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**Traffic and Transportation**

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August 6, 2024

Ms. Ann Gonsalves, T.E.
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101

Subject: Southwest Village Specific Plan Programmatic Level Vehicle Miles Traveled Assessment (PRJ-0614791)

Dear Ms. Gonsalves:

The Southwest Village Specific Plan (Specific Plan) provides a comprehensive policy framework intended to guide future development in Southwest Village, consistent with the City of San Diego - Otay Mesa Community Plan (OMCP) and City of Villages Strategy.

This programmatic Vehicle Miles Traveled (VMT) assessment is consistent with the methodologies outlined in the City of San Diego *Transportation Study Manual*, September 2022 (TSM) and includes the following sections:

1) Project Description and Trip Generation
2) Vehicle Miles Traveled Assessment
    a. Screening Criteria
    b. Significance Thresholds
    c. Methodology
    d. VMT Mitigation
3) Conclusion

## PROJECT DESCRIPTION AND TRIP GENERATION

The Specific Plan encompasses approximately 490 acres, will allow up to 5,130 attached and detached residences, and will facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The Specific Plan would provide public facilities including dedication of up to two new elementary schools, approximately 17.6 acres of publicly owned developed parks in addition to approximately 18 acres of trails, and 185 acres of surrounding natural open space and habitat conservation.

Access to the Specific Plan area will be from two Mobility Element roadways, Caliente Avenue to the north and from an extension of Beyer Boulevard to the west, connecting the Specific Plan area to San Ysidro. If Beyer Blvd is not extended by the 200th unit, then an alternative secondary access is proposed south of the Specific Plan area along an existing utility road to be improved as an emergency vehicle access (EVA) road to facilitate regional fire and emergency response.

The Specific Plan contains 30 planning areas and identifies a range of allowable residential densities for each planning area to allow for flexibility in future planning and design. The following land use designations are proposed:

- Medium-Low Density Residential allowing 8 to 22 dwelling units per acre
- Medium Density Residential allowing 15 to 29 dwelling units per acre
- Medium-High Density Residential allowing 20 to 44 dwelling units per acre
- Residential Mixed-Use allowing up to 175,000 square feet of commercial and retail uses at a maximum Floor Area Ratio (FAR) of 3.0 and multi-family attached residential units at a density range of 30 to 62 dwelling units per acre

For the purpose of the programmatic Specific Plan environmental analysis included in this report, a full buildout scenario for the Specific Plan was analyzed. The project is forecasted to develop over the next 15 years; however, the exact timing of build-out is not known at this time. Therefore, the following future years were analyzed using the current San Diego Association of Governments (SANDAG) Regional Travel Demand Model (ABM 2+):

- Year 2035
- Year 2050

Furthermore, since the Specific Plan is under multiple property ownerships and the timing of build-out is not known at this time, the ultimate mix of residential densities cannot be known with certainty. However, the following assumptions consistent with the Specific Plan land use framework were used in this assessment that identifies build-out of up to:

- 1,158 single family residential units
- 2,503 multi-family units under 20 dwelling units per acre
- 1,469 multi-family units over 20 dwelling unit per acre
- 175,000 SF Commercial/Retail
- 2 elementary schools

Under these land use assumptions, the Specific Plan has a calculated driveway trip generation of 57,225 ADT with 4,777 AM peak hour trips (1,569 inbound and 3,208 outbound) and 5,948 PM peak hour trips (3,695 inbound and 2,253 outbound). The City of San Diego *Otay Mesa Community Plan 2014* identified Southwest Village with 5,880 homes, 190,800 SF commercial, two elementary schools, and 40 acres of developed parks for a driveway trip generation of 64,393 ADT with 5,249 peak hour trips (1,690 inbound and 3,559 outbound) and 6,596 PM peak hour trips (4,108 inbound and 2,488 outbound). The proposed Specific Plan land use mix results in an overall reduction from the 2014 OMCPU in the amount of -7,168 ADT, -472 AM trips (-121 inbound and -351 outbound), and -648 PM trips (-413 inbound and -235 outbound) as shown in **Table 1**.

**Table 1: Proposed and Adopted Specific Plan Uses and Traffic Comparison**

| Land Use | ADT Rate | Size & Units | | ADT | % | Split | AM IN | AM OUT | AM Total | % | Split | PM IN | PM OUT | PM Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single-Family | 10 /DU | 1,158 | DU | 11,580 | 8% | 0.2 0.8 | 185 | 741 | 926 | 10% | 0.7 0.3 | 811 | 347 | 1,158 |
| Multi-Family (< 20 du/ac) | 8 /DU | 2,503 | DU | 20,024 | 8% | 0.2 0.8 | 320 | 1,282 | 1,602 | 10% | 0.7 0.3 | 1402 | 601 | 2,003 |
| Multi-Family (>20 du/ac) | 6 /DU | 1,469 | DU | 8,814 | 8% | 0.2 0.8 | 141 | 564 | 705 | 9% | 0.7 0.3 | 555 | 238 | 793 |
| Community Shopping Cnt | 70 /KSF | 175,000 | SF | 12,250 | 3% | 0.6 0.4 | 221 | 147 | 368 | 10% | 0.5 0.5 | 613 | 613 | 1,226 |
| Two Elem. Schools (1) | 2.9 /Student | 1,268 | Students | 3,677 | 31% | 0.6 0.4 | 684 | 456 | 1,140 | 19% | 0.4 0.6 | 279 | 419 | 698 |
| Developed Park | 50 /Acre | 17.6 | Acres | 880 | 4% | 0.5 0.5 | 18 | 18 | 36 | 8% | 0.5 0.5 | 35 | 35 | 70 |
| **Proposed Southwest Village Driveway Totals** | | | | **57,225** | | | 1,569 | 3,208 | **4,777** | | | 3,695 | 2,253 | **5,948** |
| Single-Family | 10 /DU | 1,400 | DU | 14,000 | 8% | 0.2 0.8 | 224 | 896 | 1,120 | 10% | 0.7 0.3 | 980 | 420 | 1,400 |
| Multi-Family (< 20 du/ac) | 8 /DU | 2,240 | DU | 17,920 | 8% | 0.2 0.8 | 287 | 1,147 | 1,434 | 10% | 0.7 0.3 | 1254 | 538 | 1,792 |
| Multi-Family (>20 du/ac) | 6 /DU | 2,240 | DU | 13,440 | 8% | 0.2 0.8 | 215 | 860 | 1,075 | 9% | 0.7 0.3 | 847 | 363 | 1,210 |
| Community Shopping Cnt | 70 /KSF | 190,800 | SF | 13,356 | 3% | 0.6 0.4 | 240 | 160 | 400 | 10% | 0.5 0.5 | 668 | 668 | 1,336 |
| Two Elem. Schools (1) | 2.9 /Student | 1,268 | Students | 3,677 | 31% | 0.6 0.4 | 684 | 456 | 1,140 | 19% | 0.4 0.6 | 279 | 419 | 698 |
| Developed Park | 50 /Acre | 40 | Acres | 2,000 | 4% | 0.5 0.5 | 40 | 40 | 80 | 8% | 0.5 0.5 | 80 | 80 | 160 |
| **Adopted Otay Mesa CPU Driveway Totals** | | | | **64,393** | | | 1,690 | 3,559 | **5,249** | | | 4,108 | 2,488 | **6,596** |
| ***Reduction between CPU and Southwest Village*** | | | | ***-7,168*** | | | *-121* | *-351* | ***-472*** | | | *-413* | *-235* | ***-648*** |

Source: City of San Diego *Trip Generation Manual* , May 2003. DU=Dwelling Unit. KSF=1,000 square feet. (1) Number of students based on estimated student enrollment for an elementary school of similar size per the Long Range Facilities Master Plan for San Ysidro School District 2021.

The regional location of the project site is shown in **Figure 1**. The 30 planning areas that make up Southwest Village are shown in **Figure 2**.

**Figure 1: Regional Project Location**

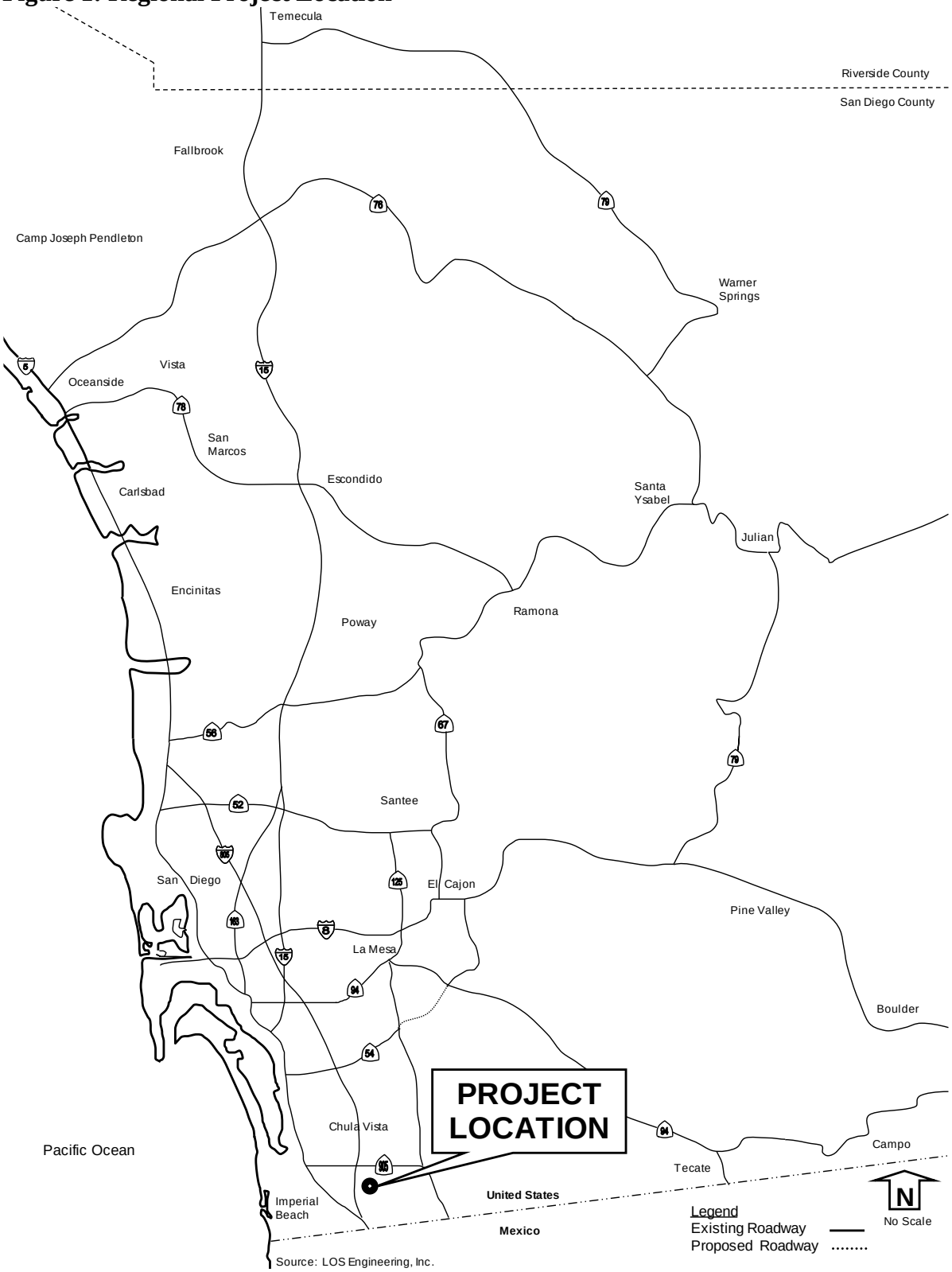
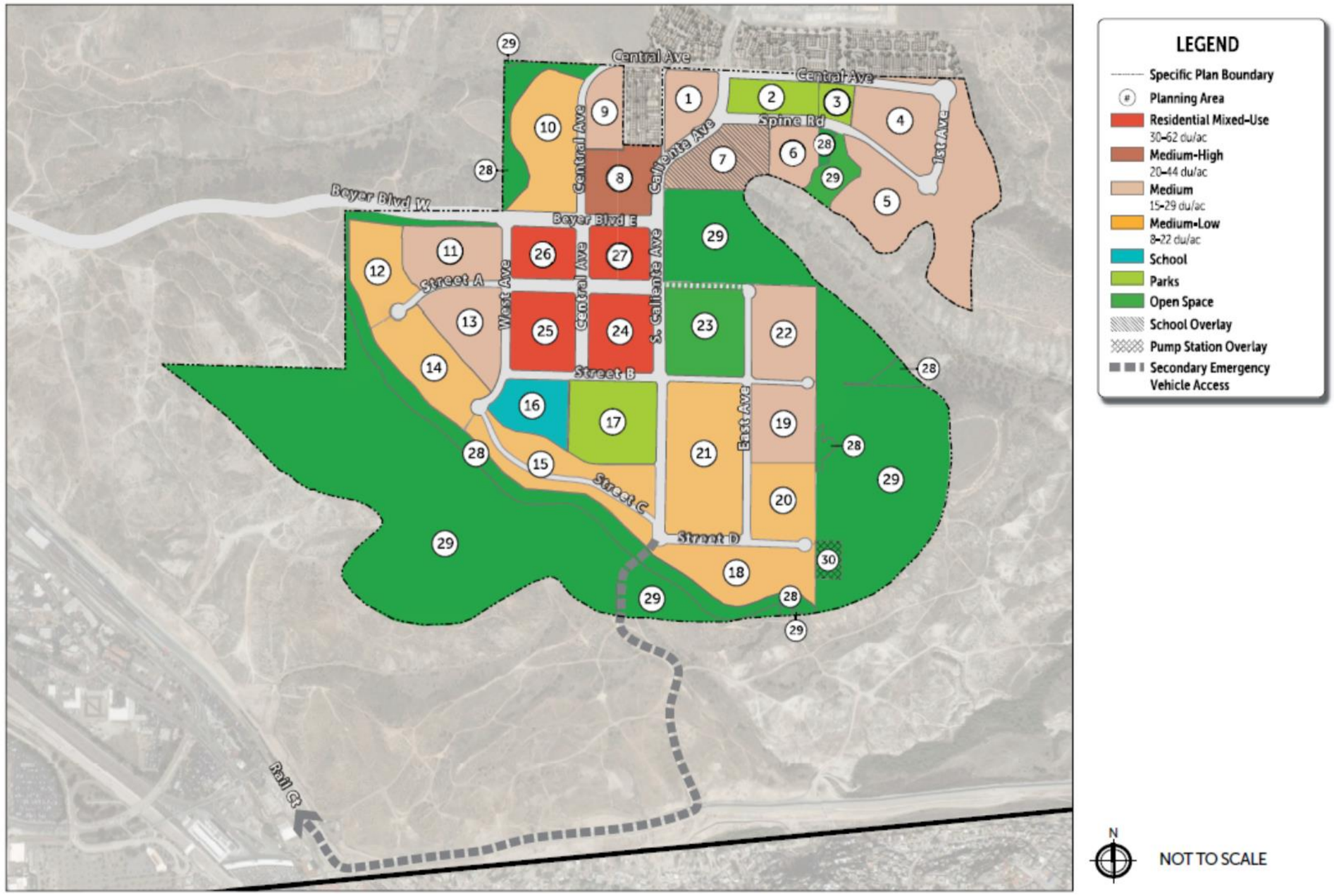


**Figure 2: Southwest Village Specific Plan**




Source: Rick Engineering

VEHICLE MILES TRAVELED ASSESSMENT

VMT is a measure of network use or efficiency generally measured as a function of population (VMT per Capita) or employment (VMT per Employee). VMT is calculated by multiplying all project trips by their associated trip lengths and is typically determined for a weekday.

Screening Criteria

The TSM provides screening criteria for land use projects to determine what level or whether a VMT assessment is required. A detailed transportation VMT assessment is required for all land development project, except for projects that meet one of the following criteria:

1) Residential or Commercial Project Located in a VMT Efficient Area
2) Industrial or Agricultural Project Located in a VMT Efficient Area
3) Small Project (less than 300 unadjusted ADT)
4) Locally Serving Retail/Recreational Project
5) Locally Serving Public Facility
6) Affordable Housing (meeting certain criteria)

The Specific Plan does not satisfy any of the above criteria and is required to provide a detailed VMT assessment. The methodology for detailed VMT assessment by land use is outlined in **Table 2**.

**Table 2: Transportation VMT Assessment Methodology by Land Use**

| Land Use | Analysis Methodology |
|---|---|
| Residential | **For projects that generate less than 2,400 daily unadjusted driveway trips:** Identify the location of the project on the SANDAG VMT per Capita map. The project's VMT per Capita will be considered the same as the VMT per Capita of the census tract in which it is located. Compare the project's VMT per Capita to the threshold to determine if the impact is significant OR input the project into the SANDAG Regional Travel Demand Model to determine the project's VMT per Capita.<br>**For projects that generate greater than 2,400 daily unadjusted driveway trips:** Input the project into the SANDAG Regional Travel Demand Model for SANDAG to provide the project's VMT per Capita. To perform the analysis, all project land uses should be inputted, and the VMT/Capita should be determined using the same method/scripts that SANDAG utilizes to develop the SANDAG VMT per Capita maps. |
| Commercial Employment | **For projects that generate less than 2,400 daily unadjusted driveway trips:** Identify the location of the project on the SANDAG VMT per Employee map. The project's VMT per Employee will be considered the same as the VMT per Employee of the census tract in which it is located. Compare the project's VMT per Employee to the threshold to determine if the impact is significant OR input the project into the SANDAG Regional Travel Demand Model to determine the project's VMT per Employee.<br>**For projects that generate greater than 2,400 daily unadjusted driveway trips:** Input the project into the SANDAG Regional Travel Demand Model for SANDAG to provide the project's VMT per Employee. To perform the analysis, all project land uses should be inputted, and the VMT per Employee should be determined using the same method/scripts that SANDAG utilizes to develop the SANDAG VMT per Employee maps. |

Source: City of San Diego *Transportation Study Manual*, September 2022.

The Specific Plan generates over 2,400 daily unadjusted driveway trips; therefore, a SANDAG Regional Travel Demand Model is required to calculate the project VMT.

Significance Criteria

The TSM documents the significance thresholds by land use as shown in **Table 3**.

**Table 3: City of San Diego VMT Thresholds**

| Project Type | Metric | Significance Thresholds |
|---|---|---|
| Residential | Resident VMT/Capita | 15% below regional mean |
| Commercial Employment | Commute VMT/Employee | 15% below regional mean |

Source: City of San Diego *Transportation Study Manual*, September 2022.

Methodology and Findings

The Specific Plan VMT was calculated using a SANDAG Series 14 Regional Travel Demand Activity Based Model 2 plus (ABM2+) screening maps.

Current Year 2035 and 2050 screening maps were applied because the project may build-out as early as 2035 or extend longer to year 2050. SANDAG screening maps are included in **Attachment A**. The Specific Plan area is shown to have significant VMT/Capita and VMT/Employee impacts under current year 2035 and 2050 conditions as shown in **Table 4**.

**Table 4: Specific Plan VMT Impact Findings (Series 14 ABM2+)**

| Project VMT by Year and Land Use | Series 14 Regional Mean VMT | Project % Compared to Regional Mean | Significant Transportation Impact (over 85%)? |
|---|---|---|---|
| **Year 2035** | | | |
| 17.1 VMT/Capita | 16.6 VMT/Capita | 102.8% | **Yes** |
| 20.7 VMT/Employee | 15.3 VMT/Employee | 135.5% | **Yes** |
| **Year 2050** | | | |
| 16.2 VMT/Capita | 16.0 VMT/Capita | 101.2% | **Yes** |
| 18.6 VMT/Employee | 14.3 VMT/Employee | 129.7% | **Yes** |

Source: SANDAG ABM2+ Series 14 Year 2035 and 2050.

VMT Mitigation

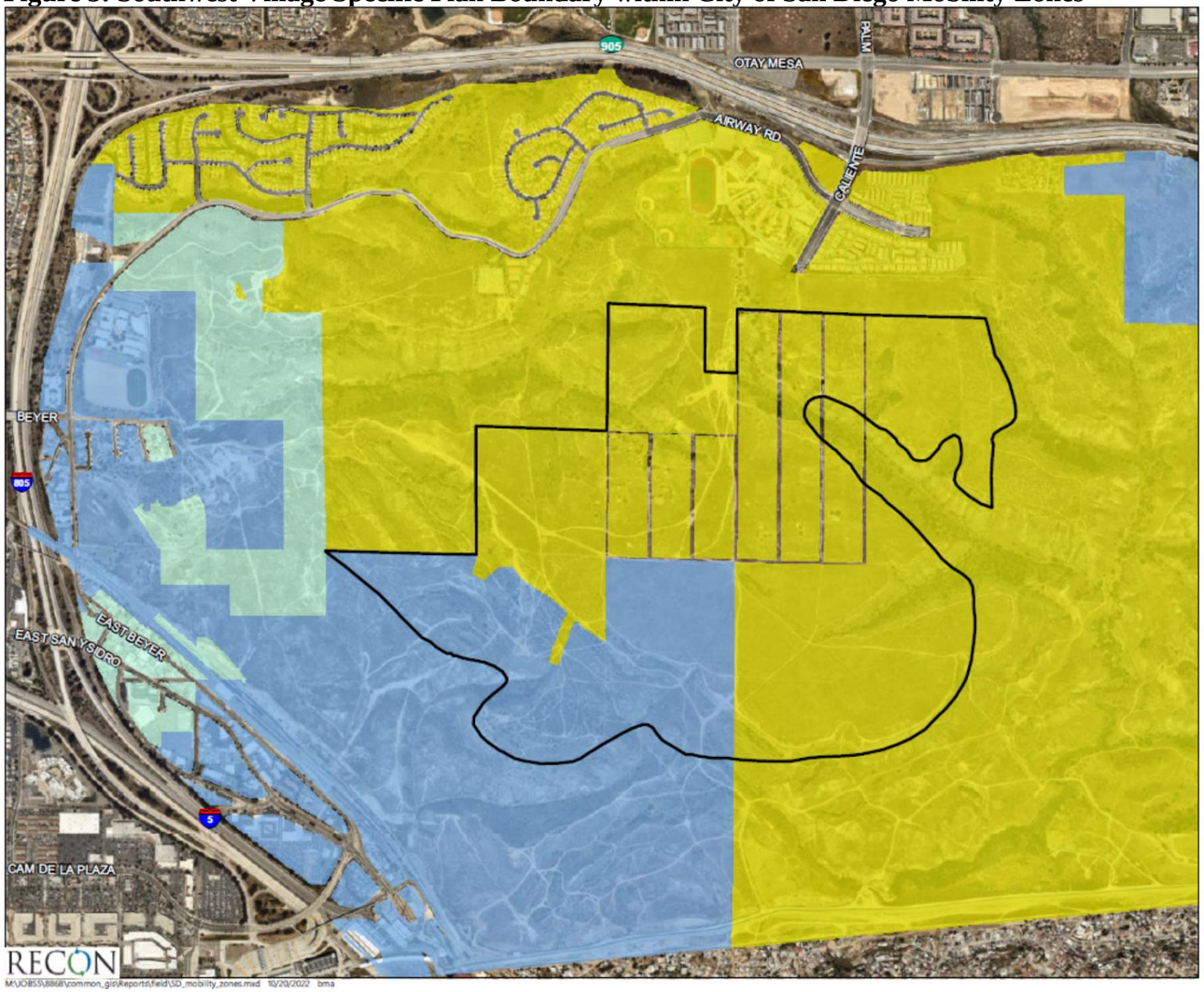
This programmatic VMT assessment is based on 5,130 homes, 175,000 square feet of commercial and retail uses, up to two elementary schools, and park land. The timing along with the final number of homes and commercial space is unknown at this time; therefore, each future Specific Plan Vesting Tentative Map will be subject to a discretionary review for consistency with the Specific Plan Subsequent EIR to the OMCP EIR and will be required to prepare LMA and VMT analyses.

VMT impacts can be mitigated through reducing the number of automobile trip or by reducing the distance that people drive. If full mitigation cannot be achieved, then mitigation to the greatest extent feasible is possible by:

1) Implementation of VMT reduction strategies outlined in the current City of San Diego Mobility Choices Regulation: Implementation Guidelines or opting into the Active Transportation In-Lieu Fee if the planning area is in Mobility Zones 2 or 3, or
2) Payment of the current City of San Diego Mobility Choices Regulations Active Transportation In-Lieu Fee (ATILF) if the planning area is in Mobility Zone 4 and
3) The project's environmental document relying on the Findings and Statement of Overriding Considerations from the Complete Communities: Mobility Choices Final PEIR (City of San Diego SCH No. 2019060003 May 2020).

The City of San Diego Complete Communities: Mobility Choices Program Mobility Zone determination for each subsequent project will be based on current adopted policy, which currently is Ordinance Number O-21274 as passed on 12/9/2020. A majority of the Southwest Village Specific Plan is located within Mobility Zone 4 as shown in **Figure 3**.

**Figure 3: Southwest Village Specific Plan Boundary within City of San Diego Mobility Zones**




Source: RECON

CONCLUSION

The Southwest Village Specific Plan provides a comprehensive policy framework intended to guide future development in Southwest Village, consistent with the City of San Diego - Otay Mesa Community Plan and City of Villages Strategy. The Specific Plan encompasses approximately 490 acres, will allow up to 5,130 attached and detached residences, and will facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The timing along with the final number of homes and commercial space is unknown at this time; therefore, each Vesting Tentative Map will be subject to a discretionary review for consistency with the Specific Plan Subsequent EIR to the OMCP EIR and will be required to prepare as needed LMA and VMT analyses.

Currently, the Specific Plan is calculated to have significant VMT/Capita and VMT/Employee impacts under year 2035 and 2050 conditions based on the SANDAG Series 14 ABM 2+ screening map.

The timing along with the final number of homes and commercial space is unknown at this time; therefore, each future Specific Plan Vesting Tentative Map will be subject to a discretionary review for consistency with the Specific Plan Subsequent EIR and will be required to prepare LMA and VMT analyses. VMT impacts can be mitigated through reducing the number of automobile trip or by reducing the distance that people drive. If full mitigation cannot be achieved, then mitigation to the greatest extent feasible is possible by:

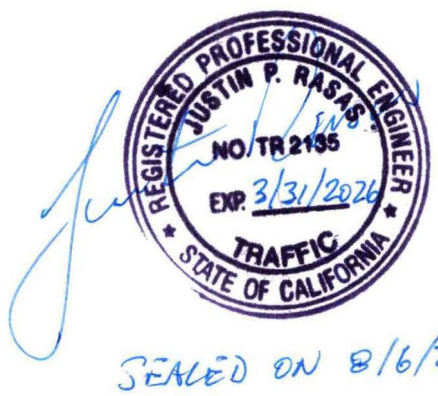
1) Implementation of VMT reduction strategies outlined in the current City of San Diego Mobility Choices Regulation: Implementation Guidelines or opting into the Active Transportation In-Lieu Fee if the planning area is in Mobility Zones 2 or 3, or
2) Payment of the current City of San Diego Mobility Choices Regulations Active Transportation In-Lieu Fee (ATILF) if the planning area is in Mobility Zone 4 and
3) The project's environmental document relying on the Findings and Statement of Overriding Considerations from the Complete Communities: Mobility Choices Final PEIR (City of San Diego SCH No. 2019060003 May 2020).

Sincerely,
**LOS Engineering, Inc.**

Justin Rasas

Justin Rasas, P.E.(TE 2135), PTOE
Principal and Officer of LOS Engineering, Inc.

Job 1733
Attachments

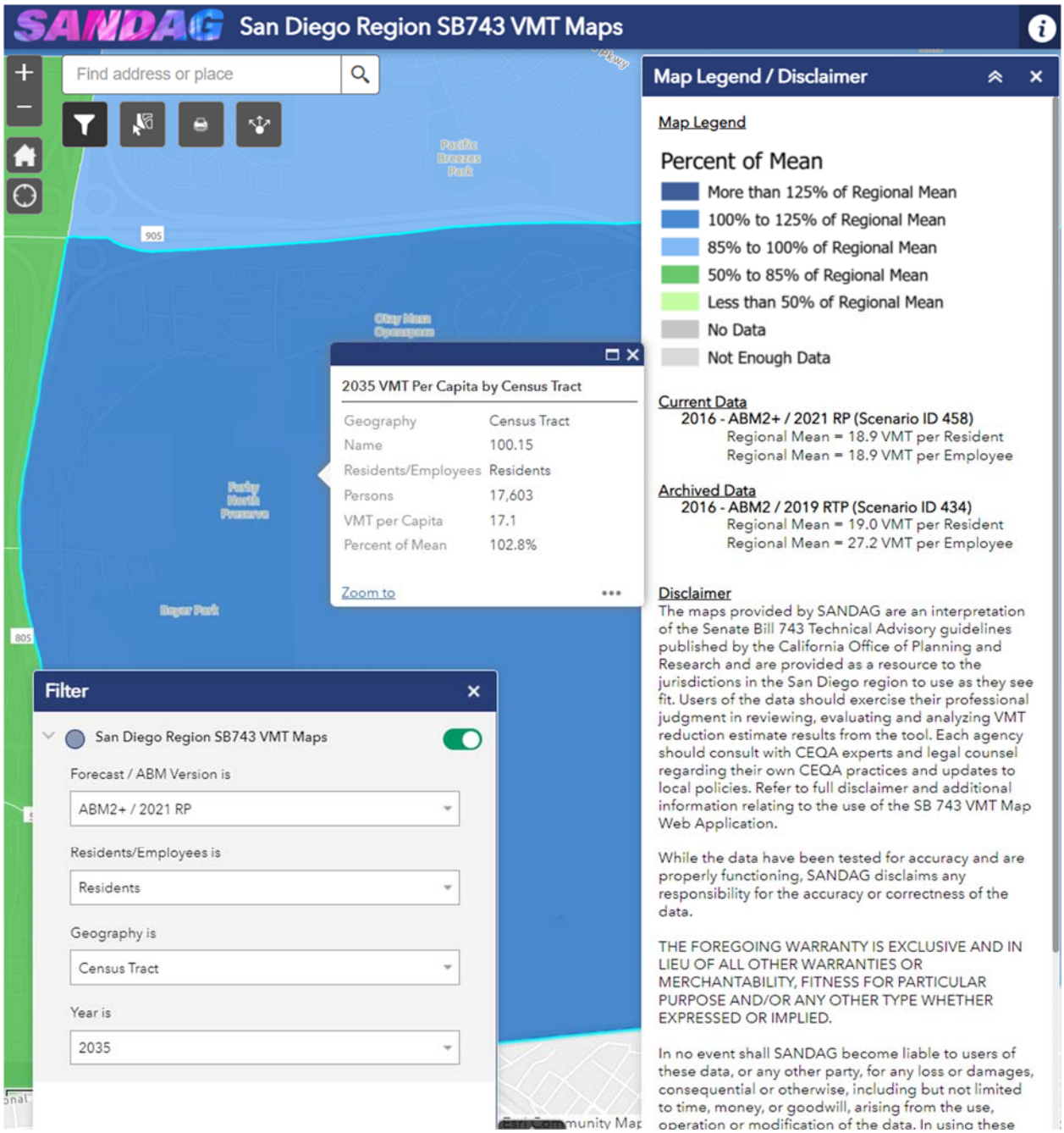



SEALED ON 8/6/2024

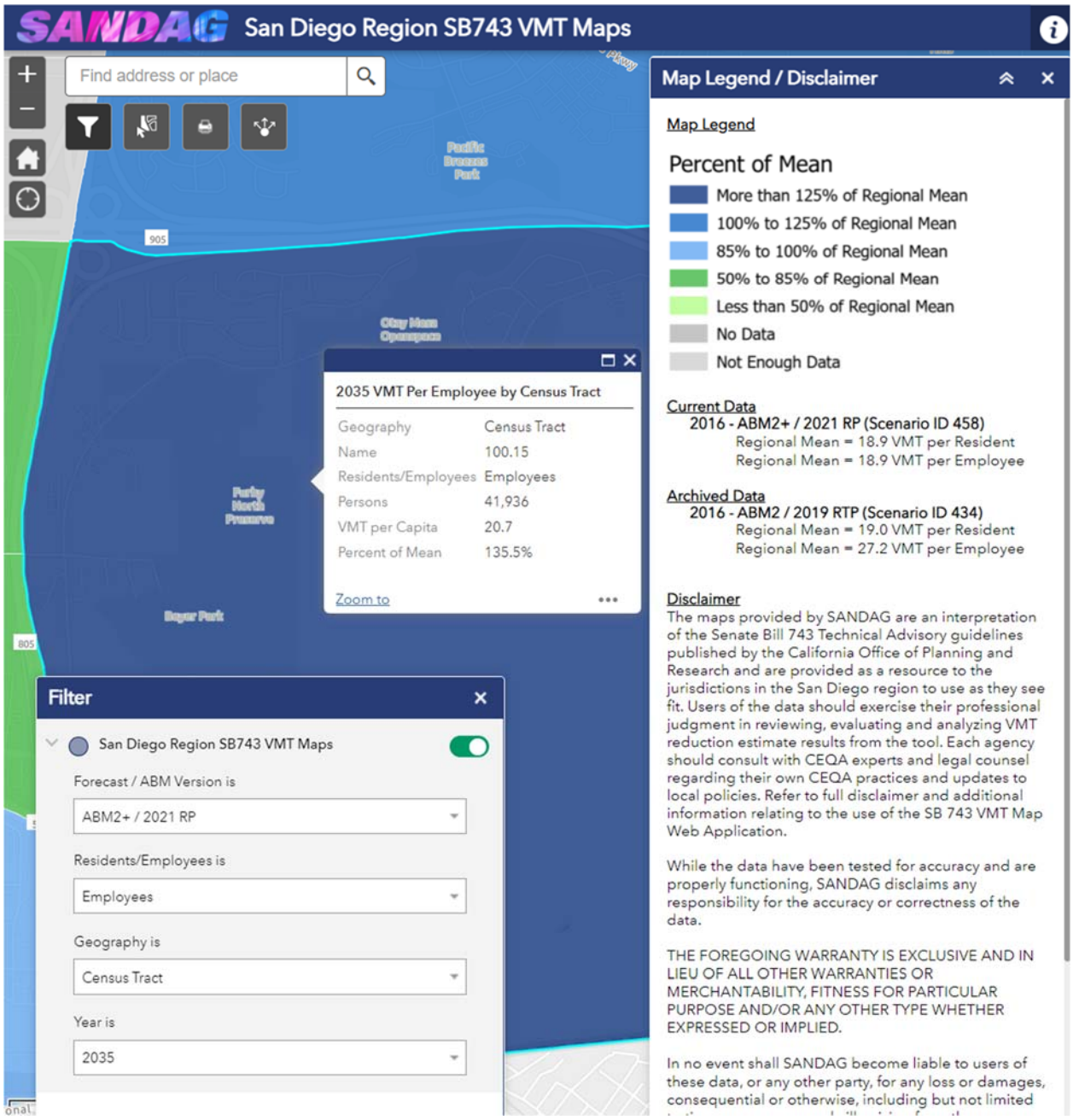
# Attachment A

# SANDAG Series 14 ABM2+ VMT Screening Maps

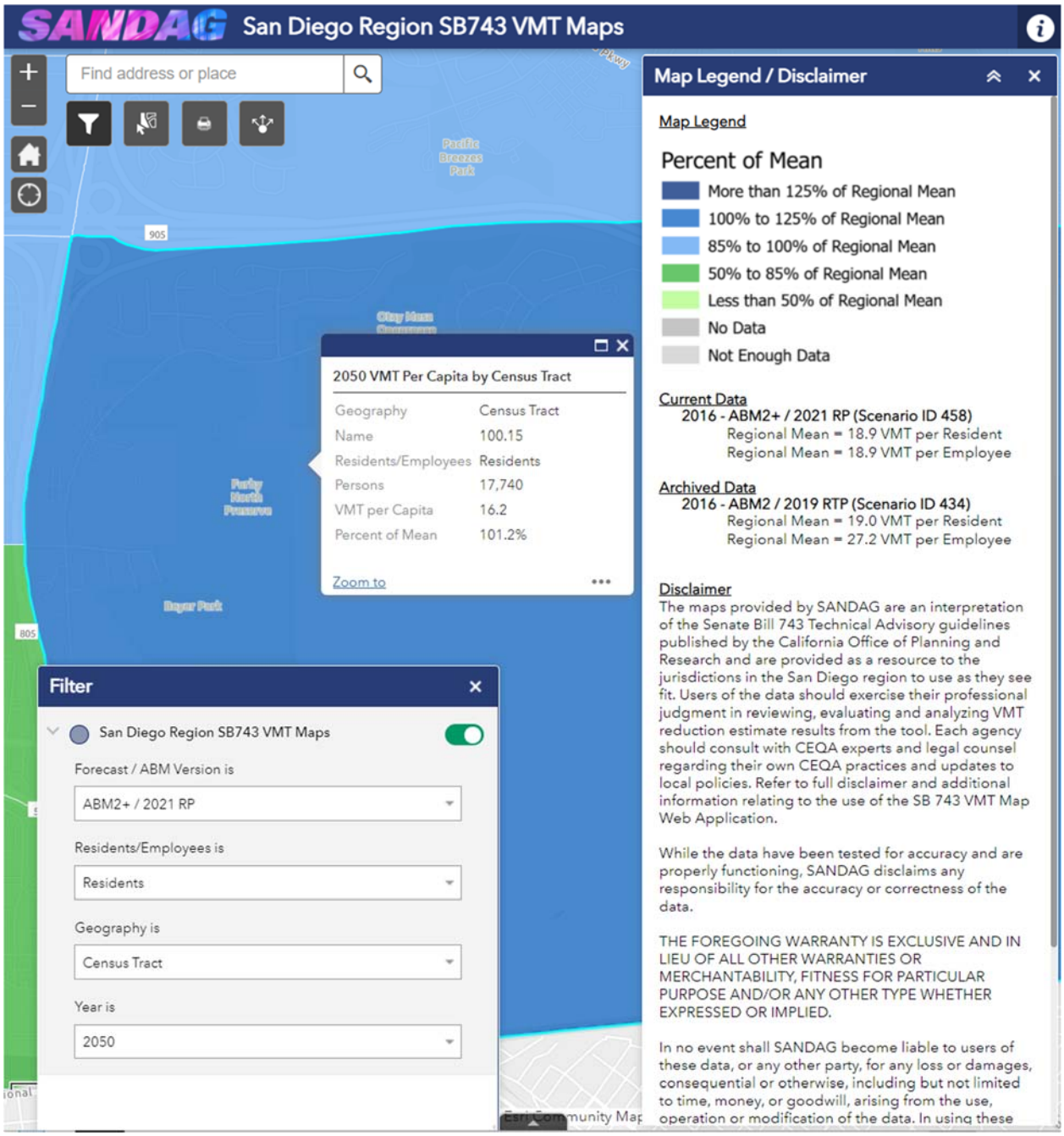
# Year 2035 VMT per Capita



## Year 2035 VMT per Employee



## Year 2050 VMT per Capita



Year 2050 VMT per Employee