBG were then calculated by multiplying the average trip length to/from the CBG by the factored visitation frequency of the specific CBG.

The following evaluation was performed to assess the reasonableness of the SACOG region results against other published data sources. If the SACOG region results are reasonable, then it follows that the VMT data for the City would also be reasonable since it is based on the same data source and calculation procedures. Following are the results of this evaluation:

<u>Resident VMT Considerations</u>

1. The *Sacramento Region Transportation Study Analysis Report* (RSG, 2018) surveyed over 4,000 households in Spring 2018 and found that the SACOG region averaged 23.9 miles of vehicle travel per day per person (calculated based on the total household size). The Streetlight Data follows a similar methodology because vehicle trips made on behalf of persons who cannot drive are accounted for in another person's (e.g., parent) device. The following conclusions are drawn based on this data:
    - Results in Table 1 represent averaged conditions on Tuesdays, Wednesdays, and Thursdays throughout 2019 whereas the SACOG survey reflects only conditions with school in session.

- The data in Table 1 only include home-based trips, while the SACOG survey also considers non-home-based (e.g., from the office to the gym) travel, which adds more VMT.
  - Based on these considerations (i.e., Streetlight Data excludes non-home-based travel, and dampens the VMT effects of school-related travel by considering months in which school is not in session), **it is reasonable for Streetlight's VMT per Resident estimate to be 16 percent less than the SACOG result**.

Worker VMT Considerations

2. The California Household Travel Survey (CHTS) contained results that may be used to compare Worker VMT estimates. That survey, which was performed in 2012, found that home-based-work travel in the SACOG region generated an average of 13.2 VMT per worker, which is 27 percent less than Streetlight's SACOG region average of 18.1 VMT. The CHTS estimate represented conditions in 2012 near the end of the Great Recession. Travel behaviors have changed considerably since 2012, as evidenced by the following:
   - Longer distance travel for work has become more common. The 2018 SACOG survey indicated that 11 percent of Yolo County and 6 percent of El Dorado County work trips were destined to the Bay Area, a considerable distance from Sacramento. [6]
   - Some short/medium distance work trips likely shifted to a Transportation Network Company (TNC) such as Uber or Lyft, which were not present in 2012. This effectively reduces the weighting effect of shorter distance trips, thereby causing average trip lengths and VMT to increase.
     - **The above factors explain why it is reasonable for Streetlight's SACOG region average of about 18 miles per day of travel per worker to be marginally greater than the 2012 CHTS estimate for the region.**

Visitor VMT Considerations

3. The Streetlight Data revealed an average SACOG region trip length of 10 miles per visitor trip. This is somewhat greater than the 2012 CHTS estimate of about 7 miles per trip[7]. This may be explained by the relatively infrequent, but much longer distance trips to a variety of destinations within the region such as gambling venues, cemeteries, ski resorts, golf courses, wine tasting, and various recreational destinations (e.g., lakes, campgrounds, etc.). Because the SACOG survey only posed questions to

[6] It takes only a small percentage of 100+ mile commute trips from the SACOG region to the Bay Area to meaningfully increase the average VMT per worker. This trend is very common when reviewing home-based work trip length datasets – the average trip length is often considerably greater than the median due to this effect.

[7] Based on the average of home-based-other and non-home-based trips from the 2012 CHTS for the SACOG region.

SACOG residents, it did not take into consideration a visitor who traveled from outside the region for these recreational or business purposes (which are reflected in the Streetlight Data results).

- **Thus, it is expected that the Streetlight Data average Visitor VMT estimate in Table 1 would be somewhat greater than the CHTS estimate for the above reasons.**

Readers interested in knowing more about Streetlight Data and Fehr & Peers' local validation of it can follow the link below to find a white paper on the topic: https://learn.streetlightdata.com/sb-743-metric-methodology-validation.

Table 2 illustrates the range CBG-specific metrics for each traveler type. Appendix A shows specific VMT values for all CBGs in Citrus Heights.

Table 2: Summarized VMT Results for Citrus Heights

Metric	Resident VMT	Worker VMT	Visitor VMT
Minimum Value	12.3 [1]	6.9 [3]	5.9 [4]
Maximum Value	23.3 [2]	24.8 [3]	28.2 [4]
Median Value	17.0	11.4	10.5
Average Value	17.4	12.8	16.0
SACOG Region Average	20.1	18.1	20.0
Percentage of CBGs less than SACOG Average	87%	92%	97%
Percentage of CBGs at 85% or less of SACOG Average	52%	74%	87%

Note:
[1] For this CBG (1372), 39% of households make $35,000 or less per year, average household size is 2.11, and average auto ownership is 1.71.
[2] For this CBG (1322), 17% of households make $35,000 or less per year, average household size is 3.28, and average auto ownership is 2.17.
[3] Both CBGs consists of less than 20 employees according to LEHD. Results appear to be outliers based on small sample size.
[4] The minimum value CBG is located in the southwest corner of Greenback Lane/San Juan Avenue and features a number of local-serving stores. In contrast, the maximum value CBG is comprised of a cemetery, which draws visitors from considerable distances.

III. PROPOSED VMT THRESHOLDS OF SIGNIFICANCE FOR LAND USE PROJECTS

This chapter presents the thresholds of significance pertaining to VMT that Citrus Heights will apply when analyzing the transportation impacts of land use projects that are subject to CEQA. Projects that are exempt from CEQA or require only ministerial actions by staff are not subject to the evaluations described below. SB 743 does not preclude analyses of a land use project's potential impacts to bicycle/pedestrian facilities, transit, construction, emergency access, nonstandard design features, etc. within CEQA.

Efficiency Threshold

Page 10 of the *Technical Advisory* states that OPR recommends that a per capita or per employee VMT that is 15 percent below that of existing development may be a reasonable threshold. Lacking any other information that would suggest a different threshold value should be applied, the City of Citrus Heights has concluded that this threshold should be applied for land use projects in the City.

Project Screening

The *Technical Advisory* offers guidance regarding land use projects that are presumed to be less-than-significant. Five such project types are presented below.

1. *Small Projects* – The *Technical Advisory* concludes that, absent any information to the contrary, projects that generate 110 trips per day or less may be assumed to cause a less-than-significant transportation impact.
   Evaluation: According to Table 2, the average VMT per resident in Citrus Heights is 17.4 miles per day. According to the US Census[8], the City has an average household size of 2.54 persons, which corresponds to 44.2 VMT per household or dwelling unit. Data from the Streetlight database shows that the average home-based trip length in Citrus Heights is 8.8 miles. By dividing VMT by average trip length, an average trip generation rate of 5.0 daily trips per dwelling unit is calculated.

   A set of mathematical calculations were performed based on 67 percent of all units in the City being single-family, and the data from ITE's *Trip Generation Manual* indicating that multi-family units, on average, generate 42 percent fewer trips than single-family units. These calculations result in average trip rates of 5.80 daily trips for single-family units and 3.37 daily trips per multi-

[8] Accessed (on December 30, 2020) at: https://www.census.gov/quickfacts/fact/table/citrusheightscitycalifornia/PST045219

family units. Thus, the *Technical Advisory* small project threshold of 110 daily trips would correspond to 19 single-family dwelling units or 32 multi-family dwelling units in Citrus Heights[9].

The *Technical Advisory* references 10,000 square feet of office space as generating no more than 110 daily trips, and thus concludes that VMT impacts for office buildings up to this size would generally be presumed to be less than significant. Table 2 indicates that the average VMT per worker in Citrus Heights is 29.3 percent less than the SACOG region average. Based on the reasonable premise that the OPR guidance was developed for a regional/statewide scale, the unique, lower travel characteristics of workers in Citrus Heights suggests a more appropriate threshold for office space in Citrus Heights would be 14,000 square feet[10].

2. *Projects near Transit Stations* – projects located within ½ mile of an "existing major transit stop" or an "existing stop along a high quality transit corridor"[11] would have a less-than-significant impact on VMT.

   Evaluation: **Figure 2** shows existing transit service and specific corridors that qualify as high-quality transit corridors. In later figures, a one-mile bandwidth along each high-quality transit corridor is shown so as to illustrate the geographic extent of the ½-mile maximum distance from each street centerline. Proposed land uses within these areas would be presumed to cause less-than-significant VMT impacts according to the *Technical Advisory* provided certain project design conditions are met. Citrus Heights staff has concluded that some, but not all of the project or site-specific guidance on Page 14 of the *Technical Advisory* is applicable to Citrus Heights given the infill nature of most new projects in the city and the small size of most remainder parcels (i.e., achieving a 0.75 FAR is unrealistic on most parcels and specific assumptions for those parcels may not have been made or known as part of the MTP/SCS). Thus, the City will require proposed projects being considered for an exemption of VMT impacts under this category to consist of transit supportive land uses, provide no more than 20 percent above the city parking code requirement, and to not replace affordable housing.

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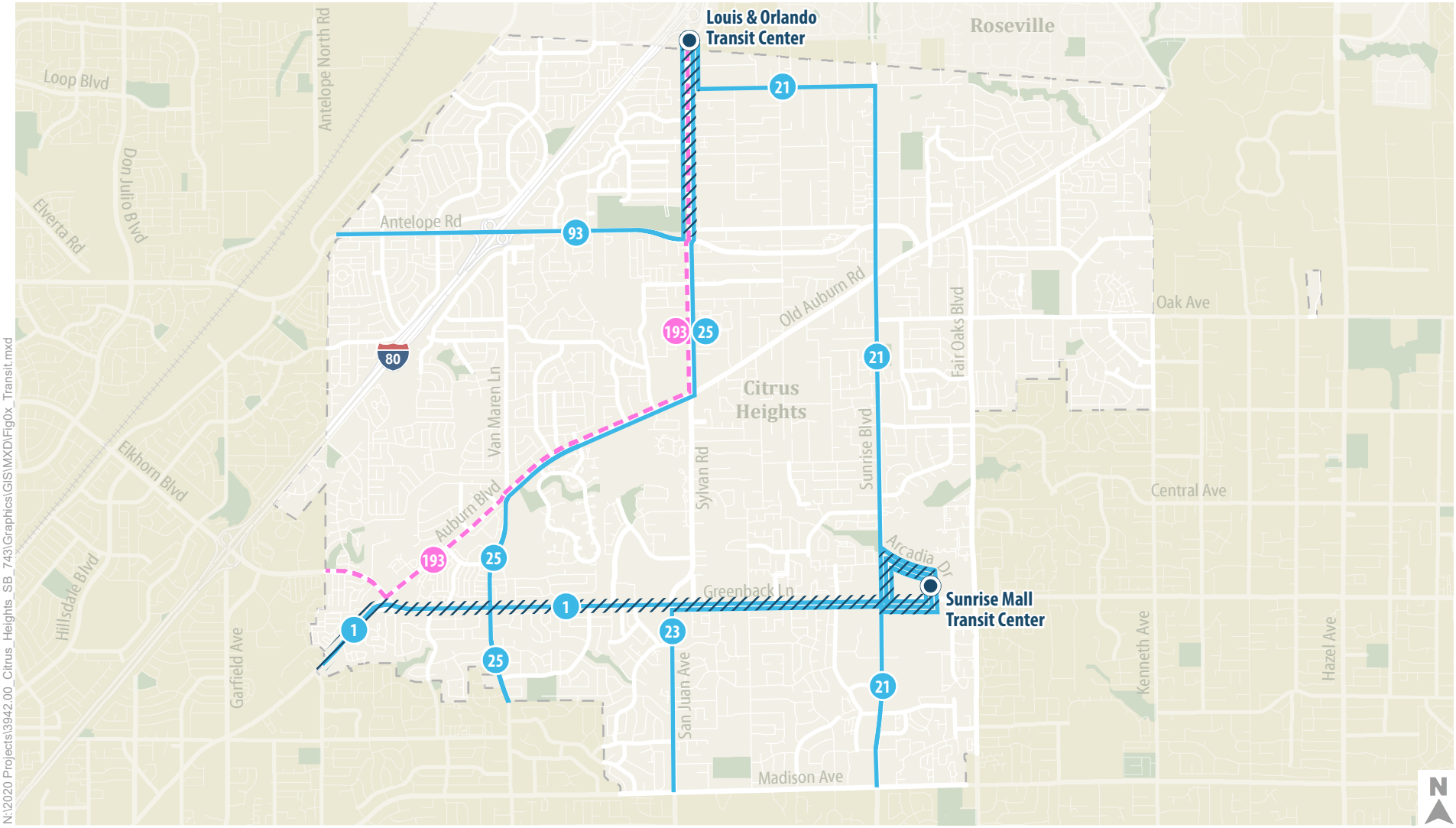
9 Calculated as: 110 daily trips / 5.80 Single-Family trips per unit = 18.96 (or 19 units).

10 Calculated as follows: 10,000 sq. ft. office x (1 / (1 - 29.3%) = 14,144 sq. ft. of office

11 According to Public Resources Code 21155, a high-quality transit corridor means fixed route bus service with service intervals of 15 minutes or less during peak commute hours (regardless of whether service is provided by a single route or multiple routes).



1 Local Bus Service

193 Peak Hour Bus Service

High Quality Transit Corridor

Note: Based on current operating schedules of Sac RT, which were restored in Fall 2020 to pre-COVID levels.

Figure 2

Existing Transit Service

3. *Affordable Residential Development* – projects consisting of a high percentage of affordable housing may be assumed to cause a less-than-significant transportation impact on VMT because they may improve jobs-housing balance and/or otherwise generate less VMT than market-based units.
   Evaluation: According to the SACOG 2018 household survey[12], person trip rates were 18 percent higher among individuals in households making over $50,000 per year versus less than $50,000 per year. Additionally, as noted in the *Technical Advisory*, affordable housing is typically situated in close proximity to jobs, thereby reducing commute distances.

4. *Redevelopment Projects* – If a proposed redevelopment project leads to a net overall decrease in VMT (when compared against the VMT of the existing land uses), the project would lead to a less-than-significant transportation impact.
   Evaluation: This is a generally reasonable conclusion. However, in most instances, redevelopment occurs on sites that may not be operating at optimal levels (e.g., an underperforming mall or strip retail center). Hence, a question that must be answered pertains to whether the comparison should be based on the existing VMT of the site or VMT of the site if operating at full capacity. When the City receives an application to redevelop a large existing property, a detailed evaluation of this topic should occur.[13,14]

5. *Local Serving Retail* – Trip lengths may be shortened and VMT reduced by adding "local-serving" retail opportunities that improve retail destination proximity. Page 17 of the *Technical Advisory* generally describes retail development including stores less than 50,000 square feet as locally-serving. In May 2020, OPR staff indicated during online webinars that any retail building that is 50,000 square feet or less may be considered locally-serving.
   Evaluation: Many agencies have followed this guidance, though it is noted that a 50,000 square foot retail center would typically generate about 5,000 VMT, which is more than five times that allowed under the Small Projects definition above.

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12 Found at: https://www.sacog.org/post/2018-sacog-regional-household-travel-survey

13 In the case of the proposed redevelopment of Sunrise Mall (i.e., Sunrise Tomorrow Specific Plan), its location in a VMT-efficient CBG, proximity to a high-quality transit corridor, and density led to a conclusion of a less-than-significant VMT impact without needing to broach the topic of being a redevelopment project.

14 For sites that have existing uses that would be redeveloped, the VMT comparison would consist of two steps. First, the daily trip generation of existing and proposed uses would be calculated based on ITE or other trip rates. Second, the VMT of the existing and proposed uses would be calculated by multiplying daily trips (by trip purpose type) by average trip length (using sources such as Streetlight data, CHTS data, or SACOG household survey).

Proposed VMT Thresholds of Significance – Residential Land Uses

The City of Citrus Heights will apply the following thresholds of significance when analyzing the VMT transportation impacts of residential land use projects under CEQA. The project would cause a significant impact if it would:

- Not qualify under one of the applicable exemption categories (small projects, projects near high-quality transit corridors, affordable housing, or redevelopment projects), and its VMT exceeded 85 percent of the regional per capita average. If the above conditions are met, the project's VMT impact could still be found to be less-than-significant if it did not cause the total VMT generated by the City of Citrus Heights to increase[15].

Due to its built-out nature, proposed projects in Citrus Heights are located on infill sites that will always be much smaller when compared to the CBG to which it belongs. The City, like many other jurisdictions, may use a "blending/adjacency evaluation" that considers the relative placement of a project within a given CBG and the travel characteristics of adjacent CBGs containing similar land uses. Refer to Chapter V for a case study example of how this process works.

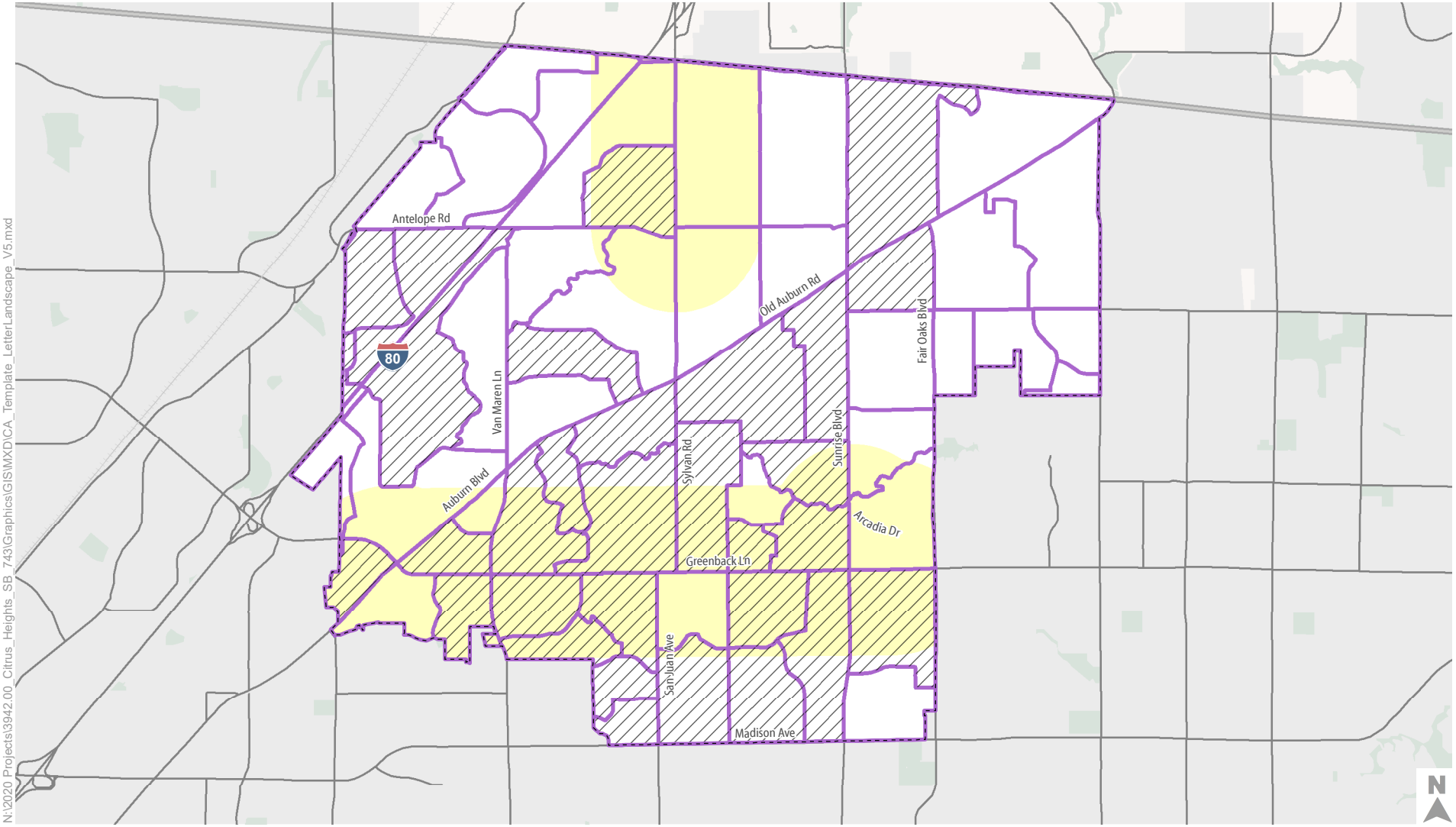
Figure 3 is a screening map of those CBGs that have average home-based VMT per resident values that are 85 percent or less of the SACOG regional average. Also overlaid on this figure are the City's existing high-quality transit corridors. Based on this figure, it can be inferred that 36 percent of CBGs in Citrus Heights have portions or all its block group areas that would not meet either the proximity to high-quality transit or screening map exemptions. However, 64 percent of all CBGs would be exempted.

The end of this chapter includes a checklist showing the potential exemptions for different land use projects.

Proposed VMT Thresholds of Significance – Employment Uses

The City of Citrus Heights will apply the following thresholds of significance when analyzing the VMT transportation impacts of employment-based land use projects under CEQA. This includes office buildings, medical-office, research-and-development, and similar uses whose purpose is primarily employment-related (versus a service business).

[15] The determination of whether the proposed project would cause a net increase/decrease in citywide VMT may be based on output from either SACOG's SACSIM travel demand model or its prior SACMET model. However, such analyses are time-consuming and complicated to perform. Thus, such investigations should only be conducted when there is reason to believe a net reduction in VMT may occur.



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Census Block Groups

Residential HBx VMT per device per day is 85% or less of SACOG average 20.1

High Quality Transit Corridor (1/2 mile buffer)

Citrus Heights City Limits

1. This figure serves as a screening map, which should be used with appropriate professional engineering judgment. Refer to report text for details.
2. Data (provided by Streetlight Data, Inc.) represents averaged travel conditions for all Tuesdays, Wednesdays, and Thursdays for the entirety of 2019.

Figure 3

Screening Map - Average Daily Home Based VMT per Resident

The project would cause a significant impact if it would:

- Not qualify under one of the applicable exemption categories (small projects, projects near high-quality transit corridors, or redevelopment projects), and its VMT exceeded 85 percent of the regional per employee average. If the above conditions are met, the project's VMT impact could still be found to be less-than-significant if it did not cause the total VMT generated by the City of Citrus Heights to increase.

Figure 4 is a screening map of those CBGs that have average home-to-work (and return) VMT per employee values that are 85 percent or less of the SACOG regional average. Also overlaid on this figure are the City's existing high-quality transit corridors. Based on this figure, it can be inferred that 13 percent of the CBGs in Citrus Heights have portions or all its block group area that would not meet either the proximity to high-quality transit or screening map exemptions. However, 87 percent of all CBGs would be exempted.

Proposed VMT Thresholds of Significance – Retail/Entertainment Uses

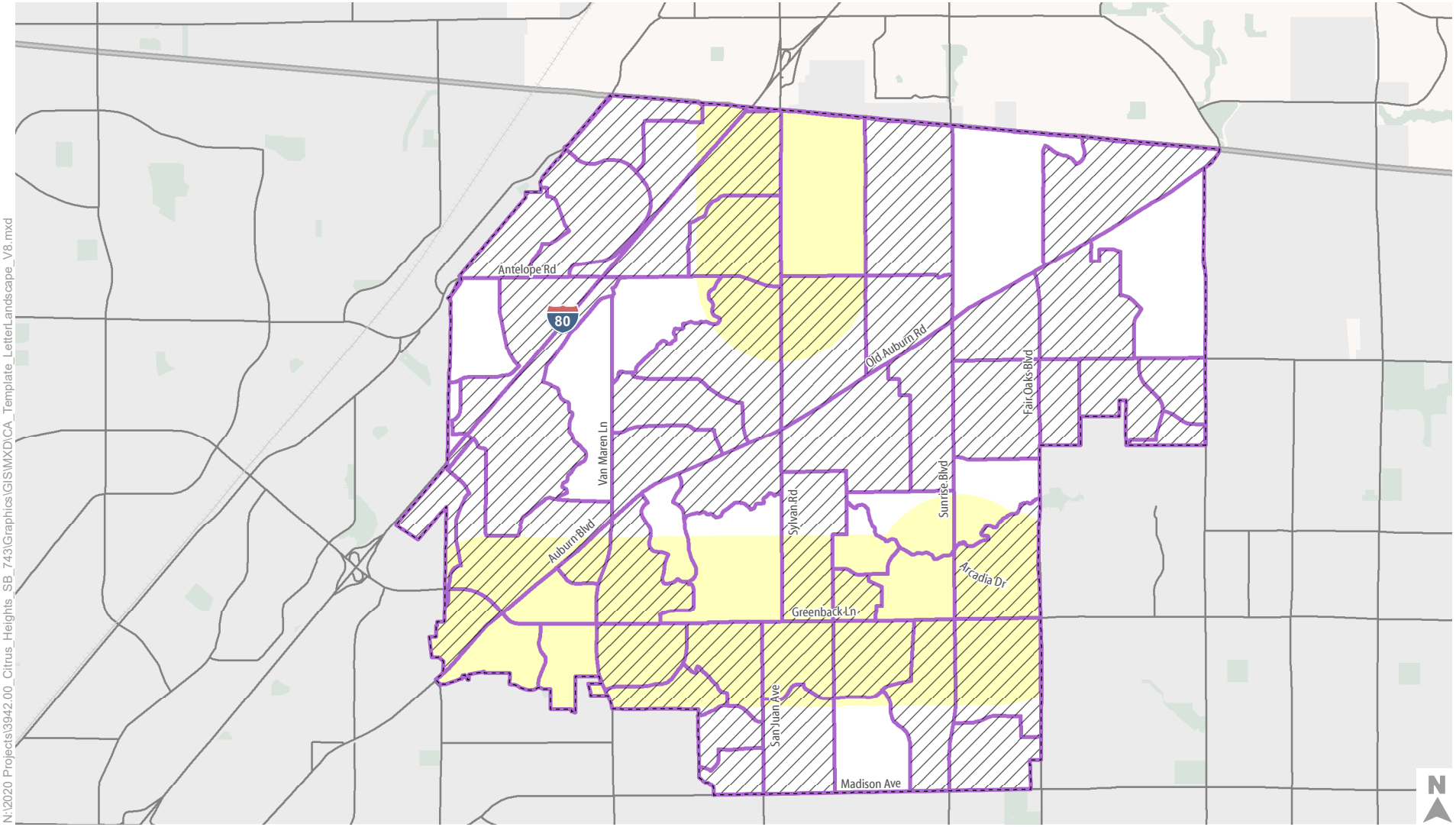
The City of Citrus Heights will apply the following thresholds of significance when analyzing the VMT transportation impacts of retail and entertainment land use projects under CEQA. The project would cause a significant impact if it would:

- Not qualify under one of the applicable exemption categories (small projects, projects near high-quality transit corridors, redevelopment projects, or local serving retail), and its VMT exceeded 85 percent of the regional per visitor average. If the above conditions are met, the project's VMT impact could still be found to be less-than-significant if it did not cause the total VMT generated by the City of Citrus Heights to increase.

Figure 5 is a screening map of those CBGs that have average VMT per visitor values that are 85 percent or less of the SACOG regional average. Also overlaid on this figure are the City's existing high-quality transit corridors. Based on this figure, it can be inferred that 21 percent of the CBGs in Citrus Heights have portions or all its block group area that would not meet either the proximity to high-quality transit or screening map exemptions. However, 79 percent of all CBGs would be exempted.

Proposed VMT Thresholds of Significance – Atypical and Mixed-Use Projects

Special consideration will be necessary to analyze VMT impacts for land uses that do not fit into any of the above categories. Common examples are hotels, medical centers, wineries, churches, schools/colleges, etc. These uses should be analyzed on a case-by-case basis using available information and applying the general intent of the *Technical Advisory*.



Census Block Groups

High Quality Transit Corridor (1/2 mile buffer)

Citrus Heights City Limits

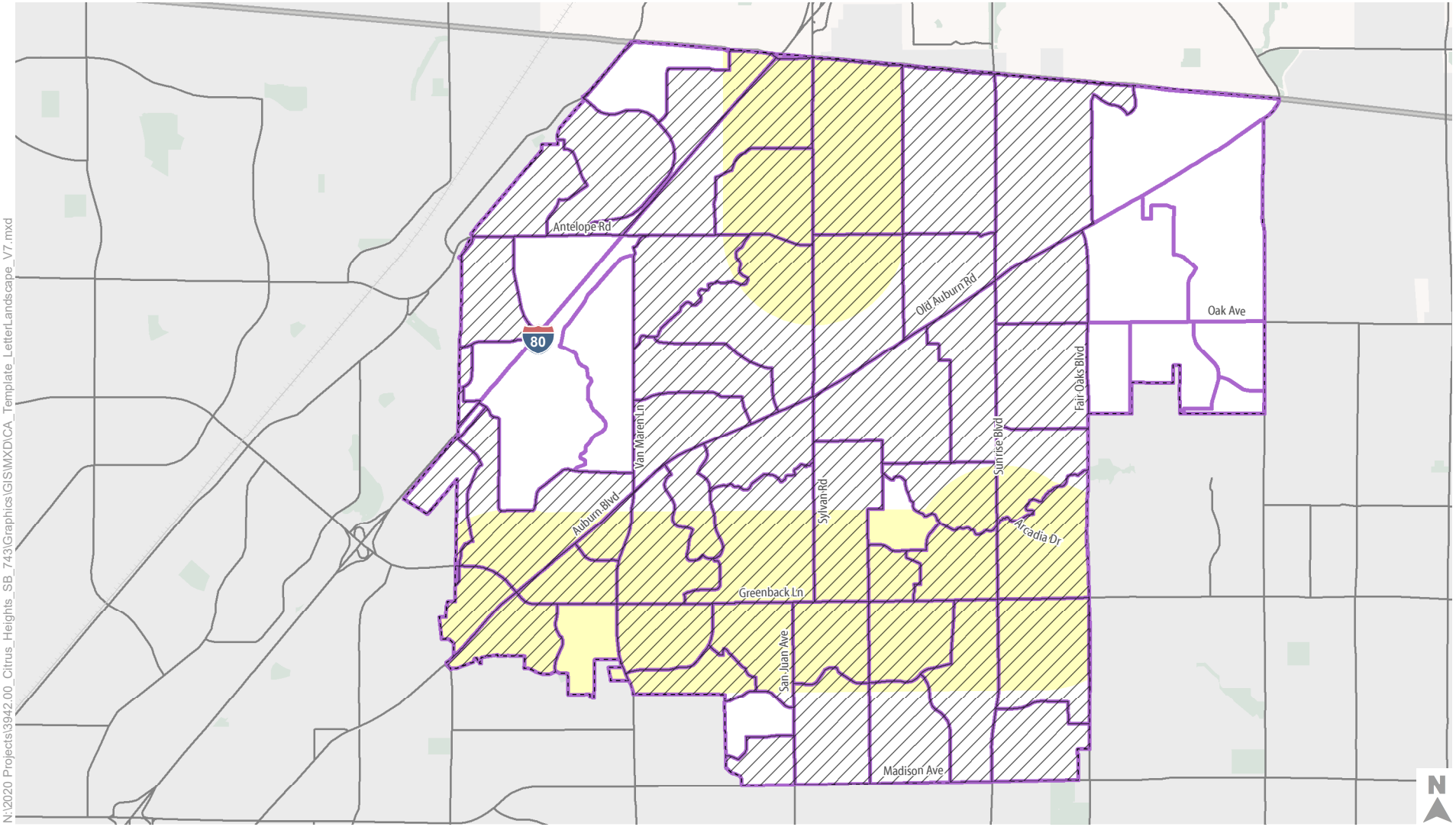
Average Daily Employee HBW VMT is 85% or less of SACOG region average 18.1

HBW = Home-Based Work trip purpose

1. This figure serves as a screening map, which should be used with appropriate professional engineering judgment. Refer to report text for details.
2. Data (provided by Streetlight Data, Inc.) represents averaged travel conditions for all Tuesdays, Wednesdays, and Thursdays for the entirety of 2019.

Figure 4

Screening Map - Average Daily Home-to-Work VMT per Employee



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Census Block Groups

High Quality Transit Corridor (1/2 mile buffer)

Citrus Heights City Limits

Average Daily Visitor VMT is 85% or less of SACOG region average

1. This figure shows the average daily VMT on days in which a visitor travels to a given block group. It considers the number of times per day that the visitor travels to/from the site and the average length of the trip.
2. Data (provided by Streetlight Data, Inc.) represents averaged travel conditions on all days (including weekdays and weekends) of 2019.

Figure 5

Average Daily VMT per Visitor

Additionally, projects that feature a mix of complementary land uses on-site should be analyzed using a technical approach geared toward the specifics of the project. The *Technical Advisory* describes two possible approaches: (1) analyze (considering internal trips) and determine significant impacts of each project component separately, or (2) consider significant impacts based on the project's dominant land use.

Checklist for VMT Thresholds of Significance for Land Use Projects [1]

Exemptions (i.e., VMT impacts presumed less-than-significant)

- *Small Projects*: up to 19 single-family units, 32 multi-family units, or 14,000 square feet of office
- *Projects near High-Quality Transit*[2]: Situated within cross-hatched areas of Figures 3-5.
- *Affordable Housing*
- *Redevelopment Projects*: project results in a net decrease in VMT.
- *Local-Serving Retail*: Projects that consist of 50,000 square feet of retail space or less.

Project Screening

- Projects that are situated in "low VMT generating" census block groups (see Figures 3-5) are presumed less-than-significant.

Other Considerations

- Use of "Blending/Adjacency" evaluations for certain projects (see Chapter V for details).
- Projects that result in a net decrease in overall VMT.

1: Applies only to projects that are subject to CEQA.

2: Subject to being transit supportive, providing parking that is no more than 20% over the City code requirement, and not removing affordable housing.

IV. PROPOSED VMT THRESHOLDS OF SIGNIFICANCE FOR TRANSPORTATION PROJECTS

This chapter provides an introductory discussion of how transportation projects should be evaluated under CEQA. Since this is a complex and evolving topic, only a high-level overview is provided at this point. The majority of planned roadway improvement projects in Citrus Heights take the form of Complete Streets and bicycle/pedestrian/transit facility upgrades. Few, if any, of the projects are capacity-inducing. Therefore, much of the material below may not be relevant to City transportation projects.

Technical Advisory Guidance on VMT Impacts from Transportation Projects

Pages 19- 28 of the Technical Advisory discuss a number of aspects of this topic. Following are some of the key recommendations from it:

1. *The "induced vehicle travel" caused by certain transportation projects must be quantified*. Projects that would likely lead to a "measurable and substantial" increase in vehicle travel (i.e., VMT) generally include: addition of through lanes on existing or new highways, including general purposes lanes, carpool lanes, auxiliary lanes, or lanes through grade-separated interchanges.
2. *A variety of transportation projects would not be expected to induce more vehicle travel*. The following page lists these project types, though it is noted that evidence is not provided to support that conclusion of no net VMT.
3. *A generally accepted interpretation of the Technical Advisory is that a transportation project that causes a net increase in VMT would be considered to have a significant impact*. Although a specific significance threshold is not provided in the *Technical Advisory*, it states on multiple occasions that transportation projects that do not generate additional VMT are presumed to have less-than-significant impacts. Part 2b of Section 15064.3 of the CEQA Guidelines (Determining the Significance of Transportation Impacts) states that "Transportation projects that reduce, or have no impact on VMT should be presumed to cause a less than significant transportation impact."
4. *VMT attributable to a project should represent the difference in VMT with and without the project across the full area in which driving patterns are expected to change.* VMT should be not truncated at model or jurisdictional boundaries.

Proposed VMT Threshold of Significance – Transportation Projects

The City of Citrus Heights will apply the following threshold of significance when analyzing the VMT transportation impacts of transportation projects under CEQA.

- A transportation project would cause a significant transportation impact if it would lead to induced travel and increased VMT.

Below is the list of projects on Page 21 of the *Technical Advisory* that are presumed to not cause a significant transportation impact.

- Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Conversion of existing general purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes
- Removal or relocation of off-street or on-street parking spaces
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs)
- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non-motorized travel
- Installation of publicly available alternative fuel/charging infrastructure
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor

V. LAND USE PROJECT CASE STUDIES

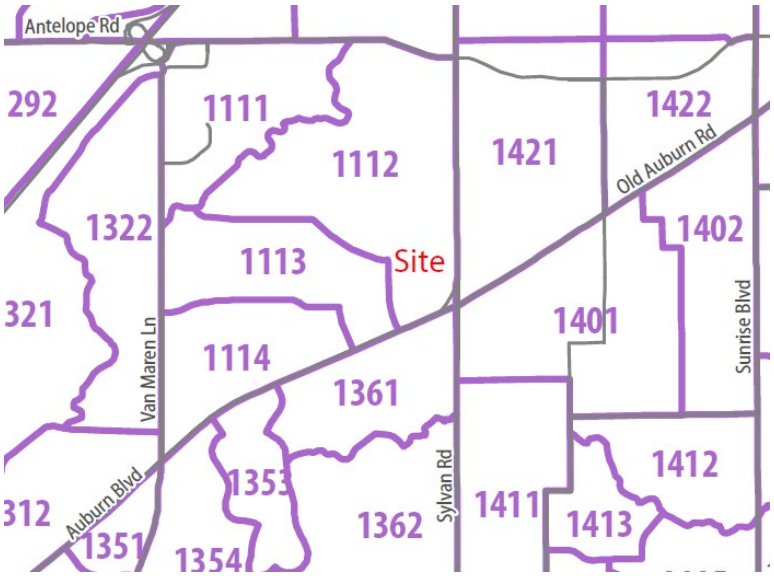
This chapter presents a typical case study that the City could expect. This example purposefully is not in a CBG that is exempted based on efficiency or high-quality transit proximity.

Case Study: Residential at Sylvan Corners

The area near the Auburn Boulevard/Old Auburn Road/Sylvan Road intersection is known as Sylvan Corners. This case study assumes residential development in the undeveloped northwest quadrant of the intersection. Existing land uses at Sylvan Corners include various retail/restaurant uses, and limited office, industrial, churches, and other supporting uses. The Stock Ranch Retail Center (featuring Costco and Sam's Club are located ½ mile to the west on Auburn Boulevard).

The case study is situated in the most southerly portion of CBG 1112 (see "Site" below in red), which is neither a VMT efficient CBG or within ½ mile of high-quality transit. The CBG is large, comprising 280 acres that extends to Antelope Road and nearly to Van Maren Lane. Given the CBG size and variety of land uses within it, residential travel characteristics within this area are not homogenous. This CBG generates an average of 20.9 VMT per resident, which is above both the Citywide average (17.4 VMT per resident) and SACOG regional average (20.1 VMT per resident). However, the immediately adjacent CBGs to Sylvan Corners exhibit much more efficient VMT per resident characteristics:

- CBG 1113 generates 16.9 VMT per resident
- CBG 1361 generates 15.0 VMT per resident
- CBG 1401 generates 15.7 VMT per resident



Based on the above information, an analyst could perform a limited amount of supplemental analysis to demonstrate the following:

1. The project would have travel characteristics more similar to CBGs 1113, 1361, and 1401 (versus 1112) all of which have VMT per resident averages that are less than 85 percent of the SACOG regional average. This could be accomplished by discussing the following (to the extent relevant):
    - Project's proximity to Sylvan Corners and other CBGs that are better indicators of travel efficiency.
    - Project's similarity in land use type, socioeconomic characteristics to adjacent CBGs.

    In all likelihood, the analysis would conclude that VMT impacts associated with such a project would be less than significant.

The above example highlights one of several ways in which VMT analysis may be approached, under certain circumstances, without relying entirely on the screening maps. In this particular instance, the project's physical location was the critical factor that influenced the ability to select an alternative approach. This is the "blending/adjacency" type of evaluation discussed in Chapter III.

Other approaches could examine the characteristics of the project against the predominate socioeconomic and commuting characteristics of that CBG (see Appendix A). For instance, if a multi-family project, which is expected to have an above average transit commute mode share (i.e., due to providing free transit passes or reducing parking) is proposed in a CBG that consists primarily of single-family dwelling units with high auto ownership levels, and high levels of commute to work by vehicle, it would be justified to consider adjustments to the project's VMT to reflect the project's unique characteristics relative to the averages of the CBG.[16]

Refer to Appendix A for two other case studies.

[16] To illustrate, if the CBG has an average VMT per resident of 18.5 and the unique characteristics of the project were demonstrated to reduce that by 10 percent, then the overall result would be 16.7 which is below the 17.1 VMT per resident threshold. However, substantial evidence would need to be provided to support the project's 10 percent reduction over the CBG average.

VI. MITIGATION MEASURES AND PLAN UPDATES

This chapter provides an overview of potential mitigation measures to address significant VMT impacts. Additionally, it describes the extent to which this plan should be updated.

Overview of Mitigation Measure Strategies

Feasible mitigation measures will be recommended for land use projects that exceed the applicable VMT threshold and cause a significant impact. While an abundance of potential VMT reduction strategies exist, not all of these are applicable to suburban settings, and many have not undergone sufficient academic/technical review to demonstrate their effectiveness. In CEQA, it is important to demonstrate that any recommended mitigation measures are both feasible and effective.

Mitigation measures for VMT impacts will principally focus on modifying the project to generate less VMT, often through the implementation of transportation demand management (TDM) strategies. This is in contrast to pre-SB 743 environmental review efforts, in which significant transportation impacts were based on traffic operations and would be mitigated by typically adding roadway capacity at the impacted facilities. Since the latter solution would not reduce a project's VMT, off-site capacity-increasing improvements to address significant transportation improvements will no longer be recommended in CEQA documents (but may still be included as conditions of approval).

Alternative approaches available to the City could include a VMT mitigation bank or impact fee program, in which a project pays a proportionate fee into the program that will fund certain improvements (e.g., bikeway projects, transit enhancements, etc.) within the City that would reduce VMT. However, these programs can be very complex, and time-intensive to establish and operate.

Fehr & Peers, working in conjunction with researchers at UC Berkeley (for the ARB Zero Carbon Buildings Study) has identified a set of TDM strategies whose reduction percentages are highly defensible and suitable for use in environmental analysis documents because they have been derived from academically prepared, peer-reviewed studies that would represent substantial evidence regarding the effectiveness of the given strategy. The following list of mitigation measures are considered feasible within Citrus Heights:

- Charge for Cost of Off-Street Parking
- Limit Parking Supply (requires a 'closed system' and available non-auto modes of travel)
- Employee Parking Cashout Program
- Transit Pass Subsidies
- Transit Service Frequency or Coverage Area Improved
- Point to point or "last mile" shuttles

- Commute Marketing Program (i.e., mode choice options at worksite, TDM coordinator, etc.)
- Carpool/Vanpool Incentives
- Pedestrian-Oriented Design

The effectiveness of a given TDM strategy can be highly dependent on the project's geographic setting and specific tenants. Thus, the effectiveness is often expressed as a range. Additionally, multiple TDM strategies implemented at the same time may have overlapping "dampening" effects, which must be considered.

The above list excludes several other well-known TDM strategies that could be applicable to projects in Citrus Heights. Unfortunately, the strategies, which are listed below, have limited academic research supporting them and hence do not currently provide substantial evidence as to the efficacy:

- Pay per use (versus monthly) parking
- Reduced parking supply
- Emergency ride home
- Transportation Network Company (TNC) partnerships
- Secure bike parking
- Showers and lockers for bicyclists
- Public bike repair stations
- Bikeshare systems
- Ridematching programs
- Carshare availability and subsidy programs

It is noted that TDM strategy effectiveness is the focus on several ongoing transportation research studies. It is conceivable that those research efforts may yield more defensible estimates of the effectiveness of the above and other TDM strategies.

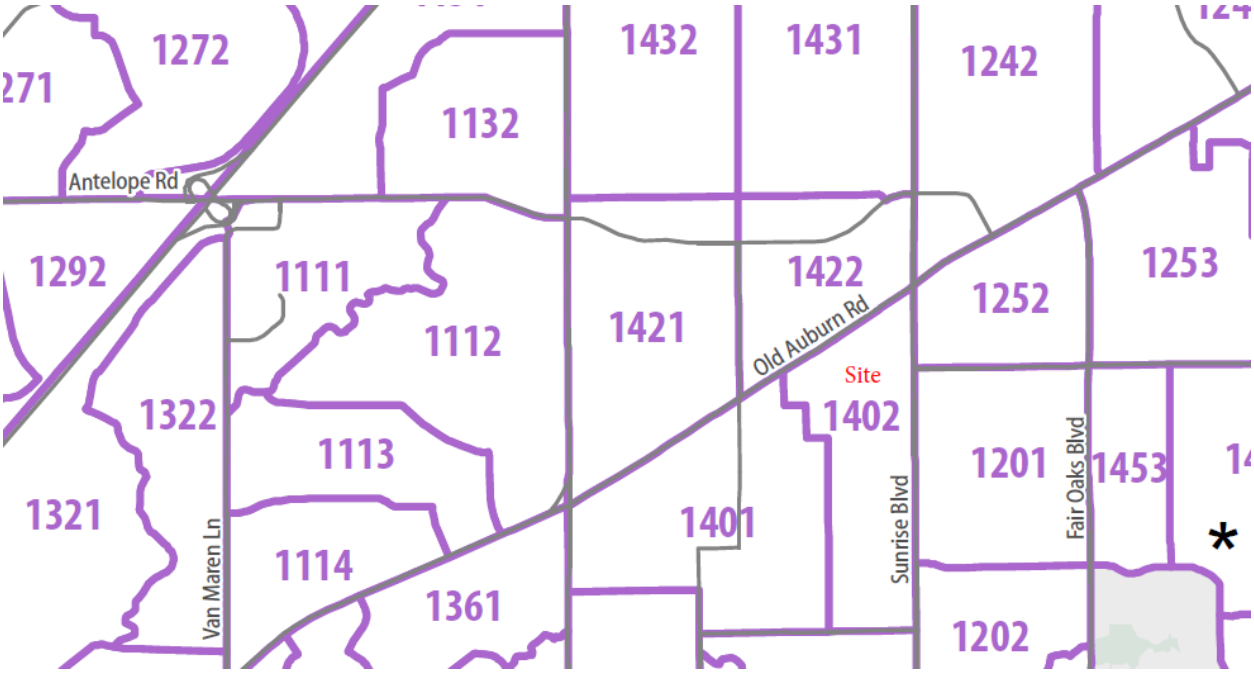
Subsequent Updates to SB 743 Implementation Plan

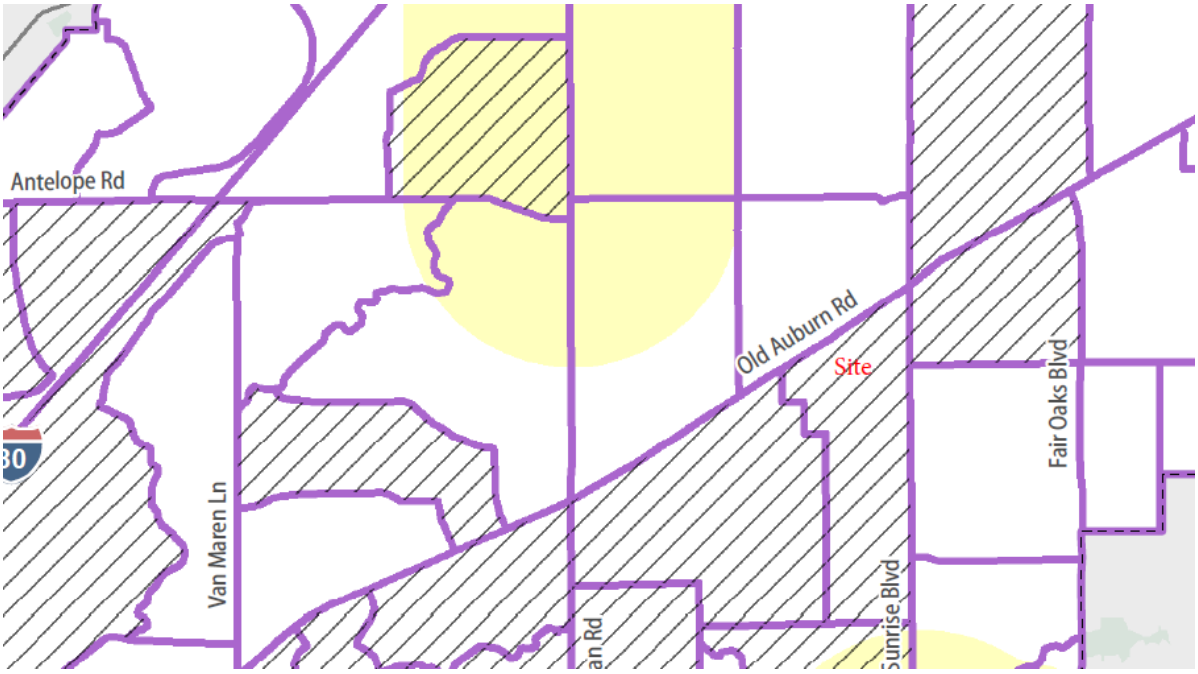
This report should be periodically updated as necessary to reflect any of the following:

- Changes in planned/proposed land uses (both within and outside of Citrus Heights) that could have a substantial effect on VMT thresholds.
- Changes in the planned roadway system (both within and outside of Citrus Heights) that could have a substantial effect on VMT thresholds.
- Changes in state-of-the-practice or technical guidance from agencies with respect to how VMT should be calculated and/or VMT thresholds should be set.
  Changes in mode choice options that could have a substantial effect on travel and VMT calculations.

Appendix A – Case Studies and Supporting Technical Information

<u>Case Study 1: Old Auburn/Sunrise Residential Project</u> – The specific area under evaluation is an approximate five-acre undeveloped parcel located south of Old Auburn Road and west of Sunrise Boulevard. It could yield 40 dwelling units if developed at 8 units/acre, which is greater than the small project exemption for single-family units. It is in CBG 1402 which according to Figure 3, would generate VMT per du that is less than 85% of the regional average. Hence, conclusion would be less than significant VMT impact. No analysis required.



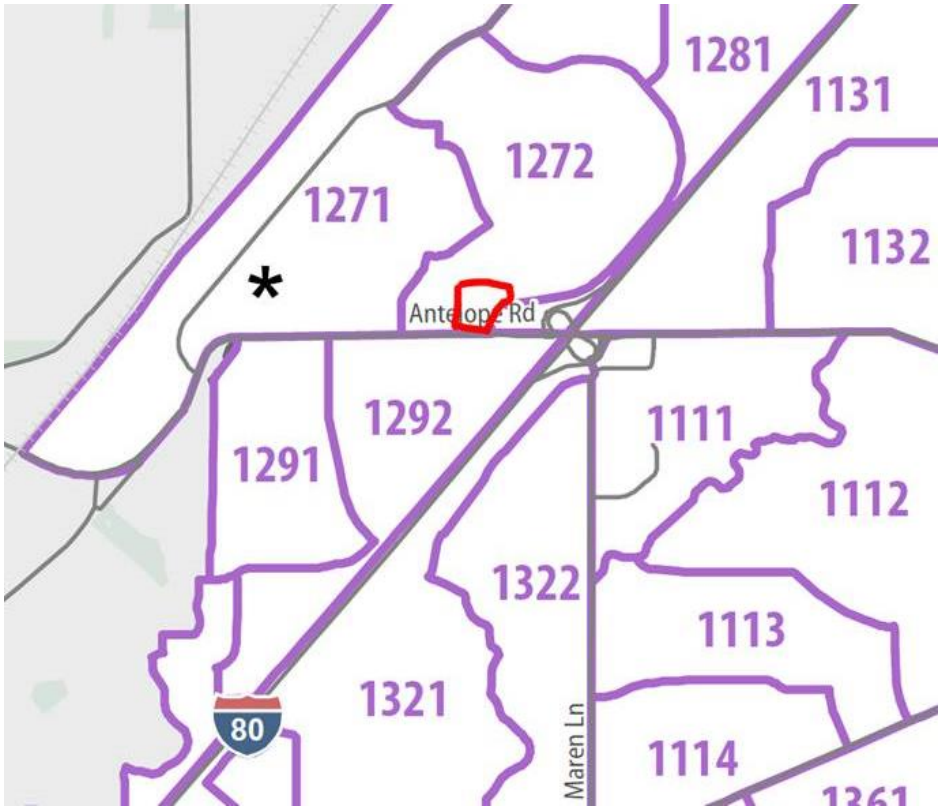


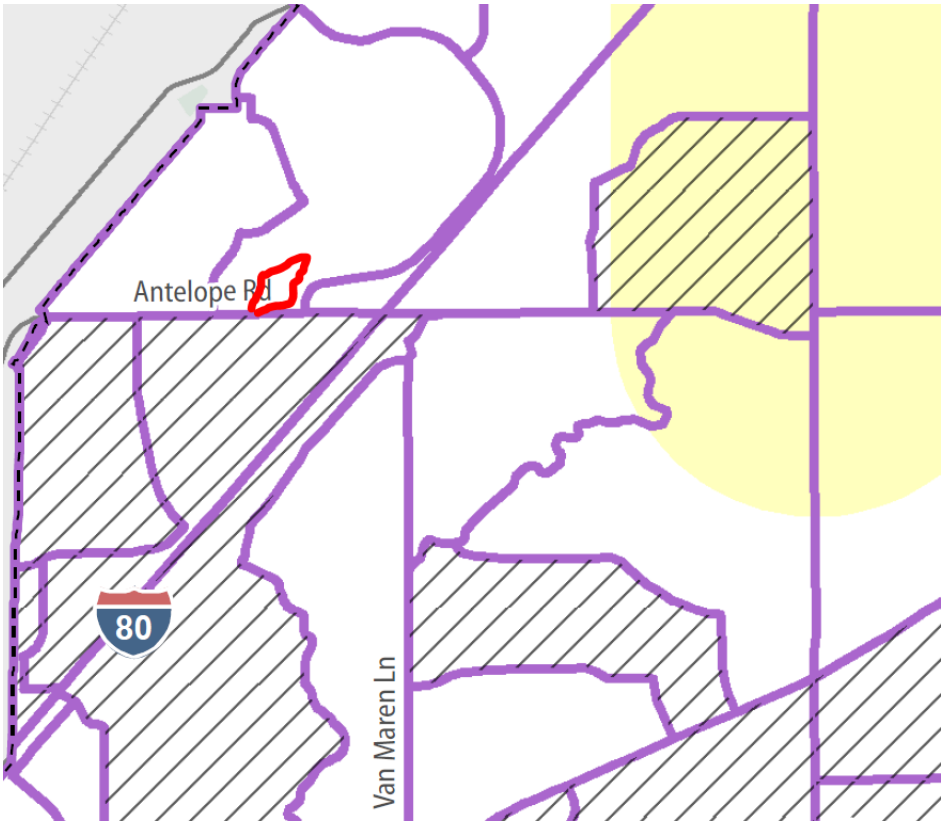
Case Study 2: Antelope/I-80 (north side) – This area is represented by CBG 1272, which is vast (215 acres), extending northwesterly to Roseville Road. Proposed development would likely occur on a portion of the underdeveloped Summerhill Plaza Retail Center, which is located along Antelope Road and Lichen Drive. That site is situated adjacent to CBG 1292 (note that low-generating CBG 1291 is also adjacent, but excluded from consideration because it consists of a large number of mobile home units). Socioeconomic and travel characteristics of CBGs 1272 and 1292 are shown below:

CBG	Avg VMT per Resident	% of Single-Family Dwelling Units	Average Vehicles per Household	Percent of Residents that are Under 18	Percent who Commute to Work by Private Vehicle
1272 (project zone)	20.8	93%	2.09	29%	99%
1292 (adjacent zone)	14.4	85%	1.87	19%	94%

Conclusion: The specific type of residential development would dictate the conclusion with respect to VMT impacts. Here are two diverging examples:

- Low Density Residential: entire retail center replaced by estate-type, single-family detached dwelling units. If yield exceeded 19 units, small project exemption would not apply. This land use would likely have characteristics similar to its CBG (1272) and have VMT per resident that is above the threshold, hence creating a significant VMT impact. A less than significant finding *could* potentially be achieved if the parking supply was limited and/or a study demonstrated that the project's proximity to retail and the SacRT Bus Line #93 would contribute to fewer external vehicle trips.
- High Density Residential: part of retail center is redeveloped with 15 to 20 multi-family units per acre, exceeding the small project exemption. Assuming parking supply is limited to 1.75 spaces per unit or less, the site's close proximity to CBG 1292 which is more similar in nature to the project's land uses, would suggest it would generate VMT per resident that is 85% of the regional average. Hence, VMT impacts would be less than significant.


1281
1131
1272
1271
1132
*
Antelope Rd
1292
1111
1291
1112
1322
1113
1321
80
Maren Ln
1114


Antelope Rd
80
Van Maren Ln

Blockgroup	Res HBx VMT/device/day	Emp HBW VMT/device/day	Avg Daily Visitor VMT per Device
60670081111	20.0	16.6	0.592
60670081112	20.9	9.3	0.724
60670081113	16.9	10.4	0.714
60670081114	18.1	11.6	0.482
60670081131	18.6	11.1	0.656
60670081132	14.7	8.9	0.635
60670081191	15.8	11.1	0.419
60670081192	16.4	10.2	0.516
60670081193	16.6	10.4	0.631
60670081194	15.5	9.5	0.502
60670081195	16.2	10.8	0.889
60670081201	18.7	10.0	0.587
60670081202	18.5	18.0	0.538
60670081203	18.8	11.4	0.501
60670081241	19.2	12.6	0.887
60670081242	16.5	16.3	0.596
60670081251	18.3	20.8	0.928
60670081252	16.7	9.7	0.496
60670081253	21.2	9.7	0.775
60670081271	18.4	7.2	0.651
60670081272	20.8	9.6	0.654
60670081281	18.4	10.6	0.586
60670081282	18.3	7.3	0.954
60670081291	13.8	17.4	0.670
60670081292	14.4	14.7	0.825
60670081303	15.4	24.8	0.436
60670081311	21.4	14.8	0.512
60670081312	17.5	11.0	0.586
60670081314	14.3	13.0	0.568
60670081321	17.0	15.3	0.997
60670081322	23.3	15.4	0.813
60670081341	13.5	18.3	1.072
60670081342	17.1	20.0	0.609
60670081351	18.0	6.9	0.564
60670081352	16.2	17.8	0.479
60670081353	13.6	21.0	0.534
60670081354	13.9	9.1	0.399
60670081361	15.0	15.3	0.614
60670081362	15.3	18.1	0.608
60670081371	19.5	14.6	0.473
60670081372	12.3	11.1	0.499
60670081381	12.9	11.4	0.587
60670081382	15.7	9.4	0.454
60670081383	15.0	16.5	0.579
60670081391	13.5	12.9	0.560
60670081392	18.9	12.5	0.545
60670081401	15.7	10.0	0.574
60670081402	15.9	12.1	0.593
60670081411	13.5	12.7	0.632
60670081412	14.0	15.7	0.680
60670081413	17.7	16.8	0.923
60670081414	14.1	10.8	0.566
60670081415	16.6	16.0	0.554
60670081421	19.8	9.4	0.558
60670081422	17.8	14.4	0.509
60670081431	17.1	10.6	0.623
60670081432	20.8	16.2	0.597
60670081451	22.0	10.0	0.772
60670081452	21.7	10.1	0.815
60670081453	18.2	8.2	0.787
60670081454	19.4	9.6	0.897
SACOG Region Avg.	20.1	18.1	0.895

Geography ID	Acres	Count of Residents (ACS)	AVG HH Size	Percent Owner Occupied Units	Percent Making $35k or less (60% of AMI)	Percent Retired	Percent of Population Under 18	Percent Population 65 and Over	% SF Units	% Commute to Work by private vehicle	Average Vehicles per HH
60670081111	151.71	1981	2.49	0.72	14.3%	25.1%	22.8%	14.8%	92.8%	97.2%	2.06
60670081112	280.04	1601	2.68	0.88	38.3%	50.3%	18.6%	18.1%	65.5%	91.9%	1.93
60670081113	139.10	1886	3.07	0.70	19.9%	32.7%	19.1%	17.2%	100.0%	97.4%	2.11
60670081114	127.71	922	2.55	0.84	20.2%	28.8%	20.2%	9.2%	100.0%	100.0%	1.73
60670081131	238.92	2536	2.40	0.51	23.6%	30.0%	17.9%	8.4%	49.0%	97.4%	1.99
60670081132	158.28	1090	2.69	0.70	11.1%	34.9%	26.1%	16.4%	100.0%	56.3%	1.88
60670081191	120.99	1953	2.69	0.32	26.9%	36.3%	20.1%	6.5%	51.8%	94.9%	1.89
60670081192	117.31	1539	3.10	0.76	28.4%	43.4%	26.3%	18.8%	97.3%	100.0%	2.06
60670081193	100.19	881	2.81	0.85	19.2%	26.0%	19.1%	8.4%	100.0%	85.2%	1.91
60670081194	77.50	462	2.51	0.82	24.3%	41.9%	22.4%	22.4%	95.7%	100.0%	2.11
60670081195	50.00	537	2.89	0.81	11.6%	31.8%	22.6%	14.4%	100.0%	91.7%	1.95
60670081201	186.27	1921	2.50	0.57	30.1%	41.5%	18.3%	19.5%	67.5%	97.5%	1.73
60670081202	123.50	1620	3.00	0.64	23.5%	33.6%	28.6%	15.0%	89.4%	100.0%	1.96
60670081203	177.56	1232	1.82	0.04	27.3%	16.8%	12.5%	5.9%	9.2%	100.0%	1.45
60670081241	263.61	3119	3.25	0.87	11.6%	37.6%	23.9%	19.7%	100.0%	99.4%	2.45
60670081242	337.84	1677	2.34	0.81	16.0%	33.6%	13.6%	22.6%	100.0%	93.3%	2.19
60670081251	297.24	2940	2.66	0.84	15.1%	33.9%	16.2%	18.9%	83.2%	97.3%	2.00
60670081252	127.55	980	2.81	0.59	15.8%	46.8%	12.0%	28.3%	68.5%	96.1%	1.81
60670081253	207.35	1503	2.55	0.72	10.2%	35.7%	19.4%	17.8%	100.0%	100.0%	1.90
60670081271	320.00	1338	3.09	0.70	17.4%	31.2%	24.9%	7.2%	100.0%	95.6%	2.09
60670081272	215.60	3105	2.93	0.59	15.9%	34.5%	29.0%	13.2%	93.4%	99.3%	2.09
60670081281	135.73	1210	2.57	0.86	35.5%	47.3%	16.2%	21.8%	57.3%	100.0%	1.74
60670081282	112.62	1261	2.85	0.75	26.7%	34.8%	21.2%	16.3%	98.9%	97.4%	2.05
60670081291	120.61	1559	2.66	0.87	26.6%	42.4%	18.7%	26.2%	66.5%	90.3%	1.79
60670081292	160.84	1584	2.54	0.69	19.6%	28.1%	19.3%	15.1%	85.2%	93.7%	1.87
60670081303	25.00	276	2.34	0.92	16.3%	42.6%	19.8%	21.9%	100.0%	100.0%	1.91
60670081311	28.00	449	2.35	0.92	16.0%	20.1%	14.6%	7.3%	100.0%	100.0%	1.95
60670081312	257.01	1711	2.70	0.82	24.5%	38.5%	29.1%	19.0%	92.4%	95.2%	2.04
60670081314	97.00	1570	2.47	0.50	48.6%	37.3%	23.4%	20.0%	0.0%	94.1%	1.53
60670081321	292.34	1582	2.03	0.88	30.5%	53.8%	10.1%	44.8%	47.9%	100.0%	1.67
60670081322	193.80	2297	3.28	0.81	17.4%	43.3%	23.2%	10.6%	95.5%	93.2%	2.17
60670081341	100.10	821	2.76	0.80	22.1%	39.6%	15.8%	30.0%	100.0%	100.0%	1.94
60670081342	141.89	2054	2.48	0.32	30.1%	35.2%	25.4%	11.2%	38.3%	93.4%	1.35
60670081351	38.88	822	1.70	0.20	37.9%	64.2%	25.3%	38.4%	21.5%	89.0%	1.06
60670081352	75.46	1782	2.53	0.28	56.0%	19.7%	27.9%	5.8%	28.8%	93.0%	1.55
60670081353	75.44	820	1.92	0.56	36.2%	47.3%	13.0%	36.0%	61.0%	100.0%	1.34
60670081354	154.17	1051	1.99	0.51	41.3%	46.4%	17.5%	32.4%	63.6%	100.0%	1.22
60670081361	126.40	714	1.91	0.29	44.9%	43.9%	14.0%	15.4%	52.9%	100.0%	1.49
60670081362	237.35	1530	2.20	0.44	25.5%	40.3%	13.1%	27.3%	49.7%	98.4%	1.66
60670081371	113.76	1526	3.10	0.36	31.1%	28.7%	31.1%	9.3%	42.1%	95.4%	1.88
60670081372	154.95	924	2.11	0.45	38.7%	37.6%	16.5%	21.4%	61.9%	94.6%	1.71
60670081381	178.59	956	2.70	0.38	37.0%	35.8%	15.9%	20.4%	51.7%	87.8%	1.36
60670081382	121.70	1654	2.88	0.50	25.6%	39.5%	30.9%	13.0%	67.1%	95.2%	2.04
60670081383	146.34	1075	2.65	0.80	5.7%	38.5%	17.7%	20.0%	100.0%	98.1%	1.99
60670081391	196.27	1906	2.27	0.10	53.8%	38.2%	21.5%	9.4%	13.5%	94.0%	1.07
60670081392	133.70	1818	2.04	0.29	34.1%	31.5%	10.1%	20.7%	44.3%	91.8%	1.49
60670081401	245.84	1576	3.09	0.83	23.5%	39.3%	24.4%	17.1%	100.0%	100.0%	2.16
60670081402	162.68	1397	2.40	0.32	36.0%	38.8%	13.8%	20.3%	54.3%	95.3%	1.62
60670081411	188.07	1072	2.71	0.89	15.2%	48.5%	12.0%	26.2%	100.0%	97.7%	1.98
60670081412	111.65	1258	2.65	0.55	23.6%	29.3%	22.3%	14.0%	79.9%	100.0%	1.84
60670081413	63.78	782	3.55	0.72	0.0%	35.1%	30.6%	17.6%	100.0%	100.0%	1.63
60670081414	47.74	1597	2.34	0.03	50.7%	27.2%	31.5%	1.6%	0.0%	72.6%	1.30
60670081415	107.26	2037	2.40	0.03	50.8%	27.3%	23.8%	5.0%	25.1%	91.0%	1.59
60670081421	234.26	2591	2.89	0.30	26.2%	30.8%	28.3%	5.6%	51.9%	99.7%	1.99
60670081422	137.23	1188	2.27	0.38	25.4%	41.3%	18.6%	10.9%	43.5%	100.0%	2.02
60670081431	293.80	2358	2.35	0.33	29.5%	32.3%	19.6%	12.8%	45.3%	93.1%	1.74
60670081432	300.72	1781	2.80	0.67	22.5%	28.3%	17.1%	15.2%	95.4%	96.2%	2.06
60670081451	65.00	619	3.03	0.71	12.1%	41.0%	34.1%	10.7%	100.0%	100.0%	2.01
60670081452	108.00	861	3.04	0.64	13.7%	36.4%	14.9%	7.5%	100.0%	90.5%	2.80
60670081453	88.88	842	2.95	0.75	18.9%	44.5%	13.5%	25.1%	100.0%	100.0%	2.42
60670081454	25.00	313	2.77	0.78	16.4%	44.2%	25.5%	18.8%	100.0%	100.0%	2.08