Opportunities to Promote Sustainable Building Practices in Transit-Oriented Development in LA County

A Study Conducted by:

California Sustainability Alliance

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The California Sustainability Alliance (the Alliance) is an innovative market transformation program funded by California utility customers under the auspices of the California Public Utilities Commission. The Alliance leverages action on environmental initiatives such as climate, smart land use and growth, renewable energy, waste management, water use efficiency and transportation planning to help the State of California achieve its aggressive energy efficiency goals more effectively and economically. In partnership with public and private organizations throughout California, the Alliance precipitates widespread market transformation by tackling major barriers to sustainability.

For information about the California Sustainability Alliance, go to:

www.sustainca.org

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ABBREVIATIONS AND ACRONYMS

AHSC – Affordable Housing and Sustainable Communities Program
BRT – Bus Rapid Transit
CBDG – Community Development Block Grant
CEQA – California Environmental Quality Act
DOT – Department of Transportation
EFID – Enhanced Infrastructure Financing District
EIR – Environmental Impact Review
FAR – Floor Area Ratio
GHG – Greenhouse gas
HQTAs – High Quality Transit Areas
LARC – Los Angeles Regional Collaborative
LEED – Leadership in Energy and Environmental Design
LEED-ND – Leadership in Energy and Environmental Design for Neighborhood Development
MPO – Metropolitan Planning Organization
NMA – Neighborhood Mobility Area
PBID – Property-Based Business Improvement District
PUD – Planned Unit Development
RTP – Regional Transportation Plan
SCAG – Southern California Association of Governments
SCS – Sustainable Communities Strategy
SGVEWP – San Gabriel Valley Energy Wise Partnership
SoCalGas – Southern California Gas Company
TOD – Transit Oriented Development
TPA – Transit Priority Area
VMT – Vehicle miles travelled
EXECUTIVE SUMMARY

The primary goal of this report is to provide utility managers in California with a brief overview of transit-oriented development (TOD) in Los Angeles (LA) and opportunities for promoting sustainable, energy-efficient building practices in future development. TOD is a planning approach that coordinates land-use development, transit planning, urban design, and pedestrian infrastructure to create compact, walkable, mixed-use neighborhoods. By connecting neighborhoods with community and employment centers through a network of pedestrian, bicycle, transit, and roadway facilities, TOD reduces automobile dependence, traffic congestion, air pollution, and greenhouse gas emissions.

Successful TOD requires an integrated approach to transit and land-use planning. This is made possible through strategic partnerships among the many different entities that have shared interests in promoting TOD to help meet the State’s aggressive energy and climate goals. This report will explore opportunities for utilities to partner with these entities to further leverage local assets in TOD districts and improve the sustainability of the built environment in LA.

Significant Findings

Even once the stage is set for TOD through planning and zoning policies, the market forces driving actual development are unpredictable and vary from place to place. These factors make it difficult to target TOD developments through traditional downstream utility incentive programs. It may be more effective for utilities to work upstream, with planners and policy-makers, to influence the land-use regulations and incentives that will shape all future development.

Utility energy program interests align, at a high level, with planners and policy-makers around promoting a sustainable, resource-efficient built environment in TOD districts. However, this alignment is not without conflicting priorities, as specific building practices are often beyond the purview of planning officials, who are generally focused on the shape and form of land-use rather than building energy performance. TOD policies and programs in LA County that do address sustainable building only do so at a high level. This presents an opportunity for utility programs to help shape the design and implementation of sustainable building standards and to leverage program funding to help promote transit-oriented development in LA County.

LA County municipalities are engaged in ongoing discussions with transit and planning officials about Measure M transit projects and some are actively drafting or updating Planning documents. Planners, policy-makers and community stakeholders could benefit from guidance and technical assistance in designing and implementing sustainable building provisions in TOD districts. These planning processes offer a window of opportunity for utilities to offer targeted outreach and incentives to influence sustainable building in future transit-oriented development in LA County.
Organization of the Report
The report is organized into the following sections:

- **SECTION 1: Introduction** provides a description of the intended audience and goal of the report and a brief overview of TOD.
- **SECTION 2: Transit-Oriented Development in LA County** provides an overview of the key stakeholders and policy, planning, and program drivers of TOD in LA County.
- **SECTION 3: Utility Program Opportunities** provides a summary of general opportunities for utility sustainability programs to leverage program funding to help promote TOD in LA County.
- **SECTION 4: Measure M Transit Project Case Studies** provides an overview of two upcoming transit projects funded by Measure M. This section also provides an assessment of current TOD and sustainable building policies in the cities along these transit corridors where future TOD opportunities will occur.
- **SECTION 5: Recommendations for SoCalGas** integrates the most promising near-term program design and implementation strategies for targeting TOD.
SECTION 1: Introduction

The primary goal of this report is to provide utility managers in California with a brief overview of transit-oriented development (TOD) in Los Angeles (LA) and opportunities for promoting sustainable building practices in future development. Successful TOD requires an integrated approach to transit and land-use planning. This is made possible through strategic partnerships among the many different entities that have shared interests in promoting TOD to help meet the State’s aggressive energy and climate goals. This report will explore opportunities for utilities to partner with these entities to further leverage local assets in TOD districts and improve the sustainability of the built environment in LA.

Overview of Transit-Oriented Development

Traditional suburban development is characterized by low-density, large lot, single-use development connected by networks of streets designed primarily to accommodate automobile traffic. TOD is a planning approach that coordinates land-use development, transit planning, urban design, and pedestrian infrastructure to create compact, walkable, mixed-use neighborhoods. TOD accomplishes this through zoning regulations and incentives that cluster high-density, mixed-use business and neighborhoods within walking distance of transit stations.

By connecting neighborhoods with community and employment centers through a network of pedestrian, bicycle, transit, and roadway facilities, TOD reduces automobile dependence, traffic congestion, air pollution and greenhouse gas emissions. Figure 1 illustrates an example of TOD from a recent proposal for the North Hollywood transit station.

The Southern California Council of Government suggests six key principles of TOD:

1. **Diversity/Compact Mix of Land Uses**: A mix of land uses located within close proximity to transit, preferably accessible by foot or a short transit trip.
2. **Density**: A higher concentration of infrastructure and amenities, and a compact built environment that allows more workers and residents to live near transit.
3. **Design**: High quality public spaces and buildings that create a sense of place, foster community, and promote economic development.
4. **Distance to Transit**: Development is ideally within a 10-minute walk to/from transit.

![Figure 1. North Hollywood Station TOD Proposal](source: Metro Los Angeles)
5. **Destination Accessibility**: Proximity to transit-supportive retail, jobs, and institutions that allow people to meet daily needs without the use of a car.

6. **Parking**: Reduced parking supply for residents, workers, and customers and coordinated, district-wide parking solutions for the station area.¹

### Barriers to Sustainable Building Practices In TOD

The primary focus of this report is to understand opportunities to improve the sustainability of the built environment in transit-oriented developments. Below are some key barriers to sustainable building practices in TOD that need to be addressed through program or policy mechanisms:

- **Competing Priorities**: Most TOD policies and regulations are primarily concerned with the location, use, mobility and aesthetic characteristics of buildings. As a result, planning and zoning tools like urban design or building standards generally do not address building practices or performance. In LA County building practices fall under the purview of the Department of Public Works, which coordinates with the planning department during the development process. While additional standards can be added to urban design guidelines, planners and city officials must consider the cost and complexity to administer additional regulations.

- **Lack of Specificity**: Where planning documents do address building practices, they often lack specificity. For instance, the Southwest LA TOD Specific Plan requires that “buildings and development projects within the Specific Plan area shall be designed and constructed using sustainable, energy efficient materials and incorporate strategies for the conservation of water, energy, and other natural resources.”² This is an excellent policy but leaves the details of implementation open to interpretation. There may be opportunities to influence the adoption of specific cost-effective prescriptive strategies.

- **Baseline Shift**: Most redevelopment projects in TOD areas would have to comply with the California Energy Code (Title 24) requirements for Additions, Alterations, Repairs or Replacement, especially for changes of use. This increases the baseline building specifications against which utility energy efficiency projects would be evaluated for cost-effectiveness. The Title 24 requirements are stringent enough to reduce cost-effective above-code energy efficiency investment opportunities.

- **Development Timelines**: TOD development is unpredictable, disbursed and may take a long time. While there are numerous TOD districts, market and regulatory forces determine where and when development will actually occur, making it difficult for a program to prioritize outreach activities.


- **Custom Approach:** Each transit station area is unique, making it difficult to apply a prescriptive program approach.
SECTION 2: Transit-Oriented Development in LA County
This section provides a brief overview of the key stakeholders, policies, and procedures relevant for utility managers in gaining a basic understanding of TOD in LA County.

Key Stakeholders
Figure 2 illustrates the various types of agencies and stakeholders that shape TOD policies and projects in LA County.

Figure 2. Key Stakeholder Groups

Policy Drivers
The following section provides a brief overview of some of the key policy and regulatory mechanisms that direct or incentivize TOD in LA.

Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008): Sets regional targets for GHG emissions reductions from passenger vehicle use, to be implemented by the metropolitan planning organizations (MPO). Each MPO must prepare a "sustainable
communities strategy” (SCS) as an integral part of its regional transportation plan (RTP).3

2016-2040 Regional Transportation Plan / Sustainable Communities Strategy4: The RTP/SCS, adopted in 2016 by the Southern California Council of Governments (SCAG), guides land use strategies and policies for local agencies to achieve State-mandated vehicle miles travelled (VMT) and greenhouse gas (GHG) emissions reductions. The RTP calls for focusing growth around the following:

- **High Quality Transit Areas (HQTAs):** Areas within one-half mile of a fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes or less during peak commuting hours.
- **Livable Corridors:** Arterial roadways where jurisdictions may plan for a combination of the following elements: high-quality bus frequency; higher density residential and employment at key intersections; and increased active transportation through dedicated bikeways.
- **Neighborhood Mobility Areas (NMAs):** Complete Streets approach to roadway improvements to improve active transportation options and provide sustainable transportation options.

**California Environmental Quality Act (CEQA):** CEQA established procedures for evaluating the environmental effects of proposed development projects. Environmental effects for each development project are evaluated through an Environmental Impact Review (EIR). To encourage growth around transit, some TOD projects are exempt from certain CEQA requirements when located within a Transit Priority Area (TPA). In these areas an EIR can be conducted in advance for a station area or a group of station areas to expedite the approval process for ensuing developments.5

**Measure M:** Measure M is a half-cent sales tax for LA that took effect in 2016 (after the expiration of Measure R) to finance new transportation projects and programs, and accelerate those already in the pipeline. Seventeen percent of the funds generated through the tax annually will go to municipalities for local transportation projects to ease traffic congestion through transit and transportation infrastructure projects.6

**TOD Planning Tools**
The primary mechanism for implementing TOD policies is through land-use zoning regulations and incentives. The key features of TOD zoning include:

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3 California Air Resources Board. https://www.arb.ca.gov/cc/sb375/sb375.htm
5 Governor’s Office of Planning and Research. http://www.opr.ca.gov/ceqa/updates/sb-743/
• **Minimum Densities:** The purpose of establishing minimum densities in zoning is to ensure a sufficient level of development occurs to support transit use, walkability, local retail or other goals. TOD zoning ordinances establish a minimum density per unit or floor area ratio (FAR) as opposed to maximum densities found in traditional zoning districts.

• **Mixed-use:** A zoning district allows a combination of residential, commercial, and institutional uses.

• **Fast-track Development Review:** One of the primary incentives for TOD developers is an expedited project review and approval process. TOD Specific Plans often include provisions for receiving building permits for complying TOD projects without a discretionary review, or with a reduced review process.

Municipalities in LA County may choose to implement TOD zoning regulations through various zoning tools, described briefly below. LA Metro’s Transit Supportive Planning Toolkit provides an excellent summary of these and other zoning tools, along with case studies from LA County, for further reading.

Figure 3 below illustrates the relationship between the various planning tools outlined in this section.

**Figure 3. Overview of Planning Tools**

| General Plan | Provides city-wide vision and framework for growth; may establish high-priority TOD Districts and policy guidelines. |
| Corridor Plan | Coordinates policy and development guidelines across multiple transit stations or stops. |
| Zoning Ordinance | Divides or zones land area by permitted use (residential, commercial) and establishes rates of development within each zone (i.e. intensity design). May include overlay zones that specify additional zoning guidelines for specific areas, such as TOD districts. |
| Specific Plan | Provides details for implementing the General Plan for specific areas of the city, such as TOD districts. |

**Development Review Process**

- Planning & Zoning Approval
- CEQA (Environmental Impact Review)
- Permitting
- Construction

**Source:** California Sustainability Alliance

**Municipal General Plans:** Each city and county in California is required to prepare a comprehensive, long-term General Plan, which outlines the city’s vision for growth and establishes broad policy guidelines for land use development. The General Plan also defines the boundaries of special land-use designations like TOD Districts, with general guidelines for development within those districts. The City of LA General Plan states a
goal that transit stations should function as a primary focal point of the City’s development. Within these areas, the highest development intensities are targeted generally within one quarter mile of the transit stations. A mix of commercial/residential uses, neighborhood-oriented retail, employment opportunities, and civic and quasi-public uses will be focused around urban transit stations, while protecting and preserving surrounding low-density neighborhoods from the encroachment of incompatible land uses.7

Community Plans: The City of Los Angeles General Plan is further composed of 35 Community Plans that define the details of specific land use policies and programs within each community’s boundary. These Community Plans also include Specific Plans that detail land use guidelines pertaining to specific areas within each community.

TOD Specific Plan: A Specific Plan is a more detailed plan for implementing certain parts of the General Plan within a particular area of the city. A specific plan may be as general as setting forth broad policy concepts, or as detailed as providing direction to every facet of development from the type, location, intensity, and design standards of uses to the financing, design and capacity of infrastructure.8 Each of the 11 TOD Districts established in the LA General Plan are required to create a TOD Specific Plan (or similar) defining zoning, design and capital improvement guidelines for the TOD District. Specific Plans are developed by the municipalities themselves, with the assistance of Metropolitan Planning Organizations and LA Metro, through its Planning Grant Program. Each Specific Plan addresses safety, connectivity, and pedestrian improvements. In addition, the specific plans identify incentive mechanisms to increase density.

TOD Overlay Zoning Districts: An Overlay Zone is a special zoning district that places additional regulations over the underlying base zone. Regulations or incentives are attached to the overlay district to encourage particular types of development within a special area. The overlay may allow for different uses or higher density, and can also be used to stimulate new development near transit by reducing development requirements (such as parking standards, setbacks, etc.).9

TOD Corridor Plans: Corridor Plans coordinate development policies across multiple transit stations or stops.

TOD Building Standards and Design Guidelines: TOD Building Standards and Design Guidelines regulate the site and building design. These guidelines often regulate building orientation, traffic and parking requirements, open space, pedestrian infrastructure, architectural design and building components.

7 LA Department of City Planning. https://planning.lacity.org/cwd/framwk/chapters/03/03210.htm
TOD Incentive Zoning: Incentive zoning is a regulatory tool for encouraging and stimulating TOD by offering developers regulatory allowances near transit areas. One of the most common types of incentive zoning is a density bonus for meeting certain conditions in TOD areas.

Program Drivers
There are numerous government and LA Metro programs that incentivize TOD in LA County. This section provides a brief summary of some these key program drivers.

LA Department of City Planning Transit Oriented Communities Affordable Housing Incentive Program: The Program offers incentives to encourage mixed-income housing within a half-mile radius of transit stations. The TOC program incentives are available to developers who provide at least 38% more affordable housing than is currently required under the City’s existing density bonus program.10

Affordable Housing and Sustainable Communities Program (AHSC): The AHSC Program funds land-use, housing, transportation, and land preservation projects to support infill and compact development that reduce greenhouse gas emissions. The AHSC Program provides grants and/or loans to TOD Project Areas (among others) which are designed to reduce VMT or mode shift from SOV use to transit, bicycling, or walking.11

Local Development/Improvement Districts: Local funding mechanisms rely on the creation of districts that generate revenue from local businesses, property owners, or new development. Improvement Districts provide a funding mechanism whereby benefits accruing to privately owned land from a public capital improvement are recouped in order to assist in paying for the improvement. These include community development block grants (CDBG), infrastructure finance districts, business improvement districts, and property-based business improvement districts (PBIDs).

Metro Joint Development Program: A real estate development program through which Metro collaborates with qualified developers to build TODs on Metro-owned properties. Joint development usually occurs through a competitive solicitation issued by the Joint Development Team. Metro issues specific TOD design and development standards for Joint Development projects, one of which is that all buildings must be Leadership in Energy and Environmental Design (LEED) certified. As an incentive for affordable housing, Metro discounts the land value of joint development sites by up to 30% of market value.12

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11 CA Department of Housing and Community Development. http://www.hcd.ca.gov/grants-funding/active-funding/ahsc.shtml
**Metro TOD Planning Grant Program:** The TOD Planning Grant Program is designed to spur the adoption of local land use regulations that are supportive of TOD in LA County. The objectives of the program are to increase access to transit by assisting local governments to accelerate the adoption of TOD regulatory frameworks; to improve the transit network and increase utilization of public transit by reducing the number of modes of transportation necessary to access regional and local transit; to further the reduction of greenhouse gases through encouraging in-fill development along transit corridors and transit use; and to support and implement sustainable development principles.13

**Metro First/Last Mile Program:** The First/Last Mile Program promotes active transportation on pedestrian pathways along heavily traveled routes surrounding transit stations. The pathways are intended to improve and shorten the time it takes to access transit, and facilitate transfers between modes (e.g., car, bike, bus, rail).14

**Southern California Council of Government Planning Grant Program:** The Sustainability Planning Grant Program (formerly known as Compass Blueprint Grant Program) was established as an innovative vehicle for promoting local jurisdictional efforts to test local planning tools. The Program provides direct technical assistance to SCAG member jurisdictions to complete planning and policy efforts that enable implementation of the regional SCS.15

**Southern California Council of Government High-Quality Transit Area Analysis Project:** Working with a consultant team, SCAG will partner with up to five pilot project sites to develop HQTA Vision Plans. The Vision Plans will identify active transportation improvements, redevelopment strategies, and implementation plans that will enable communities to take full advantage of the transit investment, and tap into regional and state funding opportunities and technical support. The overall goal will be to develop plans that reduce GHG emissions and VMTs.16

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13 La Metro. https://www.metro.net/projects/tod/
16 SCAG HQTAn Analysis Project. http://sustain.scag.ca.gov/Pages/HQTA.aspx
SECTION 3: Overview of Utility Program Opportunities in TOD

Utility energy efficiency program interests align at a high level with other TOD stakeholders around promoting a sustainable, resource-efficient built environment. However, this alignment is not without conflicting interests as specific building practices are often beyond the purview of planning officials, who are focused on the shape and form of land-use rather than building energy performance. TOD policies and programs in LA County that do address sustainable building only do so at a high level. This presents an opportunity for utility programs to help shape the design and implementation of sustainable building standards and to leverage program funding to help promote TOD in LA County. The following section presents an overview of potential utility program opportunities in LA County TOD.

Education and Outreach: Municipalities are engaged in ongoing discussions with transit and planning officials about Measure M transit projects and some are actively drafting or updating planning documents. Planners, policy-makers, and community stakeholders could benefit from guidance and technical assistance in designing and implementing sustainable building provisions in TOD districts. Planning processes offer a targeted window of opportunity to influence future development upstream of building design and development. Model sustainable building guidelines would be of particular benefit, with examples of policy language, and information on cost/benefits, best-practices, and GHG emissions reduction impacts.

Ensuring affordable housing is a key priority for many TOD policies and programs and energy efficient buildings are less expensive to operate, which presents another area where utility objectives align with policy-makers. Utility program outreach would be beneficial in addressing the conflict between affordable housing and sustainable building standards that arises out of the perception of green building practices as expensive.

Sustainable Building Standards in TOD Plans: LA County municipalities vary widely in the degree to which they are planning for TOD and/or sustainable building. Some cities, like La Verne, are pursuing LEED-ND certification for all TOD projects near future transit areas, while others are only now beginning to plan for future transit-oriented growth related to Measure M projects. Municipal officials may be reluctant to require or endorse specific building practices, which is generally beyond the purview of urban planning. However, there may be opportunities for utility experts to influence the adoption of sustainable building standards (e.g., LEED or Green Globes) in TOD districts. There are immediate opportunities to engage with cities who are in the process of conducting visioning, planning, and stakeholder outreach in anticipation of Measure M transit projects. These cities include Glendale, Burbank, San Dimas, and La Verne. In
addition, the LA Department of City Planning is conducting a series of open houses to share zoning and land-use concepts for five transit neighborhoods along the Orange Line. These meetings may present an opportunity for utilities to engage, especially if a similar series is conducted with other Measure M Project Corridor Cities.

**LEED for Neighborhood Development (LEED-ND):** The LEED-ND rating system is particularly well-suited for promoting sustainability in large scale, mixed-use TOD projects. It contains guidelines for green buildings as well as urban design and transportation elements, and offers points for mixed-uses, proximity to transit and jobs, walkable streets, redeveloping brownfields, and other TOD priorities. Utilities could provide guidance to cities in drafting plan or ordinance language to incorporate LEED-ND guidelines for TOD projects. LEED-ND guidelines could be adopted in part or in whole. More research is needed to quantify the benefits of LEED-ND compared to the baseline Green Building Code, which is already roughly equivalent to LEED Silver. The LEED-ND standard may need to be tailored to the LA market.

**Above-Code Building Standards:** An alternative to adopting specific green building standards would be to adopt more stringent local codes beyond Title 24. The City of Glendale requires new construction to exceed Title 24 requirements by 15%. Utility program expertise would be valuable in identifying cost-effective above-code provisions for TOD redevelopment projects that could be incorporated into TOD Specific Plans or zoning ordinances.

**Sustainable Building Incentives in TOD Plans:** TOD districts rely on regulatory incentives such as density bonuses and expedited permitting to attract developers and implement policy objectives. Utilities could work with city officials to develop similar incentives for sustainable building. For instance, the City of Glendale allows a density bonus of three stories within the Downtown Specific Plan area for LEED certification.18

**Energy Efficiency Investment in lieu of Non-Conforming Use Building Upgrades:** Another potential regulatory incentive would be to allow alternative compliance options for non-conforming use building upgrades. Non-conforming use, in this case, refers to a use of property allowed under previous zoning regulations that is no longer allowed in the new TOD zoning district. The City of Portland, for example, allows developers to invest in energy efficiency improvements in lieu of non-conforming use site upgrades.19 These energy efficiency improvements are often eligible for utility incentives. Newly

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17 https://gallery.mailchimp.com/ef9aa08be649a04a3133e8e73/files/86b44392-ec9e-4c16-874d-9f80ecf99389/WorkshopMailer_OrangeLine_WEB_2_.pdf?utm_source=Orange+Line+TNP+Fall+2017+Workshops&utm_campaign=e4a244b671-EMAIL_CAMPAIGN_2017_10_11&utm_medium=email&utm_term=0_c004d6d5ed-e4a244b671-236243997
18 Glendale Downtown Specific Plan, pg. 7-6.
designated TOD districts in LA County, especially around transit areas, often contain older, potentially non-conforming industrial uses. Owners of these buildings could pursue adaptive reuse opportunities for those older industrial buildings, but would be required to meet the building design standards (e.g., façade improvements) established for the new TOD district. Utilities could work with municipal officials to develop zoning or Specific Plan amendments that would allow energy efficiency improvements in lieu of certain non-conforming use building upgrades in TOD districts.

**Incentives and Financing for Developers:** Adaptive re-use and major renovations to existing buildings in TOD districts would need to comply with Title 24, which would raise the baseline and decrease the cost-effectiveness of many energy efficiency improvements (as discussed in Section 1). However, there are still likely to be cost-effective improvements or packages of improvements, especially when including non-energy benefits. Utilities could offer a program of incentives, financing, and technical assistance specifically targeted to TOD developers, in partnership with the MPOs and city planning officials to identify potential program participants.

**Engage Local Collaboratives:** There are many organizations who have existing relationships with city officials and other stakeholders. The San Gabriel Valley Energy Wise Partnership (SGVEWP) and the Los Angeles Regional Collaborative (LARC) are two examples of organizations that could be engaged to deliver energy efficiency outreach and advocacy. This will be essential for the success of downstream programs. These organizations could enable program staff to stay aware of individual TOD developments and proactively reach out to developers during the critical project design phases.

**Collaborate on Metro Joint Development Projects:** Metro requires that all buildings in Joint Development projects be LEED Silver certified. However, there may be opportunities to make additional recommendations for Metro to include in their sustainable development requirements, or to provide technical support. One opportunity would be to provide incentives and technical assistance to developers for pursuing LEED-ND certification.

**Collaborate with SCAG:** SCAG administers the Strategic Growth Council-Sustainable Communities Planning Grants, used to develop General and Specific Plans. Utilities may find opportunities to engage with SCAG to influence building sustainability provisions in future TOD Plan updates. SCAG will soon select recipients of its High-Quality Transit Area Vision Plan grant program, which could offer a near-term opportunity to engage with key municipal planning processes in selected cities.

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**Streetscape Lighting Improvements**: Streetscape improvements around transit stations are essential to improving ridership. Utility energy efficiency programs could provide incentives and/or design assistance for energy efficient street and sidewalk lighting.

**Energy Benchmarking**: Utilities could help develop energy performance metrics or tools like EPA’s Portfolio Benchmarking to demonstrate that mixed-use, high density TOD projects use less energy at the neighborhood scale. This research could help make the case for more widespread adoption of sustainable building standards like LEED-ND in TOD.
SECTION 4: Measure M Transit Project Case Studies

Transit system construction and improvement projects represent a key window of opportunity for influencing TOD. Measure M project funding will create new transit stations and redevelop pedestrian infrastructure in first/last mile areas. These projects will stimulate community planning and visioning processes as cities re-imagine development around transit stations. The following section profiles two such Measure M transit projects, including the status of current TOD policies and opportunities for utility sustainability program involvement.

Metro Orange Line Bus Rapid Transit Extension

The North Hollywood to Pasadena Bus Rapid Transit (BRT) extension is one of roughly twenty transit projects slated in the LA County Traffic Improvement Plan that will receive Measure M funding. The project will add a dedicated BRT lane and premium bus service to reduce travel times and attract ridership, as depicted in Figure 4 below.

The North Hollywood to Pasadena Corridor is a highly populated area that gets more than 700,000 vehicle trips per day, making it LA County’s most heavily traveled corridor without a premium bus service. The Corridor is currently served by the Metro Express Line 501 and the LA Department of Transportation (DOT) Commuter Express 549. However, these bus routes have seen low ridership because they do not provide convenient access to key activity centers or offer competitive travel times to the automobile.22

**Route:** The project will extend the Orange Line 15.3 miles from its current terminus at the North Hollywood Station to the Del Mar Station in Pasadena, where it will meet the Gold Line Rail service. The proposed BRT project will provide faster, more reliable service connecting between 10-20 BRT stations in Burbank, Glendale and Pasadena. Figure 5 illustrates one of two proposed routes for the BRT project.

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Timeline
The project is slated to break ground in 2020 and open for ridership in 2022.23

Current TOD Policies
Table 1 below presents the current status of TOD-related policies in each of the Orange Line BRT Extension Corridor cities.

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Table 1. Orange Line Extension Corridor City TOD Policies

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<thead>
<tr>
<th>TOD Policy / Program</th>
<th>North Hollywood to Pasadena Corridor Cities</th>
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<tbody>
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<td></td>
<td>LA</td>
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<tr>
<td>TOD-Supportive General Plan</td>
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<tr>
<td>Density Bonus for Green Buildings</td>
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</tbody>
</table>

Source: California Sustainability Alliance

Los Angeles: The LA General Plan identifies eleven TOD districts, each of which has a TOD Specific Plan. However, none of these districts are along the Orange Line Extension project. The City’s Transit Oriented Communities Affordable Housing Incentive Program does identify numerous TOD overlay districts that are eligible along the project route, which are indicated by the blue circles in Figure 6 below. TODs in these areas receive substantial density bonuses, parking and open space reductions, and siting design allowances for meeting affordable housing requirements, which are likely to shape TOD in these areas.

- **Opportunities for SoCalGas:** In LA, regulatory incentives (density bonuses and site design allowances) are already well established, though mostly directed towards affordable housing. Work with LA officials to explore the possibility of further tying these regulatory incentives to a requirement for meeting LEED-ND or similar standards for TODs.

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North Hollywood Joint Development: LA Metro’s Orange Line BRT Sustainable Corridor Implementation Plan identified North Hollywood as a key area with potential for significant new TOD along major corridors.\(^34\) In fact, Metro is currently planning a TOD around the North Hollywood Station through its Joint Development program. Metro conducted a series of focus groups, community workshops, and open house meetings in 2016 to gather public input on the project. These meetings resulted in a Guide for Development for the site, which requires LEED Silver certification for all buildings.\(^35\) The project will entail between 750 and 1,500 housing units and up to 450,000 square feet of retail and office space.\(^36\)

- **Opportunities for SoCalGas:** Work with Metro to explore opportunities for sponsoring LEED-ND in current and future Joint Development projects.

Glendale: In anticipation of infill and redevelopment resulting from the Orange Line BRT Extension, Glendale is in the process of revising the South Glendale Community Plan, through which the Orange Line is expected to pass.\(^37\) Glendale has recently adopted TOD zoning standards for the Tropico Transit Area.\(^38\) The City of Glendale currently offers a LEED Density Bonus in the Downtown Specific Plan and requires all new construction to be 15% better than code.

- **Opportunities for SoCalGas:** Work with Glendale officials during the Community Plan revision process to explore additional regulatory incentives or alternative compliance options for LEED-ND certification around transit areas.

Pasadena: Pasadena’s goal is to concentrate mixed-use transit-oriented development and redevelopment of underutilized industrial areas around the Fillmore Metro Gold Line Station on South Fair Oaks Avenue. The Central District is served by three Gold Line stations and is zoned to allow mixed-use, higher density, transit-oriented development.

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\(^{34}\) Orange Line Bus Rapid Transit Sustainable Corridor Implementation Plan. 2012. Pg. 25.


\(^{38}\) City of Glendale. http://www.glendaleca.gov/home/showdocument?id=32999
Opportunities for SoCalGas: Work with Pasadena officials to explore regulatory incentives for LEED-ND near transit stations. The underutilized industrial areas in Pasadena may present opportunities for utility-supported energy efficiency investments as an alternative compliance option for non-conforming use building upgrades. SoCalGas would need to work with Pasadena to develop amendments to the municipal code allowing energy efficiency investment as an alternative compliance option.

Burbank: The City of Burbank’s recently updated General Plan (“Burbank2035”) contains numerous policies and incentives supporting TOD and energy efficiency. The Municipal Code requires Planned Unit Developments (PUD) to be “designed, placed, and oriented in a manner conducive to the conservation of energy” and requires a specific description of the conservation techniques to be included in permit applications. It is likely that some TOD around transit stations will fall under these zoning regulations. SCAG is currently in the process of working with Burbank to revise its Mixed-Use Development Standards for the Media District, which is along the expected Orange Line expansion corridor. They have several community workshops and Planning Board visioning sessions planned for 2017-2018.

Opportunities for SoCalGas: Work with Burbank to further define the requirements for energy conservation in PUDs. For instance, offer a package of utility incentives, fee reductions and simplified permitting requirements for LEED-ND as an option for meeting conservation requirements.

Metro Foothill Gold Line Rail Extension

Overview: This Measure M funded project will extend the Metro Foothill Gold Line light rail 12.3 miles through new stations in the cities of Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair.

Route: The project will extend the Gold Line 12 miles from its current terminus in Azusa to the Montclair Station. Figure 7 below illustrates the Foothills Gold Line rail extension route.

Timeline: The Metro Gold Line Foothill Extension Construction Authority anticipates breaking ground on the Glendora to Montclair project in December 2017, with completion in early 2026.42

Current TOD Design Guidelines: Table 2 below presents the current status of TOD-related policies in each of the Foothill Gold Line Extension Corridor cities.
Table 2. Foothill Gold Line Extension Corridor City TOD Policies

<table>
<thead>
<tr>
<th>TOD Policy / Program</th>
<th>Foothill Gold Line Extension Corridor Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Glendora</td>
</tr>
<tr>
<td>TOD-Supportive General Plan</td>
<td>X</td>
</tr>
<tr>
<td>TOD Specific Plan</td>
<td>X</td>
</tr>
<tr>
<td>TOD Zoning Districts</td>
<td>X</td>
</tr>
<tr>
<td>TOD Incentive Zoning</td>
<td>X</td>
</tr>
<tr>
<td>Above-Code Building Standards</td>
<td>X</td>
</tr>
<tr>
<td>Mixed-Use Zoning in Transit Areas</td>
<td>X</td>
</tr>
<tr>
<td>TOD Infrastructure Financing Dist.</td>
<td>X</td>
</tr>
<tr>
<td>Density Bonus for TOD</td>
<td>X</td>
</tr>
<tr>
<td>Density Bonus for Green Buildings</td>
<td></td>
</tr>
</tbody>
</table>

Source: California Sustainability Alliance

**Glendora:** Glendora has not undertaken recent updates to planning documents to address the Gold Line Extension or provide for TOD.

- **Opportunities for SoCalGas:** Work with Glendora to determine plan revision timelines or opportunities to amend existing plans to incorporate sustainability-related provisions for TOD around the future Gold Line transit station.

**San Dimas:** San Dimas has rezoned the area surrounding the future Gold Line transit station to allow for TOD, prioritizing the provision of affordable housing. The City will likely revise its Specific Plan in the near future and has pursued funding from the SCAG to do so.

- **Opportunities for SoCalGas:** Work with Glendale officials during the Specific Planning process to explore additional regulatory or utility incentives for LEED-ND certified TOD around the transit station.

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44 City of Montclair General Plan. https://www.cityofmontclair.org/home/showdocument?id=5290
La Verne: La Verne is currently conducting visioning workshops for its general plan update. In 2013, La Verne created a Specific Plan for its Old Town, which is intended to facilitate TOD around the Gold Line transit station, once built. The Specific Plan provides a detailed sustainability approach that calls for LEED-ND certification. La Verne used the LEED-ND guidelines to frame their Specific Plan and conducted a preliminary analysis to ensure the Plan sufficiently addresses certification requirements. La Verne also created an Enhanced Infrastructure Financing District (EIFD) provides infrastructure funding for aesthetic improvements, connectivity, and utility capacity to facilitate TOD within walking distance of La Verne’s anticipated Gold Line transit station.

- **Opportunities for SoCalGas:** Work with La Verne officials to monitor development projects around the transit station and offer incentives and/or technical support to ensure projects actually meet LEED-ND standards and achieve certification.

Pomona: The City of Pomona recently completed a General Plan update that focuses on strategic infill development and land re-use. The Plan designated six separate TOD districts along the City’s future transit corridors. The Monterey Station infill redevelopment TOD was recently completed across from the Metrolink Station. In 2012 Pomona completed an Energy Action Plan detailing energy efficiency strategies, funded by Southern California Edison’s Local Government Strategic Plan Strategies Program.

- **Opportunities for SoCalGas:** Work with Pomona officials to explore utility and/or regulatory incentives, fee reductions and simplified permitting requirements for LEED-ND. Infill development and land re-use in Pomona may present opportunities for utility-supported energy efficiency investments as an alternative compliance option for non-conforming use building upgrades.

Claremont: The City of Claremont requires all non-residential new construction greater than 20,000 square feet to meet LEED standards.

- **Opportunities for SoCalGas:** Work with Glendora to determine plan revision timelines or opportunities to amend existing plans to incorporate additional sustainability-related provisions for TOD around the future Gold Line transit station.

Montclair: Montclair’s Downtown Specific Plan calls for TOD around the North Montclair Town Center, near the Metrolink/Gold Line transit station, though mainly focused on housing development.

- **Opportunities for SoCalGas:** Work with Montclair to determine plan revision timelines or opportunities to amend existing plans to incorporate additional sustainability-related provisions for TOD around the future Gold Line transit station.

SECTION 5: Recommendations for SoCalGas

The Orange Line extension will not be completed until 2022, and the Gold Line extension will not be complete until 2026. However, municipalities along the extension corridors are actively drafting or revising planning and development policies in anticipation of increased development around the new transit stations. These planning processes offer a window of opportunity for SoCalGas to offer targeted, upstream outreach and incentives to influence sustainable building in future transit-oriented development in LA County. As actual development around transit stations begins to increase, SoCalGas should also offer downstream incentives for developers for meeting sustainable building standards such as LEED-ND. The following section synthesizes the most promising opportunities for SoCalGas identified in Section 4 into a recommended program design and implementation strategy for targeting transit-oriented development around Measure M projects.

Recommended TOD Program Implementation Strategy

This section outlines a strategic program implementation approach for capturing opportunities identified in Section 4 in Orange and Gold Line extension corridor cities. This information is meant to provide an initial “straw-man” scenario for implementing a sustainability program.

1. **Collaborate to Accelerate Market Entry:** To accelerate the program’s market entry and reduce the ramp-up period, SoCalGas should explore collaboration and partnership opportunities with key regional organizations like SCAG and LA Metro, who have complementary goals for promoting sustainability in TOD. They are currently implementing TOD programs (e.g. Joint Development) that SoCalGas should coordinate with to identify synergies and minimize redundancy. SoCalGas can benefit from their knowledge of market conditions and the policy landscape to refine the initial program design and accelerate market entry. This is especially important for downstream incentives, whose success may rely on gaining awareness of individual TOD development projects to proactively reach out to developers during the critical project design phases. These agencies could also help to prioritize Measure M project cities for outreach, based on which cities would be most receptive to working with SoCalGas.

2. **Develop Initial Program Design and Market Strategy:** For an initial program offering, SoCalGas should first target upstream market actors like planners and municipal officials in Measure M cities. The program’s value proposition for a TOD program should include a combination of regulatory and/or utility incentives, technical support, outreach and education. These program offerings will likely need to be customized for each city, though LEED-ND offers a comprehensive, prescriptive standard that could be adapted for regulatory or utility incentives across most municipalities. The next section presents a
suggested program design as a starting point, based on this research. However, there are numerous potentially viable program designs that could effectively influence building practices in TOD. It was beyond the scope of this report to conduct the market research needed to arrive at the best approach, and there are few best-practices to cite for this hard-to-reach market.

3. **Conduct Outreach with Key Planning Officials:** Once the program offering has been refined, potentially through a pilot program, SoCalGas should begin to engage with government and planning officials and stakeholders in high-priority municipalities. These priority areas will likely include Measure M project cities, such as Glendale, Burbank, San Dimas and La Verne, who are actively conducting visioning, planning and stakeholder outreach processes in anticipation of Measure M transit projects. Initial outreach will raise awareness of the program and offer technical input during plan development processes to influence the adoption of regulatory guidelines and incentives for sustainable building in TOD districts. This outreach could be conducted by SoCalGas program staff or through partnering organizations if opportunities arise.

4. **Develop Additional Tools and Marketing Collateral:** After initial program launch, SoCalGas could begin developing additional tools and marketing collateral to support the outreach process. The goal of this effort would be to raise awareness of the program offering among the municipal officials and upstream market actors who work directly with developers. These officials could be instrumental in promoting a downstream incentive program to potential participants during the development process.

One example is model sustainable building guidelines for inclusion in the Alliance Green General Plan Toolkit, including examples of policy language, with information on costs and benefits, best practices, and greenhouse gas emissions reduction impacts. This will take time to develop and should be conducted in stages, to allow partial roll-out of materials needed in program ramp-up.

Additionally, SoCalGas could help develop energy performance metrics or tools like EPA’s Portfolio Benchmarking to demonstrate that mixed-use, high density TOD projects use less energy at the neighborhood scale. This research could help make the case for more widespread adoption of sustainable building standards like LEED-ND in TOD. Metro and SCAG are working to develop performance metrics for monitoring progress towards key sustainability goals around land-use change and new growth. These metrics will be reported in the Sustainability Annual Report as part of Metro’s Countywide Sustainability Planning Policy.
Consider working with Metro and SCAG to provide data for tracking of energy consumption performance metrics in TOD districts.53

5. **Refine and Expand Offering to Other Measure M Project Cities.** Measure M projects are phased for completion over the next forty years. The Orange and Gold Line extension projects offer near term opportunities for testing and refining a program approach that could be offered in future Measure M projects as well.

### Recommended TOD Program Design

The following section presents an initial recommended TOD program design. This information is meant to provide an initial “straw-man” scenario for designing a sustainability program.

<table>
<thead>
<tr>
<th>Program Title</th>
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<tbody>
<tr>
<td><strong>Program Objectives</strong></td>
</tr>
<tr>
<td>The program has the following objectives:</td>
</tr>
<tr>
<td>• Improve the sustainability of newly constructed and/or renovated facilities in TODs in the SoCalGas service territory.</td>
</tr>
<tr>
<td>• Capture “lost opportunities” to improve building sustainability in TOD by providing upstream assistance with development planning policies that shape building design and construction, and by offering downstream incentives and technical support for developers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target Market</th>
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<tbody>
<tr>
<td>There are two target markets for this program. The primary target is upstream of the building development process, working with planning and government officials to shape urban planning policies, and raise awareness of downstream incentives. The secondary market is individual building developers and business owners. Developers and business owners are the secondary target because they are more numerous, and would likely require more program resources to identify and engage.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Market Barriers</th>
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<tbody>
<tr>
<td>Several market barriers inhibit sustainable building practices in TOD. Such barriers, which the program implementation activities will address, include:</td>
</tr>
<tr>
<td>• First Cost vs. Lifecycle Cost Considerations: Building developers are concerned with first cost considerations as they often must build within a pre-determined budget. As such, they are reluctant to consider high performance building practices, which can cost more up-front.</td>
</tr>
<tr>
<td>• Competing Priorities: Most TOD policies and regulations are primarily concerned with the location, use, mobility and aesthetic</td>
</tr>
</tbody>
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53 LA Metro. [https://www.metro.net/projects/countywide-planning/](https://www.metro.net/projects/countywide-planning/)
Program Title

characteristics of buildings. As a result, planning and zoning tools like urban design or building standards generally do not address building practices or performance. While additional standards can be added, planners and city officials must consider the cost and complexity to administer additional regulations.

- Baseline Shift: Most redevelopment projects in TOD areas would have to comply with the Title 24 requirements for Additions, Alterations, Repairs or Replacement, especially for changes of use. This increases the baseline building specifications against which utility energy efficiency projects would be evaluated for cost-effectiveness. The Title 24 requirements are stringent enough to reduce cost-effective above-code energy efficiency investment opportunities.

- Development Timelines: TOD development is unpredictable, disbursed and may take a long time. While there are numerous TOD districts, market and regulatory forces determine where and when development will actually occur, making it difficult for a program to prioritize outreach activities.

- Custom Approach: Each transit station area is unique, making it difficult to apply a prescriptive program approach.

Program Description

The program is designed to accelerate adoption of sustainable design and construction practices in transit-oriented development. The program provides municipal officials with resources and technical support to encourage the adoption of sustainable building practices in planning policies that regulate TOD. The program also provides training, design assistance, and incentives for developers to incorporate sustainable building practices in newly constructed and renovated facilities.

Incentive Strategy

The most effective opportunity for influencing building practices in TOD will be through outreach during urban planning and policy development processes. This program will work with municipal officials to design regulatory incentives such as density bonuses, fee reductions and expedited permitting for sustainable building in TOD districts. Where possible, SoCalGas will work with municipalities and developers to pursue energy efficiency investments as an alternative compliance option for non-conforming use site upgrades. These energy efficiency investments will be supported, where possible, with assistance from SoCalGas program incentives and technical support.

The program will also offer incentives and technical support directly to developers for meeting LEED-ND standards (or equivalent) in transit-oriented developments.
<table>
<thead>
<tr>
<th>Program Title</th>
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<tr>
<td><strong>Market Strategy</strong></td>
</tr>
<tr>
<td>This program will be implemented as a subset of an existing Commercial New Construction or Retrofit program. The primary focus of the program’s market strategy will be to provide outreach and technical support to influence key urban planning policies, upstream of the building development process. The program will collaborate with existing market actors with complementary goals for promoting sustainability in TOD. This will be accomplished through the following:</td>
</tr>
<tr>
<td>» Direct outreach through one-on-one meetings and presentations with municipal officials, urban planners, developers and other stakeholders.</td>
</tr>
<tr>
<td>» Articles, case studies, and sustainable building guidelines with technical information and examples of policy language.</td>
</tr>
<tr>
<td>Limited outreach to key building developers will also be conducted. This outreach will target high-priority TOD developers and/or industry groups to raise awareness of the program offering and to provide technical support.</td>
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