Bicycle-Friendly Community Designation and Peer City Review

San Francisco Active Communities Plan

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This review outlines the steps San Francisco can take to become a Platinum-level Bicycle Friendly Community (BFC) and highlights peer cities that have moved the needle on mode share, equity, safety, and other goals and priorities of the SFMTA Active Communities Plan (ACP). Additionally, the EU PRESTO program is reviewed to provide an international perspective on active transportation milestones.

This review provides a snapshot of San Francisco's active transportation network and identifies potential steps for the SFMTA to advance its active transportation network, policies, and programs. For example, how can the City increase bicycle mode share, decrease bicyclist-involved crashes, and ensure that its programs, policies, and network distribution is equitable? What can the City learn from its peers and other model cities in terms of staffing, programs, project delivery, and policies?

Evaluating San Francisco per BFC and PRESTO guidance will help pinpoint where the SFMTA should focus its efforts as it develops the ACP. This will help determine policy actions and recommendations as well as guide community engagement.

Bicycle Friendly Community Designation and PRESTO Guidance

The BFC program, developed by the League of American Bicyclists (the League), provides policy guidance to U.S. cities in their efforts to advance bicycling. It offers an application-based designation program that evaluates a given city's current bicycling statistics, programs, and policies; awards each city a ranking based on its bicycling accomplishments; and recommends how each city can individually improve. Currently, participating U.S. cities rank from Bronze to Platinum, and there is an aspirational Diamond tier that no city has yet achieved.

PRESTO (Promoting Cycling for Everyone as Daily Transport Mode) is a European program that provides policy guidance and benchmarks for cities to grow their bicycling networks. Whether a city is a classified as a "Starter", "Climber", or "Champion" city is fluid and self-determined, and ultimately depends on the relative mix of bicycling rate and conditions. San Francisco falls into the category of a "Climber" city.

Table 1:	BFC versus	PRESTO	Comparison
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	BFC	PRESTO		
What is it?	Designation program with individualized guidance	Guidance framework		
By whom?	League of American Bicyclists	Intelligent Energy Europe		
What are the tiers?	Bronze, Silver, Gold, Platinum, Diamond	Starter, Climber, Champion		
How is level determined?	Application-based	Self-determined		

Bicycle Friendly Community: Recommendations to Reach Platinum

The BFC assessment can be used to guide San Francisco's active transportation policy development and programmatic investment. As of the Spring 2021 BFC report card, San Francisco was rated as a Gold-level community. Some key indicators assessed by the BFC program are summarized below; the full BFC report card includes additional indicators.¹

	San Francisco (2021)	Average Platinum Community
Total Bicycle Network Mileage to Total Road Network Mileage	36%	80%
Commute Mode Share	3.96%	13.6%
Bicycle Education in Schools	Average	Good
Share of Transportation Budget Spent on Bicycling	16%	14%
Fatalities per 10k Daily Bicyclists	1.38	0.4
Bicycle-Friendly Laws and Ordinances	Excellent	Very Good

Table 2: Key Indicators of a BFC-Platinum Community

While San Francisco has a way to go in expanding its bicycle network, increasing ridership, decreasing fatalities, and improving education, it does exceed expectations in areas such as bicycle-friendly laws/policy and allocating budget towards bicycling.

¹https://bikeleague.org/sites/default/files/bfareportcards/BFC_Spring_2021_ReportCard_San_Francisco_ CA.pdf

BFC Recommendations

- Add more protected facilities
- Convert existing bike routes into lower-stress bicycle boulevards/neighborhood greenways
- Improve tracking of the City's Complete Streets Policy
- Include bike lane striping as part of repaving plans
- Expand options for high-quality bicycle parking
- Expand bicycle safety education
 - Especially for K-12 students
 - May be achieved by expanding school partnerships with local bicycle advocacy groups
 - Motorist awareness education
 - Bicycle skills education
- Ensure schools can be accessed on a low-stress bicycle network

While the tailored BFC guidance does emphasize safety, the statistical criteria used in the BFC designation process do not necessarily reflect best practices or ACP goals. For instance, one BFC criterion is percentage of high-speed streets with bicycle infrastructure (not highlighted in the indicators table above) while another is ratio of bicycle infrastructure mileage to roadway mileage, neither of which emphasizes safety and comfort. San Francisco's preferred approach might be enacting policy to reduce speeds and/or designating low-stress/high-comfort routes parallel to high-speed roads. Similarly, evaluating a community on its ratio of lower-stress facility mileage to roadways mileage might be more meaningful than assessing total bikeway mileage.

Also, commute mode share, part of the BFC criteria, is not an accurate way to assess bicycle ridership in the post-pandemic world. The American Community Survey one-year estimates for San Francisco show that the bicycle commute mode share decreased from 4.2 percent in 2018 to 2.1 percent in 2021, which likely reflects a significant increase in hybrid or fully remote work schedules. In communities across North America, it might appear as if bicycling mode share has remained stagnant or decreased since the pandemic, but bicycling has actually increased in recent years as cities have put forth significant efforts to expand bicycle infrastructure and reduce greenhouse gas emissions. This phenomenon was documented in Montreal, where Velo Quebec identified a six percent increase in bicyclists over a five-year span, while the commute mode share increase was minimal.²

PRESTO Guidance

PRESTO is not focused on achieving designations, but instead provides guidance tailored to the status of bicycling in a given city. Cities self-identify themselves as Starter, Climber or Champion cities based on ridership and conditions, as shown in Figure 1, then look to the guide for tailored recommendations.

² Velo Quebec. Cycling in Quebec in 2020. Accessed at https://www.velo.qc.ca/wp-content/uploads/2021/06/vq-edv2020-en.pdf



Figure 1. PRESTO Bicycling Tiers

San Francisco falls into the broad Climber category, which has a modal split of 5-35 percent. Climber cities may have substantial bicycling infrastructure but lower bicycling rates, or higher bicycling rates with limited infrastructure; San Francisco is an example of the former. At the Climber level, the theme is to "get more people on a bicycle" and PRESTO recommends that city efforts focus on infrastructure and promotion.

Notably, PRESTO discourages cities from pursuing a network that prioritizes protected bikeways, with the rationale that these facilities are still unsafe at intersections and that riders must feel comfortable around traffic. It is difficult to reconcile European bicycling guidance with U.S. roadway conditions, however, as the U.S. has far higher bicyclist fatality rates than any peer European country³. To follow PRESTO's guidance of focusing less on separation and more on making bicyclists and motorists comfortable with each other, U.S. cities including San Francisco should focus on improving traffic safety, eliminating fatalities, and expanding education for all roadway users. Instead of protected bikeways, PRESTO recommends the Dutch approach: prioritizing infrastructure that is direct, connected to a broader network, comfortable (smooth and well-lit), and mixes bicyclists with slow vehicle traffic.

PRESTO Recommendations

- Improve network connectivity so bicyclists can easily travel longer distances
 - Focus on solutions for major roadways and other barriers
- Focus less on separation and more on making bicyclists and motorists comfortable co-existing
 - Focus on infrastructure that mixes bicyclists with slow traffic
- Create positive associations with bicycling
 - Targeted campaigns with local businesses
 - Test rides for schoolchildren
- Provide rewards
 - o Subsidized gear

³ Buehler, R. & Pucher, J. *The growing gap in pedestrian and cyclist fatality rates between the United States and the United Kingdom, Germany, Denmark, and the Netherlands, 1990–2018.* Accessed at: https://www.tandfonline.com/doi/full/10.1080/01441647.2020.1823521

• Free or subsidized bicycles or electric bicycles, especially for those new to bicycling

Comparing BFC and PRESTO Guidance

While BFC encourages protected facilities, PRESTO discourages this; however, both encourage a focus on shared streets with slow traffic. PRESTO encourages promotion of bicycling, while BFC focuses on education; both pieces are crucial to get more people on bikes.

Peer City Review

Peer cities, or cities with similar characteristics and active transportation progress as San Francisco, were identified to offer guidance in areas in which they excel. A comparative review of cities recommended by SFMTA, plus Washington, D.C., was undertaken to determine a final list of peer cities for this review. Using the criteria described below, the final list of peer cities includes Seattle, WA; Austin, TX; Cambridge, MA; Washington, D.C.; and Vancouver, B.C. They range from flat to steep terrains and year-round pleasant weather to months of snow, illustrating that there is no one-size-fits all approach to expanding bicycling.

The primary criteria for peer cities were:

- Comparable bike-friendly progress (via BFC and People for Bikes scores); and
- Size (population and area; density)

The Peer City Tool developed by the Federal Reserve Bank of Chicago (Chicago Fed)⁴ was additionally used as a quick way to identify which cities are also peers of San Francisco in terms of demographics and economy. While this tool did not make or break which cities were included in the analysis, it affirmed that some of the chosen cities have more in common with San Francisco than just their active transportation efforts. It demonstrates that:

- Austin has comparable racial and socioeconomic demographics;
- Seattle and Cambridge are peers in having resilient economies and labor markets; and
- Seattle has similar demographics and economic outlook.

North American model cities, which are recognized leaders in bicycling, were also identified to offer aspirational guidance. These cities include Fort Collins, CO and Montreal, QC.

Peer Cities Comparison

All of the peer cities are recognized as leading cities for bicycling in North America and are currently BFC Gold (except for Vancouver as the BFC program is U.S.-specific). Additionally, **all** have bikeshare

⁴ https://www.chicagofed.org/region/community-development/data/pcit

programs and offer bikeshare subsidies to low-income populations. Differences across the cities are highlighted in the table below.

City	2021 Population/S q. Mileage	Density (persons/sq. mi)	Length of Total Bicycle Network (Date)	Miles of Protected Bikeways and Off-Street Paths (% of Total)	Bicycle Program Staff to Population°	Bicycle Commute Mode Share 2019*	Active Transportation Education Included in Public School Curriculum	Fatalities per 10k Bicycle Commuters
San Francisco	815,201 46.87	17,393	464† (2021)	120 (26%)	1 per 17.6K	4%	No - Optional events and classes are offered (weekends/su mmer)	1.4
Seattle	733,919 83.78	8,760	297 (2020)	Unknown	1 per 46K	3.5%	Yes - "Let's Go" program for elementary students; modules in development for kindergartener s and middle schoolers	1.9
Austin	964,177 305.1	3,547	Unknown	215 (52%) [!]	1 per 61K	1.3%	No- Schools can opt for Safe Routes to provide trainings	2.5

Table 3: Peer Cities Comparative Statistics

Cambridge	117,090 7.104	16,482	94 (2019)	44 (47%)	1 per 7K	7.7%	Yes- "Second Grade Pedestrian and Bicycle Safety Unit"	1
Washington, DC	690,093 68.34	10,098	164 (2022)	84 (51%)	1 per 99K	4.5%	Yes- Part of second grade P.E. classes	1
Vancouver, BC	662,248 44.39	14,917	202 (2019)	50-60 (25- 30%) [!]	N/A	13.2%^	Yes- "Everyone Rides Grade 4-5"	Unknown

⁺This number may be comparatively higher since San Francisco totals facilities on both sides of the street (e.g., one mile of bike lanes on two sides of the street = two miles).

¹This value represents the all ages and abilities network, which additionally includes bike boulevards (or analogue facilities).

°Based on most recent BFC report card, which varies by city and only exists for U.S. cities.

*2019 statistics were chosen due to the pandemic-era decrease in commuters observed in all U.S. cities. American Community Survey 5-Year Estimates is the source for U.S. data.

*Based on 2019 Vancouver Panel Survey. (Canada Census Journey to Work is only available every five years.)

Length of Total Bicycle Network

Total bicycle network mileage cannot be compared across cities as these cities are vastly different sizes, from 7 square miles (Cambridge) to 305 square miles (Austin). Also, cities measure their bikeways differently; for instance, San Francisco totals facilities on both sides of the street (e.g., one mile of bike lanes on two sides of the street are counted as two miles).

Miles of Protected Bikeways and Off-Street Pathways

The percentage of protected bikeways and off-street pathways compared to total bikeway mileage is a better indicator of a city's bicycle infrastructure progress than total mileage. Compared to most of its peers, which hover around the 50 percent protected facilities mark, San Francisco has significantly fewer miles of protected facilities. Percentage of all ages and abilities facilities (which additionally includes bike boulevards/neighborhood greenways) is also a good indicator and can be easier to accomplish since bike boulevards and their analogues can be quicker and more cost-effective to implement.

Bicycle Program Staffing

Comparing bicycle program staff-to-population ratios across peer cities indicates that a strong active transportation program does not necessarily require a city to increase program staffing. Naturally smaller (but well-resourced) cities will have a better ratio, with Cambridge leading this category. There is quite a range in bike staff to population ratios across these peer cities, yet all are recognized as top bicycling cities in North America.

Bicycle Commute Mode Share

Given the shortcomings of using commute mode share described above, it may be time to move away from emphasizing commute mode share as an indicator of a city's active transportation success and instead focus more on outreach to get more people on bikes. Regardless, 2019 commute mode share (the most recent pre-pandemic mode share estimates) is compared here to get a general sense of which cities enjoy the highest bicycling rates. As indicated in the chart above, Cambridge and Vancouver are the leaders in this category.

Active Transportation Education

Most of the peer cities include active transportation education as part of their public school curriculums. While most cities tend to offer this education during one school year (i.e., second grade, fourth grade, etc.) Seattle is working towards a comprehensive bicycle education program, described in the following spotlight section.

Bicyclist Fatalities

The peer cities with the lowest bicyclist fatality rates also have lowered speed limits citywide in previous years. Cambridge lowered speed limits on its arterials to 25 mph in 2016 and on local roads to 20 mph in 2019, and Washington, D.C. rolled out speed limit reductions from 2020-2022. This is described in more detail in the following spotlight section.

Equity

All of the peer cities have integrated equity into their active transportation programs as a metric for prioritizing infrastructure. Additionally, all of these cities offer subsidized bikeshare memberships for lower-income populations. San Francisco is making similar strides in equity as the other peer cities. The current 15-minute city initiative in model city Fort Collins will be reviewed as a best practice in developing an equitable active transportation network.

Peer City Spotlights

Seattle

Seattle has greatly expanded its active transportation program, and over the course of just one year during the pandemic, the City installed over 10 miles of protected bike lanes. The City of Seattle has also made a bold commitment to reducing greenhouse gas emissions: 90 percent of all person trips will be emission-free by 2030. Realizing this commitment requires a significant mode shift to active modes.

Project delivery is where Seattle sets an example. Since 2016, its newly installed facilities have been almost entirely low-stress: trails, protected bike lanes, and neighborhood greenways. Its rapid installation of over 10 miles of protected bike lanes in just one year helped to greatly expand its active transportation network. Most of this network was built in the downtown area, ensuring a connected stretch of low-stress bicycling facilities in a dense area.

Seattle also sets an example for **education**. Since 2015, the City has partnered with Cascade Bicycle Club offer bicycle education classes to all public elementary schools. The program is expanding to kindergarten and middle schools with modules tailored to each age group, building off the education learned at each step.



Figure 2. A child learns to ride a bike at school with the Let's Go program (Photo Credit: Seattle Public Schools)

Austin

Austin excels in **promoting** bicycling and bicycling resources to its residents. Department of Transportation staff created a one-stop-shop web resource for all modes of sustainable transportation, "Get there ATX", which promotes bicycling as fun and healthy activity and provides interactive maps, trail spotlights, safety tips, and information on accessing bikeshare and getting bikes on transit. Information on assistance programs for e-bike purchase, bikeshare, and more is also included on the site.

Austin additionally excels at **project delivery**. After receiving a \$20 million Mobility Bond specifically for bicycle projects in 2016, the City installed significant bicycle infrastructure from 2017 through 2021,

building out over 50 percent of its all ages and abilities network (115 miles) in just 24 months. To accomplish this, the City prioritized projects located on streets scheduled to be repaved as well as projects involving external partners. Many of the projects supported by the 2016 Mobility Bond serve elementary and middle schools; the goal is to complete all bond-funded projects at 137 schools by 2024.

Cambridge

As the oldest city of the peer cities group, Cambridge benefits from its design: its narrow streets originally designed for horse-and-buggy serve as bicycle-friendly low traffic speed/volume streets today. Low-speed/low-volume streets make up a significant portion of its bicycle network and are one of three major facility types, which also include protected bike lanes and shared-use paths. Notably, Cambridge has installed a handful of grade-separated facilities, such as the one on Concord Avenue, shown Figure 3, below. These facilities provide a safe option for bicycling on major roads with high traffic volumes.



Figure 3. Protected facilities, such as this grade-separated facility, are a priority in Cambridge

Active transportation policy is where Cambridge excels. While it has been recognized for many progressive bicycle policies throughout the years, in 2019 it became the first U.S. city to mandate protected bike lanes. Its Cycling Safety Ordinance requires that whenever a road is reconstructed, it must also install a protected bike lane if the road is identified in its Bicycle Network Vision. The expectation is that 25 miles of bikeways will be built within seven years due to this ordinance. As described in the section on bicyclist fatalities, Cambridge also has an established speed limit reduction policy, which

consequently has made it a leader for **safety**. In 2016, the City reduced arterial speed limits from 30 to 25 mph, and in 2019 reduced speed limits on local streets (most of its network) to 20 mph.

Washington, D.C.

While Washington, D.C. benefits from having an extensive trail network thanks to a system of pathways along the National Mall, its dedication to providing safe, continuous routes across key corridors in the city has put it on the map as a top bicycling city and boosted its **mode share** in the early 2010s. It was an early adopter of protected bike lanes, and one of its most notable facilities is a connected low-traffic/low-speed route that parallels a major vehicle route. The 15th Street two-way cycletrack, a protected bikeway on a one-way street, parallels the major 16th Street corridor, providing an alternative for residents to access jobs downtown without the vehicle traffic of 16th Street.

D.C. has also made bold strides towards **safety** by permanently lowering many 25 mph roads to 20 mph in 2020 and lowering key 30 mph roads to 25 mph in the past two years to help circumvent the rise of bicyclist and pedestrian fatalities that most U.S. cities have experienced in recent years.

Vancouver

Vancouver doubled its bicycling **mode share** from 2013 to 2018. This increase in ridership has been associated with a focus on building infrastructure for **all ages and abilities**. This includes not only lowerstress facilities, but also ensuring facilities are wide enough for cargo bikes and recumbent bikes and utilizing green paint in its facilities to increase visibility and help bicyclists feel safer on roadways. **Policy** and the presence of a complementary, world-class transit system play a key role here, too: after meeting its 2020 goal of 50 percent sustainable mode share (including transit) two years early in 2018, it has committed to shifting two-thirds of all trips to active modes or transit by 2030.



Figure 4. A skater and a bicyclist share the lane in a protected, two-way cycletrack in Vancouver

Model City Spotlight

Fort Collins

Fort Collins, while a smaller city, is a model city for San Francisco. It strives to make motor vehicles redundant in its new 15-Minute City initiative that will ensure that all residents live within a 15-minute walk or bike ride of key daily destinations, such as grocery stores, schools, and parks. This initiative is grounded in **equity** by prioritizing disadvantaged communities with poor access to daily destinations in its efforts to connect all residents to daily destinations.

Montreal

Montreal is recognized as the North American leader in bicycling. Bicycling is more integrated into the culture than the other cities discussed here, and Montreal has a more extensive bicycling network compared to the peer cities, with a bicycling expressway in the works.

Montreal excels in **active transportation policy.** The City built the first protected bike lane in North America in the 1980s, establishing itself as an early adopter of pro-bicycling culture. The City recently pledged to add another 200 km (124 miles) of protected bike lanes by 2027, with a focus on underserved areas of the network. This ambitious plan includes 10 bicycle expressway routes, which will comprise 60 km of the 200 km goal. In 2021, a bicycle expressway route was completed in the city, boasting a 9-km stretch of uninterrupted bikeway across a key corridor.

Next Steps and Implications for the ACP

While San Francisco may achieve BFC Platinum status in the coming years, it should consider a full range of strategies to advance its active transportation network independent of any given rating system or program. In developing the ACP, San Francisco should consider BFC and PRESTO guidance, along with best practices from peer and model cities, in the context of local conditions and community input. Key considerations from this review include the following.

- Increase protected facilities. While this may not be recommended by PRESTO (for European cities), the League does recommend this in its BFC report card for San Francisco. Protected facilities may still be necessary on streets with higher vehicle volumes in North America. Compared to its peers, San Francisco lags in protected facilities. Quick build, or installing bicycle facilities in an efficient manner with lower-cost and easier-to-implement (but not necessarily permanent) materials, is one method that cities have used to quickly expand bicycle networks. San Francisco has taken the quick build approach in recent years to roll out protected infrastructures in its high-injury networks. However, quick build is often politically charged as its temporary nature allows cities to circumvent the typically bureaucratic policies required for permanent facilities. Cambridge does have a community-vetted quick build prioritization process in place to ensure protected facilities are installed on streets that are not subject to its Cycling Safety Ordinance.)
- **Prioritize low-traffic/low-speed shared facilities**, such as Slow Streets and neighborways. This is consistent with the Dutch approach to building infrastructure and these facilities are more affordable and quicker to implement than trails and protected bikeways. This will ensure routes familiarize bicyclists with riding in traffic but still expand the low-stress bicycle network. It is imperative, though, that these streets are truly low-volume/low-speed; otherwise, they will not

serve riders of all ages and abilities. San Francisco had opted to make some of its pandemic-era Slow Streets permanent and in other parts of the city, it has ramped up its neighborways (bike boulevard analogue) program. Neighborways are implemented on low-speed/low-volume streets and rely on traffic-calming measures, such as raised crossings and roundabouts, to enhance traffic safety (in contrast to Safe Streets, which utilize barriers to fully or partially close streets to through traffic.)

- Continue reducing speed limits. Vehicle speed is the biggest factor in crash severity and can be a huge deterrent from people riding bikes. The passage of Assembly Bill (AB) 43 has allowed California cities to reduce existing speed limits, and San Francisco began implementation in 2021, rolling back speed limits from 25 to 20 mph in parts of its high-injury network, and continued to reduce speed limits from 30 to 25 mph and 25 to 20 mph in key business activity districts.
- **Continue to provide low-stress, connected facilities parallel to major roadways** rather than installing facilities on higher-speed/higher-volume roadways. Polk Street, which has protected bike lanes on both sides of the street and runs parallel to major thoroughfare Van Ness Avenue, is a good example of this in San Francisco.
- Expand promotional efforts to attract new bicyclists. This is consistent with PRESTO guidance and the efforts in Austin are a great example. Currently, SFMTA does not offer a one-stop website that dually promotes bicycling and connects bicyclists and would-be bicyclists with all the resources they need.
- Expand bicycle education and tailor it to all ages and all roadway users, including adults and motorists. Including active transportation education in public schools is a key place to start to ensure that the youngest generations and future generations are encouraged and prepared to be safe active transportation users. Currently, San Francisco Unified School District only offers optional learn-to-ride summer programs and occasional, optional weekend activities for schoolchildren. Seattle's bike education program is an excellent model, leveraging city funding with non-profit expertise and staffing.
- Make bold policy commitments. Cambridge and Montreal are leaders when it comes to making the commitment to install safe infrastructure and following through. Similar to Cambridge's Cycling Safety Ordinance, San Francisco is developing a policy to require planned protected bikeways to be installed during the repaving process.
- Make tangible efforts to build an equitable active transportation network and livable communities. One approach might be to evaluate whether disadvantaged and underserved communities can access daily destinations within a 15-minute walk or bike ride of their home, and if not, build the necessary connections or make land use decisions that will ensure such destinations exist in these neighborhoods. San Francisco is considering using a similar approach for the ACP Equity Analysis.