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Bike-Share Stations in the U.S.

by Theresa Firestine

- A total of 2,655 bike-share stations operate in 65 U.S. cities.
- Of the 2,655 bike-share stations, 86.3 percent (2,291) connect to another scheduled public transportation mode within 1 block. These connections extend the transportation network by offering a means for reaching places with scheduled public transportation (e.g., heavy rail stations and local bus stops) and a means for reaching destinations not served by scheduled public transportation.
- Transit bus is the most typical connection, with 84.2 percent (2,236) of bike-share stations located a block or less from a transit bus stop.

Bike-share systems enhance modal choice and extend the existing transportation system by providing access to destinations off existing public transportation routes.

The Bureau of Transportation Statistics' (BTS') [Intermodal Passenger Connectivity Database](http://www.transtats.bts.gov/IPCD.aspx)¹ (IPCD) provides the locations of U.S. bike-share stations and their connectivity levels to scheduled public passenger transportation modes, such as air and intercity and transit modes (bus, ferry, and rail) (see box A). A bicycle (bike) sharing system is a service where bikes are available for shared use to individuals on a short-term basis. In the United States, 86.3 percent (2,291 of 2,655) of bike-share stations connect to another scheduled public transportation mode within 1 block, 9.0 percent (238) connect within 1 to 2 blocks, and 4.7 percent (126) either have no connection or no connection to a scheduled public transportation mode within 2 blocks (see figure 1).

¹ <http://www.transtats.bts.gov/IPCD.aspx>

BOX A. About the Intermodal Passenger Connectivity Database (IPCD)

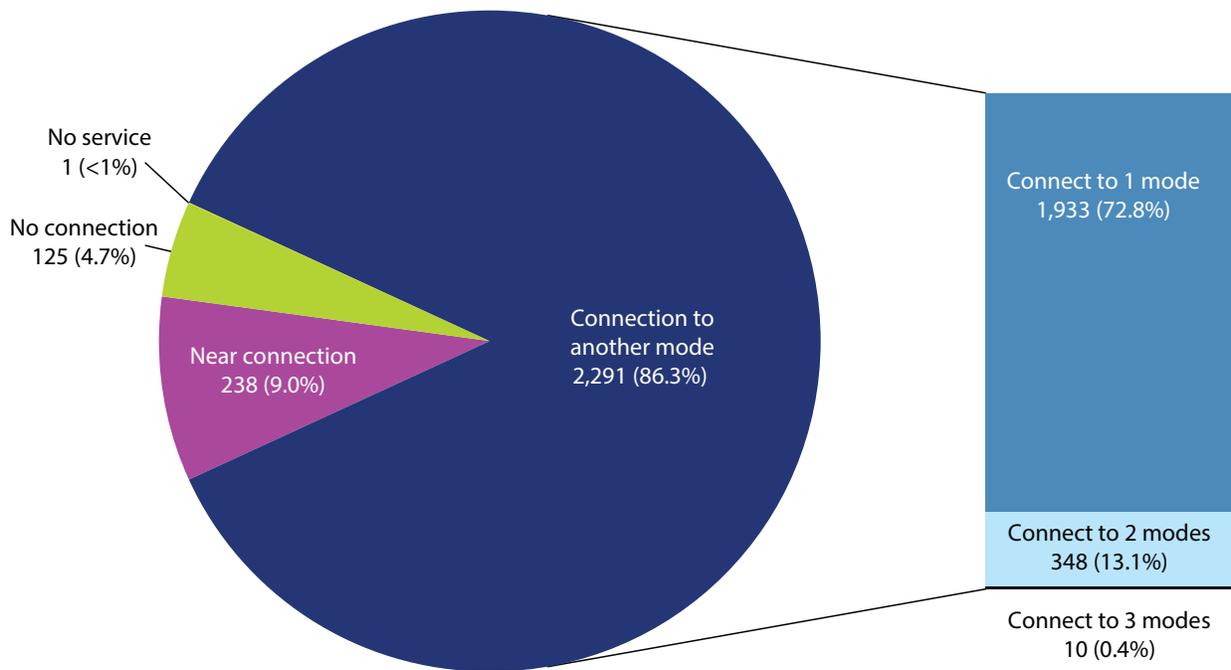
The Intermodal Passenger Connectivity Database (IPCD) is a nationwide database of passenger transportation terminals, with data on the availability of connections among the various scheduled public transportation modes at each facility. The IPCD data covers the following types of passenger transportation terminals:

- Scheduled airline service airports
- Intercity bus stations (includes stations served by regular scheduled intercity bus service such as Greyhound and Trailways; code sharing buses such as "Amtrak Thruway" feeder buses; supplemental buses that provide additional frequencies along rail routes; and airport bus services from locations that are outside of the airport metropolitan area)
- Intercity and transit ferry terminals

- Light-rail transit stations
- Heavy-rail transit stations
- Passenger-rail stations on the national rail network served by intercity rail and/or commuter rail services
- Bike-share stations

The data elements describe the location of the above types of terminals as well as the availability of intercity, commuter, and transit rail; scheduled air service; intercity and transit bus; intercity and transit ferry services; and bike-share availability. Transit bus service locations are not specifically included in the database. However, the status of transit bus as a connecting mode is included for each bike-share facility in the database.

FIGURE 1. Bike-Share Connectivity to Scheduled Public Transportation



NOTE: “Connection to another mode” indicates the number of bike-share stations in, directly outside, or within one block of another scheduled public transportation mode. “Near connections” means a connecting mode is within 1-2 blocks of a bike-share station. “No connection” means that another scheduled public transportation mode serves the same metropolitan area as the bike-share station but not within 2 blocks so it is considered to have no connection. “No service” means that no scheduled public transportation mode serves the same metropolitan area as the bike-share station.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Intermodal Passenger Connectivity Database (as of Feb. 2, 2016)



Theresa Firestine

Capital Bikeshare station, Washington, DC.

Bike-share generally uses new mobile communications technologies to offer a transportation option. In most cases, users pay a fee to grab a bike at any outdoor docking location in the system and then return the bike within a specified time limit to any outdoor docking location within that system. Bike-share systems generally operate within a city; however, a few operate across cities within a metropolitan area.

Bike-share systems typically operate independently of local transit authorities. However, most bike-share docking stations (86.3 percent) can be found near local public transportation stops (transit bus, commuter rail, heavy rail, light rail, and transit ferry). These locations offer modal choice and the opportunity to connect between modes. Transit bus is the most typical connection, with 84.2 percent (2,236) of bike-share stations located a block or less from a transit bus stop.

Bike-Share Systems

BTS found a total of 2,655 bike-share stations that operate in 65 U.S cities as of August 2015 (see figure 2).² A total of 46 bike-share systems operate these stations. Of the 46 bike-share systems, 5 operate across 1 or more cities within a metropolitan area. Capital Bikeshare, for example, serves 11 cities in the Washington DC-Arlington-Alexandria Metropolitan Area, and Cincinnati Red Bike serves 4 cities in the Cincinnati Metropolitan Area³.

Connecting Options at Bike-Share Stations

Bike-share systems that connect with other transportation modes extend the transportation network and increase modal options. A bike-share facility, for example, located within a block of a transit bus stop offers an alternative to

² This count does not include bike-share systems operated by a college or university and/or operating exclusively on a college or university campus and does not include private rentals.

³ Five bike-share systems operate across one or more cities within a metropolitan area. Capital Bikeshare serves Washington DC; Rockville, MD; Bethesda, MD; Silver Spring, MD; North Potomac, MD; Takoma Park, MD; Derwood, MD; Redland, MD; Chevy Chase, MD; Alexandria, VA; and Arlington, VA; Cincinnati Red Bike serves Covington, KY; Newport, KY; and Bellevue, KY; Nice Ride serves Minneapolis and St. Paul, MN; Bay Area Bikeshare serves San Francisco, Mountain View, San Jose, Palo Alto, and Redwood City, CA; Heartland Bicycle serves Omaha, NE and Council Bluffs, IA; and Broward Bicycle serves Pompano Beach, Lauderdale by the Sea, and Fort Lauderdale, FL.

BOX B. How Bike-Share Connectivity is Defined in the Intermodal Passenger Connectivity Database (IPCD)

A bike-share station **connects** to another mode when it is directly outside of another scheduled public transportation mode or within one block (2,291 bike-share stations).

A bike-share station **nearly connects** to another mode when it is between one and two blocks of another scheduled public transportation mode (238 bike-share stations).

No connection means that another scheduled public transportation mode serves the same metropolitan area as the bike-share station but does not come within two blocks, so it is considered to have no connection (125 bike-share stations).

No service means that no scheduled public transportation mode serves the same metropolitan statistical area as the bike-share station (1 bike-share station in Evans, GA).

In cities with transit rail and bike-share, bike-share offers a means for reaching transit rail stations and a means for reaching destinations beyond transit rail stations. Commuters, for instance, may use bike-share to travel from their neighborhood to a transit rail station and/or may use bike-

TABLE 1. Number of Bike-Share Stations with Connections to Transit Modes

Connecting transit mode	Connections	Near connections	No connection	No service
Bus	2,236	261	157	1
Transit rail	397	470	1,375	413
Heavy rail	267	334	1,078	976
Light rail	110	128	1,465	952
Commuter rail	58	75	1,878	644
Ferry	17	31	1,340	1,267

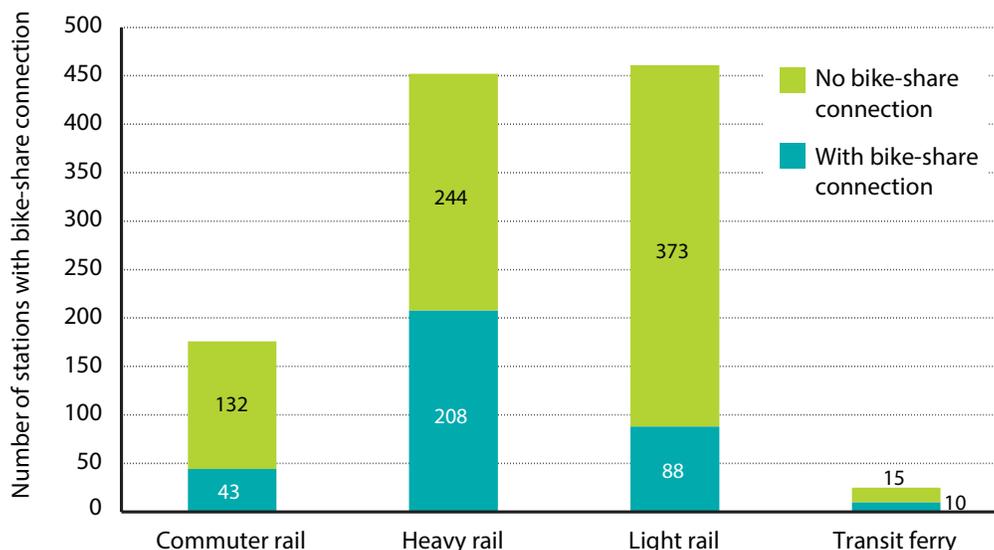
NOTES: Multiple modes may serve a station; connectivity counted for each mode served at the station. "Connection to another mode" indicates the number of bike-share stations in, directly outside, or within one block of another scheduled public transportation mode. "Near connections" means a connecting mode is within 1-2 blocks of a bike-share station. "No connection" means that another scheduled public transportation mode serves the same metropolitan area as the bike-share station but not within 2 blocks so it is considered to have no connection. "No service" means that no scheduled public transportation mode serves the same metropolitan area as the bike-share station.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Intermodal Passenger Connectivity Database (as of Feb. 2, 2016)

share to reach their workplace from a transit rail station. The following discusses the connectivity of each transit rail mode and transit ferry to bike-share.

In the 22 cities served by commuter rail and bike-share, 24.6 percent of the stations served by commuter rail connect with a bike-share station (43 stations). The remaining 132 commuter rail stations in cities with a bike-share system offer no connectivity to bike-share, although a bike-share system exists within the city itself (figure 3).

FIGURE 3. Connectivity of Transit Rail and Transit Ferry to Bike-Share



NOTE: Includes only stations where specified mode offered in same metropolitan area as bike-share system. Multiple modes may serve a station; connectivity counted for each mode served at the station.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Intermodal Passenger Connectivity Database (as of Feb. 2, 2016).

In the 11 cities served by heavy rail and bike-share, 46.0 percent of the stations served by heavy rail connect with a bike-share station (208 stations). The remaining 244 heavy rail stations in cities with a bike-share system offer no connectivity to bike-share, although a bike-share system exists within the city itself (figure 3).

In the 15 cities served by light rail and bike-share, 19.1 percent of the stations served by light rail connect with a bike-share station (88 stations). The remaining 373 light rail stations in cities with a bike-share system offer no connectivity to bike-share, although a bike-share system exists within the city itself (figure 3).

A bike-share system exists in 9 of the 145 cities served by transit ferry. In these cities, 40.0 percent of transit ferry terminals connect with a bike-share station (10 stations). The remaining 15 transit ferry terminals offer no connectivity to bike-share, although a bike-share system exists within the city itself⁵ (figure 3).

Bike-Share and Intercity Connectivity

Only 2.4 percent of bike-share stations (64) connect with an intercity transportation mode (intercity ferry, intercity bus, intercity rail, and/or air). Bike-share does not connect with intercity ferry or air but nearly connects with (is between one and two blocks from) four intercity ferry terminals and one airport. Bike-share connects with intercity rail at 22 stations⁶, and with intercity bus service at 56 locations. Bike-share connects with both intercity rail and intercity bus service at 14 locations. Bike-share nearly connects with intercity rail at 35 locations, and nearly connects with intercity bus at 167 locations. (see table 2).

⁵ The IPCD identifies connectivity by metropolitan area. In the IPCD, bike-share systems exist in 5 of the 32 metropolitan areas served by transit ferry. Cities not served by transit ferry in the metropolitan areas excluded from the count in this paper.

⁶ At 14 of these 22 stations, commuter rail service exists in addition to intercity rail service.

TABLE 2. Number of Bike-Share Stations with Connections to Intercity Modes

Connecting intercity mode	Connections	Near connections	No connection	No service
Bus	56	167	2,406	26
Rail	22	35	2,438	160
Ferry	0	4	696	1,955
Air	0	1	2,623	31

NOTES: "Connection to another mode" indicates the number of bike-share stations in, directly outside, or within one block of another transportation mode. "Near connections" means a connecting mode is within 1-2 blocks of a bike-share station. "No connection" means that another scheduled public transportation mode serves the same metropolitan area as the bike-share station but not within 2 blocks so it is considered to have no connection. "No service" means that no scheduled public transportation mode serves the same metropolitan area as the bike-share station. Multiple modes may serve a station; connectivity counted for each mode served at the station.

Bus refers to intercity bus service. Supplemental and Code Share buses that are in the database are not included in the totals in this table since they are not classified in the database as either intercity or transit.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Intermodal Passenger Connectivity Database (as of Feb. 2, 2016)

About this report

For more information, contact: Theresa Firestine, Economist, Bureau of Transportation Statistics, U.S Department of Transportation, 1200 New Jersey Ave., SE (Room E34-303) Washington, DC 20590 Email: Theresa.Firestine@dot.gov Phone: 202-366-3629.