PREFACE

A series of Working Papers has been prepared for SANDAG as part of its efforts to develop a Regional TOD Strategy for the San Diego Region. The Working Papers focus on issues associated with implementing TODs in the San Diego region, drawing upon the experience and lessons learned from other metropolitan areas in their attempts to address similar issues. The Working Papers address the following topic areas:

- Urban Form, Density and Land Use
- Financing Infrastructure and Community Facilities
- Housing Choices and Affordability
- CEQA Streamlining and Travel Forecasting
- Connections: Travel Options, Mobility Management and Access Enhancements
- Readiness Criteria: Metrics for Transit-Oriented Districts

“TOD” is typically an acronym for “Transit-Oriented Development.” This definition focuses on real estate development projects next to transit stations, often as public/private partnerships; however, this definition is narrow and does not reflect the importance of the relationship between transit stations and the surrounding community.

The Working Papers approach the “D” in TODs as “District,” an area, neighborhood or community that is conveniently accessible to transit. The size of a district will vary by location, topography, community characteristics, the pattern and concentration of residential and employment, and other unique factors. Districts are larger areas where some people are close enough to walk to a station, others are close enough to bike to a station or be dropped off by a friend or family member who is driving, or even use a car-sharing service. Thinking of the district in this larger context enables more opportunities to find sites for various types of development that are feasible – small lot housing and town homes, low-rise and loft housing, flats and, residential towers, or main-street type of commercial, urban flex and campus space, institutional facilities, and taller office buildings – all within mixed-use environments that are walkable. TOD is an important to the San Diego region’s future and is expected to contribute significantly to meeting the projected demand for new housing and employment growth that SANDAG estimates will occur in the future.

The Working Papers are focused on how to implement TODs. They describe the challenges, some of which are not unique to San Diego. They mention examples of how other metropolitan areas around the country are trying to address these challenges and conclude by suggesting some ideas for consideration. The ideas for consideration are meant to stimulate thought, questions, and possible solutions.

The Working Papers are being published prior to a TOD Implementation Forum (January 27 and 28, 2015) that SANDAG is holding to get input that inform the development of SANDAG’s Regional TOD Strategy. As such, the Working Papers are drafts that will be augmented by the input received during the TOD Implementation Forum, and will be used to support the preparation of the Regional TOD Strategy and an agenda for success.
READINESS CRITERIA: METRICS FOR TRANSIT-ORIENTED COMMUNITIES

Introduction

The aggressive promotion of transit-oriented development projects is a front-line public policy goal in the San Diego region, lying at the nexus of SANDAG’s Regional Transportation Plan (RTP) and San Diego Forward: The Regional Plan, now in development, that together comprising its Sustainable Communities Strategy (SCS). A Regional Transit-Oriented Development Strategy is one of six policy commitments made by the SANDAG Board of Directors in 2011 as part of its adoption of the 2050 RTP/SCS.

The first product of this Regional TOD Strategy was the Context Report, entitled *Transit-Oriented Communities in the San Diego Region*. That report introduced the concept of transit-oriented *communities*, which are defined as district-scale places: station areas or transit corridors characterized by concentrated, walkable, mixed-use development, as distinct from the individual transit-oriented development *projects* that may contribute to them.\(^1\) Unless otherwise indicated, in this Working Paper the acronym “TOD” is used to mean a transit-oriented *district* or *community*.

The purpose of this Working Paper is to advance one of the key implementation tools proposed in the Context Report: the development of “Readiness Criteria: Metrics for Transit-Oriented Communities”. The role of such metrics is to help policy makers and private investors evaluate and prioritize TOD opportunities. All TOD is desirable, but scarce resources should be targeted to places of high readiness and high potential benefit—that is, district-scale TOD that can “move the needle” in the near to mid-term if investment and other implementation efforts are directed there.

Goals and Barriers

The over-arching goals of this TOD planning framework reflect SANDAG’s Sustainable Communities Strategy targets for 2050, which include:\(^2\)

- 79 percent of the region’s housing, and 86 percent of the region’s jobs, will be located within the Urban Area Transit Strategy boundary.

- The percentage of homes within 0.5 mile of public transit services will increase from 45 percent in 2008 to 64 percent in 2050.

- Per capita greenhouse gas (GHG) emissions from cars and light trucks will be reduced (from the 2005 baseline) by 7 percent in 2020 and 13 percent in 2035.

- At least half the region’s land area will remain preserved from development.

---

2 SANDAG, 2050 Regional Transportation Plan, Chapter 3 (Sustainable Communities Strategy).
The highest-priority TOD opportunities are high-readiness/high-benefit areas that can help advance these goals. Places that are TOD-ready today—in terms of transit connectivity, market strength, available land, and local support—may need little more than visibility and marketing to attract private investment. Places that are generally TOD-ready, but lack a key ingredient or two, are targets for gap-filling public investment that can help overcome the remaining barriers to TOD. Broadly speaking, these barriers may include:

- the cost of new or improved transit service;
- the need for advanced planning and implementation capacity;
- the cost of “district infrastructure”—the grid of streets, sidewalks, utilities, open space, and viable development parcels that, when created from scratch, may cost more than the transit facilities;
- the absence of safe, reliable “last-mile connectivity” between the transit facility and residential areas or employment destinations that lie beyond walking distance; or
- housing subsidy and finance incentives, for low- and moderate-income units as well as workforce-affordable market units.

Other Working Papers in this series discuss how these barriers can be addressed and overcome. This Working Paper proposes a framework for deciding where these implementation resources can best be targeted.

**The Framework**

To create a set of metrics that helps identify high-readiness/high-benefit TOD opportunities, it is necessary to establish three parameters: the appropriate unit of geographic measurement; the appropriate time horizons for defining “readiness”; and distinct metrics for TOD readiness and TOD benefits. In principle, the highest-priority locations for public intervention and/or private investment would be those that rate high on both dimensions.

**Geographic Unit of Measurement**

The SANDAG Smart Growth Concept Map, first adopted in 2006 and most recently updated in October 2014, identifies just over 200 Smart Growth Opportunity Areas. These are the presumed geographic units of measurement for district-scale TOD, with the exception of approximately a dozen such

---

REGIONAL TOD STRATEGY

areas that are located outside the Urban Area Transit Strategy boundary.\(^4\)

In applying the metrics, a Smart Growth Opportunity Area may be divided if it includes clearly distinct subareas of substantial size. For example, the Carlsbad Village Coaster Station Area (designated CB-1 on the Concept Map) includes the 200-acre Village Redevelopment Master Plan Area as well as the 128-acre Barrio; for purposes of assessing TOD readiness and impact, these could be treated as two distinct areas.\(^5\)

For TOD purposes, it may also make sense to expand the envelope of each Smart Growth Concept Area to reflect the geographic reach of different modes of access, using five to ten minutes as the standard for convenient, reliable access to the station. In general, this suggests a catchment area of 0.25 mile for pedestrians, 0.75 mile for bicyclists, and 2 miles for those using park-and-ride, kiss-and-ride, or shuttles. TOD priority should be given to the walk and bicycle catchment areas, but the larger geography accessible by car and shuttle provides additional capacity for a variety of housing and employment types to serve market demand, especially given the region’s topography.

Downtown San Diego is a special case. It constitutes a single Smart Growth Opportunity Area (the Metropolitan Center), with eleven rail transit stations and extensive bus route coverage. The Downtown would be an outlier on all of the proposed TOD metrics, as would any smaller districts into which it might be divided for purposes of this exercise. Because Downtown San Diego is so well understood in the development and planning communities, applying the metrics in a formal way would not produce any useful comparative knowledge that does not already exist. Therefore, it is recommended that Downtown San Diego be excluded from the application of the metrics described in the pages that follow.

Level of Readiness

An area is TOD-ready to the degree that it enjoys a favorable combination of transit service, economic submarket strength, developable property, and local government support. It is proposed that SANDAG’s Smart Growth Opportunity Areas be sorted into three broad time horizon categories: Ready, Emerging, and Future.

- **Ready (near-term).** These are areas where, based on existing conditions, significant TOD could be under construction by the end of 2020. For this purpose, existing conditions include major transit improvements that are expected to complete construction and enter service by 2020, such as the Mid-Coast Light Rail Extension.\(^6\)

- **Emerging (mid-term).** These are areas that score in the middle range of a battery of readiness metrics, suggesting they could have significant new or expanded TOD underway by around 2025, a decade from now. By that time, the San Diego regional market will be more experienced with TOD, and additional transit improvements listed in the 2050 Regional Transportation Plan will have advanced to construction.


Future (long-term). The remaining Smart Growth Opportunity Areas will be ranked as Future. These areas may have land, market, and regulatory disadvantages compared to the Ready and Emerging locations, or they may depend on transit improvements not expected to be implemented until 2030 or beyond.

It is understood that in SANDAG’s Sustainable Communities Strategy, the three time horizons used to measure progress toward the key performance indicators are 2020, 2035, and 2050. For purposes of measuring TOD readiness, however—and thereby helping to focus public and private implementation efforts where TOD has the best chance of taking root—the closer mid-term horizon of 2025 was chosen.

Level of Benefit

A high-benefit TOD opportunity is one that can create, expand, or intensify a transit-oriented community of substantial scale. Metrics that differentiate higher-benefit TOD opportunities could include:

- The type of Smart Growth Opportunity Area. The Concept Map establishes a seven-category place typology, reflecting a qualitative blend of transit and land use intensities as well as specific modal and density thresholds. While all categories except Rural Village are potentially TOD-supportive, the higher intensity ones are inherently higher benefit. In addition to the Metropolitan Center (Downtown San Diego), these include the ten Urban Centers and fifty-one Town Centers.\(^7\)

- The presence of planned housing and employment densities over and above the threshold levels associated with the applicable Concept Map place typology.

- Transit service featuring multi-modal convergence and connectivity (as distinct from the hierarchy of individual transit modes reflected in the Concept Map typology). Places that become “Mobility Hubs” are likely to attract more riders and more development.

The intersection of TOD readiness and potential benefit is illustrated in the graphic below. The intent of this two-dimensional framework is to identify Smart Growth Opportunity Areas within the Urban Area Transit Strategy boundaries that are ready or emerging and that offer potentially high or medium benefit—that is, locations that fall in Priorities 1 and 2.

---

\(^7\) The Rural Village category has no defining transit threshold and its several examples all lie outside the Urban Area Transit Strategy boundary. It is therefore excluded from this analysis. (See SANDAG Smart Growth Concept Map Site Descriptions (October 2014), p. 5: http://www.sandag.org/uploads/projectid/projectid_296_14002.pdf, p. 2.)
The Proposed Metrics

Five categories of metrics are proposed. Categories 1 through 4 relate to TOD readiness, while Category 5 relates to potential benefit. Most of the individual metrics are scored qualitatively on a simple scale of 1 to 3 (with 3 denoting the highest rating). The intent is not to create a hair-splitting algorithm, but a set of descriptive, easy-to-use measures that distinguish among potential TOD opportunities in an intuitive way.

1. Location in the Transit Network

It is a truism that “you can’t have TOD without transit”. Granted, mixed-use development with TOD-like characteristics can sometimes be created in non-transit settings, and traditional bus routes can nurture transit-oriented communities in legacy transit cities where they feed a larger fixed-guideway network. However, this paper takes it as a given that district-scale TOD in metropolitan San Diego requires some level of transit service above low-frequency local bus routes. The Regional TOD Strategy is focused on COASTER, SPRINT, Trolley, Rapid, and/or the high-frequency bus routes.

The presence of higher frequency transit is only one aspect of what constitutes a favorable location in the regional transit network. Service by several rail, Rapid, and/or high frequency local bus services is more powerful than a single mode, and a convenient ride to major employment and institutional destinations in other parts of the region can make some station areas more attractive for residential development than others. For any station, the quality of its physical interface with surrounding land uses is critical to how well it will attract riders and growth.
A. Type of Transit Service. The TOD literature demonstrates that the premium bus service modes (full-featured BRT and Rapid Bus with at least some of its alignment in dedicated or semi-dedicated bus lanes) can have a positive influence on private development locational and investment decisions, while rail, other things being equal, generally represents a further step up in market perception and locational preference. In addition to the mode of transit service, the market can be expected to respond to stations with multi-modal service, since they have one-seat accessibility (that is, a transit trip requiring no change of mode or vehicle) to every stop on each of the intersecting services.

Type of Transit Service is scored from 1 to 5, to distinguish among modal types and provide extra weighting for locations with fixed guideway services. Locations that are tied to rail stations by a defined last-mile shuttle service are scored just one level below locations within rail station walksheds; examples include the expansive area connected by the “SuperLoop” to the five future Mid-Coast Trolley stations in the University City/University Town Center/Medical Center area, or the shuttle that will link the Chula Vista Bayfront development to the H Street Trolley stop.

- 5 = Light rail (LRT: Trolley or Sprinter), streetcar, or commuter rail (Coaster)
- 4 = Rapid Bus or full-featured BRT
- 3 = Defined last-mile circulator connection to an LRT or commuter rail station
- 2 = high-frequency local bus
- 1 = conventional bus stop service only

B. Labor Market Connectivity. This measure reflects a key observation in the Context Report: people who work near a transit station are more likely than people who live near a station to commute by transit. Consequently, the limited reach of the existing premium transit system with respect the region’s major employment centers is a barrier to TOD.

One strategy to enhance both ridership demand and market demand for development is to plan for workforce housing at price points consistent with wages earned at major employment centers along the transit line. Direct access to workers is a selling point to employers, and direct access to jobs is a selling point to households, reinforcing demand for both employment and residential development.

All other things being equal, Smart Growth Opportunity Areas with convenient access (one- or two-seat premium transit rides [rail, BRT, or Rapid Bus]) to multiple employment centers have an advantage in recruiting residential development. Along with employment destinations, this metric also considers Special Use Centers, as defined in the Smart Growth Concept Map—regional destinations dominated by a major educational, medical, or other non-residential land use.

---

8 See, among many others: Center for Transit-Oriented Development (for FTA), Capturing the Value of Transit (2008); Center for Neighborhood Technology (for APTA and NAR), The New Real Estate Mantra: Location Near Public Transportation (2013); National Bus Rapid Transit Institute (for FTA), Land Use Impacts of Bus Rapid Transit: Effects of BRT Station Proximity on Property Values along the Pittsburgh Martin Luther King, Jr. East Busway (2009) and Land Use Impacts of Bus Rapid Transit; Phase II—Effects of BRT Station Proximity on Property Values along the Boston Silver Line Washington Street Corridor (2012).

9 A location with no transit service, or conventional bus route service only, is not rated for TOD potential.

REGIONAL TOD STRATEGY

- 3 = Strong: one-seat transit access on rail or Rapid bus, in either direction, to Downtown San Diego and at least one additional major employment or Special Use destination (such as Mission Valley or University City)
- 2 = Moderate: two-seat transit access (two on rail or Rapid bus services, or one on rail or Rapid bus service and one local bus) to at least two employment or Special Use destinations, not including Downtown San Diego
- 1 = Weak: one- or two-seat access to a single employment or Special Use destination

C. Catchment Area Connectivity. As noted earlier, the type of transit service serving a Smart Growth Opportunity Area is only part of the story; the extent to which the station can actually touch the surrounding community and influence its development is critical as well. In the recent decades of North American light rail development, several transit systems have wrestled with highway and freight rail alignments whose stations are not easily accessed by local streets, sidewalks, and bike routes. Commuter rail stations may be in traditional town centers or at highway catchment points chosen for park-and-ride convenience. The most efficient, highway-based BRT lines often have most of their stations outside of developed areas. And some stations are constrained by site-specific barriers in their natural or built environments. Catchment Area Connectivity is measured as follows:11

- 3 = Strong: Most of the station’s 360-degree radius is actually or potentially accessible by pedestrians, bicyclists, and motorists; adequate streets, sidewalks, and bike lanes exist or are planned. If a major employment destination or Special Use Center is nearby, the station can or does accommodate an appropriate last-mile shuttle connection.
- 2 = Moderate: One or two quadrants of the station area present significant physical barriers to local access; and/or the station area lacks an appropriate street, sidewalk, and bike route network. If relevant, the station can accommodate last-mile shuttle connections to nearby employment or Special Use destinations.
- 1 = Weak: Much of the station area’s 360-degree circle is constrained by natural or built barriers, and last-mile shuttle connections, if relevant, are not currently accommodated.

D. Daily Ridership. The Sustainable Communities Strategy assumes that transit ridership is a dynamic outcome that will increase over time on both a system-wide basis and in individual Smart Growth Opportunity Areas. That said, current ridership is a useful indication of the degree to which a Smart Growth Opportunity Area is a “known commodity” in the transit network. For stations expected to enter service in the near term (such as those on the Mid-Coast extension), the early horizon year ridership forecasts will be used. For Mixed-Use Transit Corridors (linear corridor segments served by high-frequency or premium bus routes, such as the new Mid-City Rapid), the segment’s total daily ridership will be used.

11 This measure of physical connectivity to the immediate catchment area is distinct from the measures of station area density and market activity in the Local Market Readiness category, which follows.
• 3 = High: at least 6,000 current average daily boardings and alightings at a station
• 2 = Medium: between 3,000 and 6,000 average current daily boardings and alightings at a station
• 1 = Low: less than 3,000 current average daily boardings and alightings at a station

2. Local Market Readiness

Transit can influence a market but cannot by itself create one from thin air. Among Smart Growth Opportunity Areas with good transit service and connectivity, those whose real estate submarkets are strong, with rents or prices sufficient to support development and land costs, are most likely to be ready for TOD now; those whose submarkets are at least trending upward may emerge as TOD-ready over the coming decade. Three metrics are proposed to capture this key dimension.

A. Station Area Density. Existing density is not a perfect indicator of market conditions. An area could be densely populated but economically disadvantaged, unable to afford rents sufficient to support new construction. Or an area could be so densely built out that its further development potential is limited for lack of available land. In general, though, clustering of either population or employment is at least a partial indicator of potential market strength, including demand for retail and other walk-in services that help create street-level TOD environments. Locations with higher densities of both residents and jobs are presumptively mixed-use in nature, an important TOD attribute, especially if they offer a roughly even balance of housing and employment within a single station area or within a closely-spaced set of stations along a corridor segment. The density metric covers a 0.5-mile radius around all of the stations in a Smart Growth Opportunity Area and is scored as follows:

• 4 = High and well balanced: at least 11,000 combined residents and jobs, and a jobs/housing ratio between 0.8 and 1.2
• 3 = High: at least 11,000 combined residents and jobs
• 2 = Medium: between 7,000 and 11,000 combined residents and jobs
• 1 = Low: less than 7,000 combined residents and jobs

B. Subarea Market Performance (Residential). A second indicator of market strength is the performance of local real estate values compared to the San Diego region as a whole. This reflects the essential role that rent levels or sale prices play in determining whether new development can “pencil out” in a given location, given that regional construction and operating costs apply with relative uniformity throughout the urbanized portions of the region. Since a local submarket could be strong in either the residential or office market or both, separate metrics are proposed for each of these development types. Each proposed metric

---

12 Boardings plus alightings in both directions. Numbers for existing stations are updated periodically by SANDAG; FY2014 numbers for all existing Trolley, Coaster, and Sprinter stations are provided in the Context Report (SANDAG, Transit-Oriented Communities in the San Diego Region: Draft Context Report (AECOM and Strategic Economics, November 2014), pp. 43-46. The thresholds or “break points” were chosen, based on current station data, to provide a broad distribution among the high, medium, and low ratings.

13 See the related discussion of Local Market Readiness, ibid.

14 The jobs/housing balance may be achieved within the individual Smart Growth Opportunity Area in question or within a segment of up to three contiguous Smart Growth Opportunity Areas along a single transit line. The jobs and residents numbers themselves apply to each Smart Growth Opportunity Area individually.

15 Numbers for all existing Trolley, Coaster, and Sprinter station areas are provided at ibid., pp. 36-40. “Break points” were chosen to provide a broad distribution among the high, medium, and low ratings.
REGIONAL TOD STRATEGY

compares median rent levels in the geographic submarket containing a given Smart Growth Opportunity Area with those in the region. The residential metric is scored as follows:

- 3 = Strong: residential rental rates per square foot are higher than the regional average, and were trending upward in the last 24 months\(^{16}\)
- 2 = Inconsistent: residential rents are higher than the regional average but were trending downward in the last 24 months, or \textit{vice versa}
- 1 = Weak: residential rents are lower than the regional average, and were level or trending downward in the last 24 months

C. Subarea Market Performance (Office). The similar metric for office market performance is scored as follows:

- 3 = Strong: office rental rates per square foot are higher than the regional average, and were trending upward in the last 24 months\(^{17}\)
- 2 = Inconsistent: office rents are higher than the regional average but were trending downward in the last 24 months, or \textit{vice versa}
- 1 = Weak: office rents are lower than the regional average, and were level or trending downward in the last 24 months

D. Development Activity. A third indicator is the extent to which the market has actually responded to a given Smart Growth Opportunity Area by undertaking, or preparing to undertake, actual development projects.

- 3 = Strong: two or more substantial projects (at least 100 residential units and/or 100,000 square feet of commercial or employment space) have been completed in the last two years or are currently under construction
- 2 = Active: one substantial project is under construction or has been completed in the past two years; or two such projects are in the entitlement stage
- 1 = Inactive: there is no substantial project activity; or a single project is in the entitlement stage

3. The Land Resource

Independent of the quality of the transit location and the strength of the local market, a station area may offer an ample land resource ripe for development, or a constrained land resource that poses hurdles for development in the near to mid-term. A series of four metrics is designed to compare Smart Growth Opportunity Areas on this key readiness dimension.

As noted in the earlier discussion of station area density, places with high concentrations of population or employment might have vibrant markets but not much land left for development. A Smart Growth Opportunity Area that scores well on both dimensions—an established, built-up market with land still available—would be especially well positioned.

\(^{16}\) See the related discussion at ibid., Chapter 5, pp. 47ff.
\(^{17}\) See the related discussion at ibid., Chapter 5, pp. 47ff.
A. Developable Area. The most visible indicator of physical development potential is the presence of a substantial area of vacant land within walking distance of one or more stations. Alternatively, a vacant development site may be located outside the station’s walk shed or bike shed but be readily connected by an existing or planned shuttle. In more built-up settings, ample development opportunities may exist in the form of infill sites, or existing buildings ready for repurposing or adaptive reuse.

- **3 = Large:** at least five acres (aggregated or disaggregated) of vacant or underutilized developable land within the SB 375 Transit-Priority Area Definition and Federal Transit Administration (FTA) Standard for Transit-Supportive Land Use distance (0.5 mile) of a rail or BRT station, or ten acres connected by an existing or planned shuttle to a station
- **2 = Medium:** at least five acres of vacant or underutilized developable land connected by shuttle; or at least two acres of a single site or infill sites, or a substantial building reuse opportunity, within 0.5 mile of a station, or frequent bus route
- **1 = Small or fragmented:** none of the above

B. Pattern of Ownership. Beyond its size and contiguity, a site is generally more ready for development if its ownership is concentrated in a few sets of hands rather than spread among many owners, requiring complex assembly for projects of scale. A concentration of ownership in public hands can be valuable if the agency in question is able and interested in making the site available for development and if the parcel is adjacent to supportive private owners. When land near a station is owned by the transit agency itself, it can be made available for “joint development” (TOD on transit property); the San Diego Metropolitan Transit System (MTS) joint development program has resulted in substantial TOD projects, including the mixed-use residential and retail community at Grossmont in La Mesa.18

- **3 = Single ownership or joint development:** a substantial development site (at least a score of 2 in the Developable Area metric) is in a single private ownership, in MTS, North County Transportation District (NCTD), or other public agency ownership and available for joint development, or a combination of the two
- **2 = Concentrated ownership:** a substantial development site (at least a score of 2 in the Developable Area metric) is in two or three ownerships
- **1 = No concentration of ownership**

C. A TOD Fabric. A transit-oriented community requires a fabric of streets, sidewalks, utilities, and open spaces, with block sizes suitable for walking, for compact vertical development, and for viable ground-floor commercial activity. Without suggesting a “one-size-fits-all” template for 200 Smart Growth Opportunity Areas, it is useful to measure, in broad qualitative terms, the extent to which a TOD fabric is already in place. To the degree that it is not, then either the municipality or the prospective developers must invest the time and money to create it, at least insofar as is needed to support the initial phase of development. The metric reflects a qualitative assessment of streets, sidewalks, utilities, amenities, intersection density,

---

18 See: http://www.sdmts.com/Marketing/documents/TODApta.pdf;
and bicycle lanes. Where development is to occur at a distance from a rail or BRT station and be connected to it by shuttle or circulator, the requisite TOD fabric includes streets with an adequate frequency and distribution of stops.

- 3 = Strong: a TOD fabric appropriate for the setting is substantially in place; any missing components are fully planned and designed
- 2 = Medium: a TOD fabric appropriate for the setting is only partially in place; significant components are missing and not yet planned or designed
- 1 = Weak: most components of an appropriate TOD fabric are missing, and a substantial investment is required to create it

D. Major Site Constraints. The fabric measure described above refers to the template or “grid” through which streets and blocks define viable development parcels and integrate them into a cohesive, walkable district. In addition to deficiencies in this fabric, the potentially developable land in a Smart Growth Opportunity Area could be affected by physical constraints that make it less ready for TOD. These might include brownfield conditions requiring remediation prior to redevelopment; wetlands that limit the percentage of a site that can be developed or impose an inefficient configuration on the site plan; the need to build some or all of the development on air rights as opposed to terra firma; topography that constrains development or increases costs beyond what can be supported by rents; or the need for complex relocation of existing uses.

- 3 = Unconstrained: there are no significant brownfield, wetlands, air rights, topographic, relocation, or other limiting conditions
- 2 = Moderately constrained: such conditions exist and are resolvable with appropriate investment
- 1 = Severely constrained: such conditions exist and represent a significant barrier to development in the near to mid-term

4. Governmental and Regulatory Support

The areas to be evaluated are already Smart Growth Opportunity Areas on SANDAG’s Smart Growth Concept Map. As such, they have been identified by their respective municipal governments and by SANDAG as appropriate places for sustainable TOD. That said, some places have become particular targets for governmental and regulatory support. The intent of this final set of readiness metrics is to identify Smart Growth Opportunity Areas with TOD plans or designations at a district level; with zoning that readily supports TOD; with plans or projects that have advanced deeply into the environmental review process; and with funding strategies in place for needed infrastructure facilities.

A. TOD District Designation. The presence of a TOD district or equivalent in the General Plan indicates community support for TOD and provides guidance and certainty to TOD projects. Projects consistent with adopted underlying planning documents can be more easily supported by staff and decision makers as meeting established citywide goals and growth targets. Consistent underlying designations may also

---

19 In its project evaluation criteria for the TransNet Smart Growth Incentive Program, SANDAG uses specific measures of intersection density per square mile and built or planned bicycle facilities as measures of a ped-bike fabric. (See http://www.sandag.org/uploads/projectid/projectid_491_18486.pdf.) This concept is distinct from the station Catchment Area Connectivity metric described previously, which refers specifically to the station’s accessibility to its surroundings.
streamline the development review process; whereas, projects that require amendments to underlying plans or major additional discretionary review require longer processing times and hold more uncertainty in the decision-making process.

- **3 = Consistent with Plans**: Area is designated in an adopted General Plan and/or Community Plan for TOD or equivalent development, and project is within the minimum and maximum target residential and/or employment densities of the General Plan and SCS. No General Plan Amendment or major discretionary review process beyond California Environmental Quality Act (CEQA) is required.
- **2 = Additional Discretionary Review Required**: Project is consistent with the general goals and designations of an adopted General Plan and SCS designation for TOD; however, additional discretionary review in the form of a Specific Plan, plan amendment, or discretionary use permit is required to implement the project as proposed.
- **1 = Not Planned**: Project is not within an area planned for TOD in an adopted General Plan or is not consistent with underlying goals and designations within the General Plan.

**B. Zoning.** Even among communities that are prepared to welcome TOD, zoning ordinances can vary widely in the extent to which the foundational elements of TOD are allowed by right. Ordinances in suburban communities may not allow sufficient density to achieve a concentration of development within walking distance of stations. Others may not require (or allow) minimal setbacks with doors and windows along the street front. Older Euclidean codes often discourage the vertical mixing of uses. And some codes, even if they embrace all of the other foundational TOD characteristics, do not allow the reduction in parking that translates transit-oriented development into reduced vehicle miles traveled in private automobiles. The zoning metric is as follows:

- **3 = TOD-ready zoning**: higher density, vertical and horizontal mixed-use development, minimal setbacks, and reduced parking are all allowed by right or achievable through a special permit subject only to design review.20
- **2 = Partial TOD zoning**: higher density, vertical and horizontal mixed-use development, and minimal setbacks are required or allowed, but high (non-TOD) minimum parking ratios are required.
- **1 = Non-TOD zoning**: most elements of TOD zoning are not in place.

**C. Environmental Review Status.** The TOD readiness of a Smart Growth Opportunity Area will be influenced by the extent to which its key prospective actions—infrastructure improvements, development projects, or both—have advanced through the environmental review process. Once a project or master plan has cleared CEQA (and National Environmental Policy Act [NEPA], when applicable), it is on a relatively predictable path toward permitting.

- **3 = Substantially complete**: proposed catalyst investments (public infrastructure and/or private development projects, as applicable) have completed CEQA (and NEPA if applicable).

---

20 In residential or mixed-use areas, “higher density” may be defined as, at minimum, the default average density stated for each jurisdiction in the state’s Housing Element Law (AB 2348). In San Diego County, this is generally 30 dwelling units per acre, but 20 in Coronado, Del Mar, and Solana Beach (http://www.hcd.ca.gov/hpd/hrc/plan/he/ab2348stat04ch724.pdf).
REGIONAL TOD STRATEGY

- **2 = Clear path:** the key project(s) are in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) stage, are consistent with a certified program-level EIR, or have been designated Transit Priority Projects under SB 375 and have initiated a Sustainable Communities Environmental Assessment (SCEA) or a Limited EIR.
- **1 = Early stage:** the key project(s) are not at the Final EIR/EIS stage and are not eligible for as, or have not initiated, an SCEA or Limited EIR. \(^2\)

**D. Infrastructure and Facilities Funding.** Finally, TOD readiness may reflect the extent to which local government has secured funding, or at least adopted a credible funding plan, for infrastructure improvements or public facilities that are critical to the potential TOD. These could include elements of the “district infrastructure” or “TOD fabric” described earlier; major roads or pedestrian ways connecting the station to the quadrants of its catchment area; shuttles connecting development areas in the expanded catchment area to the station; or traditional neighborhood facilities like a school or library. With the demise of redevelopment, alternative funding and financing mechanisms (including developer contributions where feasible) are essential.

- **3 = Funding commitment:** funding sources and/or financing mechanisms are in place to fully fund the preponderance of the improvements or facilities in question.
- **2 = Funding plan:** a funding source or financing mechanism is in place for a portion of the improvement or facility costs and a plan has been adopted to secure the balance.
- **1 = No funding:** funds are not in place, and a credible funding plan has not been adopted.

**5. Level of Benefit**

The highest priority TOD opportunities are those which are not only high in readiness, but substantial enough to make a difference if and as they materialize. A set of five measures is proposed to identify the Smart Growth Opportunity Areas with the highest potential benefit. They begin with the Smart Growth Concept Map place typology, which has transit and development thresholds built into each place-type definition. Additional measures reflect the fact that some locations are served by multiple high-speed services (rail or Rapid bus), as well as the fact that some areas are explicitly planned for residential or employment capacity in excess of the defining thresholds. The final measure is a simpler version of the Developable Area metric, with larger land area thresholds.

**A. Place Typology.** The place typology developed in the 2004 Regional Comprehensive Plan and reflected in the Smart Growth Concept Map has seven categories. As explained previously, the categories at both ends of the spectrum—the handful of Rural Villages lying outside the Urban Area Transit Strategy boundary and the Metropolitan Center (Downtown San Diego)—are not included in the exercise. The remaining five categories provide a proxy for scale of place, based on the minimum transit and density targets built into their definitions, as shown in the following table. \(^2\)

---


\(^2\) See SANDAG Smart Growth Concept Map Site Descriptions (October 2014), p. 2.
### Table 1 - Place Types: Minimum Transit and Density Targets

<table>
<thead>
<tr>
<th>Place Type</th>
<th>Minimum Residential Target</th>
<th>Minimum Employment Target</th>
<th>Minimum Transit Service Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Center</td>
<td>40 du/acre</td>
<td>50 empl/acre</td>
<td>LRT or Rapid Bus</td>
</tr>
<tr>
<td>Town Center</td>
<td>20 du/acre</td>
<td>30 empl/acre</td>
<td>LRT, Rapid Bus, shuttle</td>
</tr>
<tr>
<td>Special Use Center</td>
<td>Optional</td>
<td>45 empl/acre</td>
<td>LRT, Rapid Bus, Rapid Express</td>
</tr>
<tr>
<td>Community Center</td>
<td>20 du/acre</td>
<td>N/A</td>
<td>High-frequency peak local bus, shuttle</td>
</tr>
<tr>
<td>Mixed-Use Corridor</td>
<td>25 du/acre</td>
<td>N/A</td>
<td>High-frequency peak local bus, shuttle</td>
</tr>
</tbody>
</table>

Notes: du/acre = dwelling units per acre  empl/acre = employee per acre

The categories may be rated as follows:

- **3** = Urban Center
- **2** = Town Center or Special Use Center
- **1** = Community Center or Mixed-Use Transit Corridor

**B. Multiple High-Speed Services.** In many cases, the minimum transit thresholds in the preceding table are exceeded today, or will be exceeded by 2030. As an obvious example, commuter rail is not a threshold transit mode in any of the place types, even though the town centers along the Coaster corridor have stations in their midst. The earlier “readiness” measure of Type of Transit focused on the principal mode of service. As a measure of potential benefit, it is proposed to focus on multi-modalism.

- **3** = Highly served by multiple high-speed services: the Smart Growth Opportunity Area is served by at least two premium modes (rail or Rapid Bus) in excess of the minimum place type threshold
- **2** = Served by multiple high-speed services: the area is served by one additional premium mode
- **1** = Not served by multiple-high-speed services: the area is served only by the mode(s) specified in the place typology and conventional local bus service
C. Planned Housing Density. The density targets in the place typology table are minimum thresholds. Many Smart Growth Opportunity Areas contain approved plans with higher targets for dwelling units per acre, jobs per acre, or both. SANDAG takes such additional density into account as a criterion for ranking applications to the TransNet Smart Growth Incentive Program, and similar measures are proposed here for both housing and jobs. The housing measure is as follows:

- 4 = Planned du/acre are at least 200 percent of the typology threshold
- 3 = Planned du/acre are at least 150 percent of the typology threshold
- 2 = Planned du/acre are at least 125 percent of the typology threshold
- 1 = Planned du/acre are less than 125 percent of the typology threshold

D. Planned Employment Density. The similarly constructed measure of additional employment density is as follows:

- 4 = Planned jobs/acre are at least 200 percent of the typology threshold
- 3 = Planned jobs/acre are at least 150 percent of the typology threshold
- 2 = Planned jobs/acre are at least 125 percent of the typology threshold
- 1 = Planned jobs/acre are less than 125 percent of the typology threshold

E. Developable Area. Finally, the potential benefit of TOD in a given location reflects, in

---

23 SANDAG similarly uses planned density in excess of the place typology threshold as a criterion for Smart Growth Incentive Program grants. (See http://www.sandag.org/uploads/projectid/projectid_491_18486.pdf.) By using place typology and additional density as separate measures, no part of the proposed density is double counted.

24 For Community Centers and Mixed-Use Transit Corridors (which have no minimum threshold for jobs/acre), a threshold of 20 jobs per acre can be used as a basis for defining the "additional" jobs.
part, the extent of available land. From a readiness perspective, a station surrounded by an expanse of vacant or underutilized property is a two-edged sword, but from a benefit perspective more developable land simply means more potential development. This metric uses larger land areas than the earlier readiness metric and does not distinguish between walking and shuttle connections to the station.

- 3 = Larger land area: at least 25 acres of vacant or underutilized land within walking or shuttle distance of a rail, Rapid Bus, or BRT station
- 2 = Medium land area: between 10 and 25 acres of vacant or underutilized land within walking or shuttle distance of a rail, Rapid Bus, or BRT station
- 1 = Smaller land area: less than 10 acres

**Summary of Metrics**

A total of sixteen separate measures of TOD Readiness have been developed and grouped into four thematic categories: Location in the Transit Network; Local Market Readiness; the Land Resource; and Government and Regulatory Support. The categories, the individual measures, and their maximum scores are summarized in Table 2. The total score for any Smart Growth Opportunity Area would range from 16 to 51. If this range is divided roughly into thirds, areas scoring 40 or higher would be considered “Ready”; those scoring between 28 and 39, “Emerging”; and those scoring 27 or lower would be “Future”. As these metrics are applied to the roughly 200 Smart Growth Opportunity Areas, they may be refined and calibrated so as to yield a broad distribution of rankings that intuitively differentiate the best near- and mid-term Opportunities.

The five measures of potential TOD Benefit have a combined minimum score of 5 and a maximum of 17. Subject to further refinement, Smart Growth Opportunity Areas scoring from 13 to 17 would be considered High Benefit; from 9 to 12, Medium Benefit; and 5 to 8, Low Benefit.
REGIONAL TOD STRATEGY

References

California Office of the Governor, Senate Bill 375 CEQA Provision Flow Charts” (2011)

SANDAG, Preliminary Focus Group Theme Summary: July-October 2014 Interviews (AECOM; 2014)

SANDAG, 2050 Regional Transportation Plan

SANDAG, Smart Growth Concept Map and Smart Growth Concept Map Detailed Site Descriptions (October 2014)

SANDAG, Smart Growth Incentive Program Evaluation Criteria (2014)

SANDAG, Transit-Oriented Communities in the San Diego Region: Draft Context Report (AECOM and Strategic Economics, November 2014)