

GRADING CALIFORNIA'S RAIL TRANSIT STATION AREAS

I. Executive Summary: How well do California's rail transit station areas perform as thriving, walkable areas that encourage transit ridership?

How well do California's rail transit station areas encourage transit ridership, connect to amenities, and create walkable, equitable, and thriving locales? This report grades 489 neighborhoods within 1/2-mile radius of rail transit stations based on factors like these in 6 California systems:

- Los Angeles County Metro Rail
- Sacramento Regional Transit (RT)
- San Diego Metropolitan Transit System (MTS)
- San Francisco Bay Area Rapid Transit (BART)
- San Francisco Municipal Railway (MUNI)
- Santa Clara Valley Transportation Authority (VTA)

This report also separately examines the busiest bus stops in the two largest San Joaquin Valley cities of Fresno and Bakersfield and includes the bus rapid transit Orange Line in Los Angeles, given its rail-like qualities. The grades do not cover long-distance Amtrak, cable cars, or less frequent commuter rail lines.

Why grade these neighborhoods? The most effective rail systems with the highest ridership serve significant concentrations of jobs, retail, services, and housing around the stations and along the corridors they travel, particularly those within one-half mile of the station. Better station-area development also addresses important environmental and quality-of-life needs, by accommodating growth in a sustainable manner and meeting increasing market demand for rail-oriented neighborhoods. Grading rail transit station areas helps highlight strong performers and alerts underperformers about the need to improve.

Methodology:

Grades are determined by dividing rail transit stations based on three place types, which appear color-coded on the grading sheet:

	Group 1 - Primarily residential , 33.3% or less workers relative to workers and residents
	Group 2 - Mixed between 33.4% to 66.6% of workers relative to workers and residents
	Group 3 - Primarily employment : 66.7% or more workers relative to workers and residents.

Scores are calculated on each of the following 11 indicators within those 3 place types, weighted according to expert input:

Metric 1 – Transit

1. transit use by residents
2. transit use by workers
3. quality of transit reach
4. transit safety

Metric 2 – Land use and design

5. sum of jobs and households per acre
6. walkability

Metric 3 – Policy and market context

7. policy support for TOD
8. market performance in real estate - change of value over five years (2009-2013)

Metric 4 – Equity

9. transit affordability
10. dependency

Metric 5 – Health and environmental impact

11. greenhouse gas (GHG) emissions
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We utilized the following existing data on rail transit station areas to determine the performance on the 11 indicators:

The TOD Database	Uses figures from the US Census 2000 and 2010, employment dynamics, and census transportation.
The H+T Affordability Index	Specifically measures transit quality, transit use, and level of activity.
Walk Score	Measures walkability based on a location's distance to amenities, block size and intersection density.
Zillow Index	Measures trends in home value based on city, state, neighborhood, and zip code.
California Governor's Office of Planning and Research 2012 Survey Results	Consists of information on city planning/policies.
Crime Reports Database	Lists the number of reported criminal incidents based on data provided by police departments.

Each transit station area competed within its place type to receive scores up to **5 points** on each of the 11 indicators, with a 5 representing the top 20%.

Letter grades for each transit station area are based on the number of points obtained across all indicators, determined by the percentile rank within the place type. Grades are determined by scores at the following percentages.

A+ > 95%	B+ > 70%	C+ > 45%	D+ > 20%	F > 0%
A > 80%	B > 55%	C > 30%	D > 5%	
A- > 75%	B- > 50%	C- > 25%	D- > 2%	

Grading Results:

With grading on a statewide curve, and each station separated into and competing within one of three place types (residential, employment, and mixed), certain transit systems averaged better than others:

Table 3: Best and Worst Performing Stations Per Region			
AGENCY	AVE	BEST	WORST
BART	B-	Civic Center/UN Plaza	SFO
LA METRO	C	Westlake/ MacArthur Park	Wardlow Station
SAN DIEGO MTS	C-	12 th & Imperial Transit Center	Gillespie Field Station
SACRAMENTO RT	C	7 th St and K St	Longview Dr and I-80
SF MUNI	B	Market St & Church St	Third St & Marin
SANTA CLARA VTA	C-	Japantown/ Ayer Station	Middlefield Station

The overall best and worst performing station neighborhoods, by total scaled score across the three place types:

OVERALL BEST	SF MUNI	Market St & Church St	93.8	A+
OVERALL WORST	SAN DIEGO MTS	Gillespie Field Station	23.5	F

The best and worst station neighborhoods per transit system:

AGENCY	AVE	BEST	WORST
BART	B-	24 th St. Mission; Ashby	SFO Airport
		Civic Center/UN Plaza; 16 th St. Mission	South San Francisco; Orinda
		Montgomery St.; Powell St	North Concord/Martinez
LA METRO	C	Westlake/ MacArthur Park; Hollywood/ Western	Wardlow Station
		Wilshire/Vermont; Wilshire/Normandie Station	Del Amo
		Willow	
SAN DIEGO MTS	C-	12 th & Imperial Transit Center; Civic Center Station	Massachusetts Ave; Alvarado; Spring Street
			Gillespie Field Station ; Santee Town Center Station; El Cajon Transit Center
			Fenton Parkway Station
SACRAMENTO RT	C	7 th St and K St; 7 th St and Capitol Mall; K St and 8 th St	Longview Dr and I-80; Watt Ave and I-80
			Fruitridge Rd and 24 th St
			Roseville Road and I-80
SF MUNI	B	Market St & Church St ; Church St & 14 th St; Church St & 16 th ; Metro Church Station; Church St & Market St; Market	Third St & Marin

		St & Sanchez; Church St & Duboce St; Duboce St/Noe St/Duboce Park; Right of Way/18 th ; Church St & 18 th	
		Market St & 7th St; Market St & 8 th St; Metro Civic Center Station; Market St & Hyde	46 th Ave and Vicente St; Ocean Ave & Westgate Dr; Wawona/26 th Ave/SF Zoo
		Market St & New Montgomery St; California St & Front St; California St & Battery St; California St & Kearny St California St & Montgomery St; California St & Sansome St; Market St & 3rd St; Market St & Kearny St Metro Montgomery Station	
SANTA CLARA VTA	C-	Japantown/ Ayer Station	Middlefield Station

San Joaquin Valley Transit-Oriented Areas Results:

Unlike the grades for California’s rail transit station areas, the Fresno and Bakersfield grades are *estimates* based on the available but limited data for each of the eleven scorecard indicators.

Fresno Area Express and Future Bus Rapid Transit Grades: Stations in Fresno that were included in the scorecard consist of high-use areas and areas likely to become high-use areas with new transit infrastructure. The Blackstone/University or Blackstone/Clinton bus stop area is estimated to score a B, while the Kings Canyon/Peach and Kings Canyon/Clovis both scored estimated D grades.

Bakersfield Golden Empire Transit (GET) Bus Station Grades: Stations in Bakersfield that were included in the scorecard consist of high-use transit areas. The Downtown Transit Center is estimated to score a C+, while Bakersfield College and Southwest Transit both scored estimated D grades.

Key Conclusions

The grades in this report reveal that high-performing stations are often in the middle of transit systems in downtown-like environments, while the poorest-performing stations are often located at the outer edges of the rail systems and the urban areas. Low density, auto-oriented areas, even when graded against similar place types, scored poorly. Overall, high-performing rail transit stations serve significant concentrations of housing, jobs, and other amenities in a walkable, equitable environment.

To be sure, some transit systems serve stations in areas where improved neighborhood development is not possible, such as due to proximity to airports and freeway interchanges. These stations may generate significant ridership anyway due to their non-neighborhood destinations, or serving these areas may be a relatively low-cost option given the specific route of the rail line.

However, in cases where station areas are located in industrial or blighted areas, with little pedestrian access or incentive for private investment without massive public subsidies, transit system officials may want to avoid siting future rail stations there. And in some jurisdictions, local governments have deliberately prevented growth around the station areas out of concern for impacts on traffic, parking, and other local concerns.

To improve these underperforming areas:

- Federal and state leaders could ensure that money for rail transit is conditioned on supportive local land use policies for station-area development or is prioritized for areas that already contain significant concentrations of jobs and housing;
- State leaders could develop financing programs for new development projects in under-performing areas, such as through infrastructure finance districts, “green bank” revolving loan funds, and tax increment financing;
- State leaders could develop a permanent source of funding for affordable housing projects near transit and otherwise eliminate costs for these developments, such as by eliminating excessive parking requirements;
- Local leaders could remove restrictive local land use policies on station areas, such as height limits, bans on mixed-use development, and excessive parking requirements on new development projects, through specific plans for the station areas.
- Transit agency leaders could site new transit lines and stations in areas that are likely to be high-performing for ridership based on existing or planned land use patterns and condition new transit funds on local governments allowing or planning for adequate development around rail transit station areas.

Ultimately, policy makers should encourage new development around transit stations by lifting restrictions and investing in underperforming areas, locate new transit stations in places where neighborhoods can develop, and build more walkable, convenient neighborhoods that transit can eventually serve.

Because land use changes often take years to implement, these grades will likely remain relatively constant for the near term. However, as new data become available, we may update them and possibly expand the geographic range. Ultimately, we hope that California’s leaders in both the public and private sectors consider the lessons from these grades as they bring new neighborhoods into the fold of the state’s rail transit network.