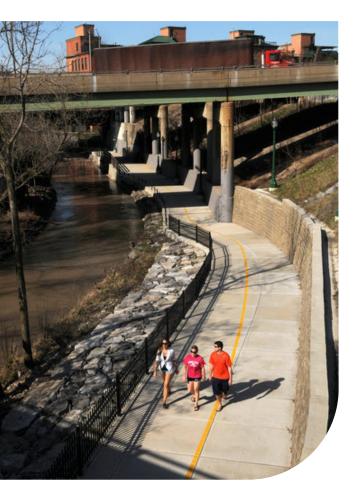


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Cities are finding ways to pay for high quality bicycling infrastructure. This report provides transportation officials and advocates examples of how protected bike lanes are being paid for in the United States.

How Communities are Paying for Innovative On-Street Bicycle Infrastructure



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How Communities are Paying for Innovative On-Street Bicycle Infrastructure

Communities across the country are making strides to become safer and more accommodating for bicycling and walking. When it comes to bicycling, innovative American cities are increasingly turning to on-street bicycling infrastructure that provide separation from traffic, known variously as protected bikeways, cycle tracks, buffered bike lanes, or green lanes. Both advocates and city planners are asking the same question: How are communities paying for innovative infrastructure? This report offers answers to that question, as a part of a series of reports on how communities – whether through ballot measures or state sources of funding – are paying for bicycling and walking improvements.

Purpose

This report provides transportation officials and advocates examples of how protected bike lanes are being paid for in the United States, in order to give "permission by example" to other communities. The message is: Dozens of cities are finding ways to pay for high quality bicycling infrastructure. Yours can too.

Methodology

We asked the city officials behind recent and planned protected bikeway projects about their funding sources and collected information on 75 projects. To identify projects, we relied on the detailed <u>inventory of protected bike lanes</u> from the Green Lane Project of PeopleForBikes.¹ We focused on recently completed or planned projects to allow us to report primarily on contemporary, existing sources. We received responses from most, but not all of the cities we contacted.

What do these projects cost?

The cost estimates in this report are not apples to apples comparisons. Many bicycle facilities are part of larger road projects, making estimating precise project costs difficult. They are not meant to be estimates for future projects, or to be compared with each other, because they represent different parts of projects at different scales. Some estimates include design and construction, some only one or the other. Some estimates include the whole street project, some only the biking component. Some projects are more ambitious than others and cities have different labor and right-of-way acquisition costs.

To those unfamiliar the typical cost of transportation projects, the cost estimates may seem high. However, bicycling projects are significantly cheaper, in general, than most road projects² and a higher proportion of the cost goes toward labor (as opposed to materials) than road projects, making them efficient job creators.³

³ Political Economy Research Institute, "Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts." http://bit.ly/1qsFi8s





¹ PeopleForBikes, Green Lane Project, "Inventory of Protected Bike Lanes." http://bit.ly/GreenLaneInventory

² Advocacy Advance, "Lifting the Veil on Bicycle & Pedestrian Spending." http://bit.ly/LiftingTheVeil

Below: The \$64 million Cultural Trail in Indianapolis, IN, was paid for with a mix of federal, local, and private funds. (Photo courtesy of doingindy.com)



Findings

Where there's a will there's a way

The essential finding of this report is that communities are using a wide variety of ways to pay for protected bikeways, just like they pay for other important civic infrastructure. Cities like Cambridge, MA take a holistic approach. The City's Transportation Program Manager, Cara Seiderman said: "When we redo the street, it is done well, incorporating better bicycling infrastructure. Where the money comes from to do a sewer project is kind of irrelevant, isn't it?"

Until all communities build high quality bicycling infrastructure as a matter of course, the examples in this report can point the way forward for cities trying to find ways to pay for it.

Types of funding sources

There's no single go-to funding source for protected bikeways. Within a given community – or even within a single project - several sources will often be used. The choice depends on the availability of particular funds, the nature of the projects, and expediency.

EXAMPLES OF REAL-WORLD FUNDING SOURCES FOR PROTECTED BIKEWAYS

FE	DERAL	STATE	OCAL/ REGIONAL PRIV	ATE
	Congestion Mitigation and Air Quality (CMAQ) Improvement	» State bicycle and pedestrian grant	Business Improvement District » Defunds	evelopers
	Program	State multi-modal fund	General Obligation Bonds	ospitals
» F	Highway Safety Improvement		» Pr	nilanthropy
	Program (HSIP)	» State Safe Routes to Schools funds	Local Capital Improvement Programs » Ur	niversities
	Surface Transportation Program (STP)		Regional Bike Program fund	
»	Transportation Investment		Tax Increment Financing (TIF)	
(Generating Economic Recovery (TIGER) Discretionary Grant		Transportation Fund for Clean Air (Bay Area, California)	
ķ	orogram		Unspecified city funds	
F	Transportation Alternatives Program (formerly Transportation Enhancements)		Voter-approved sales taxes or other levies	





Below: A TIGER-funded protected lane on University Ave in Syracuse, NY, as part of the city's multi-modal "Connective Corridor" (Photo courtesy of Max Bloch)



Bicycle and Pedestrian Criteria	Score
Proximity to Land Uses (within 1/2 mile ped, 3 mile bicycle)	10
Schools and Colleges	2
Parks	2
Major and Local Retail Centers	2
Major Employment Centers	2
Transit Routes	2
Network Continuity	15
Regional Network continuity projects that foster greater connection region wide	15
Localized Network continuity projects that has localized benefits	10
No Network continuity	0
Bicycle Related Improvements	8
Project scope includes cycle track or shared-use path	4
Project scope includes signed and painted bicycle lanes	3
Project scope includes shared roadway design or paved shoulder	2
Project scope includes bicycle wayfinding signs	1
Project scope does not include bicycle facility	0
Project identified as a priority in the Regional Bicycle and Pedestrian Plan and incorporates facility improvements:	
Regional	3
Primary	2
Secondary	1
Pedestrian Related Improvements	
Project scope includes ADA accessible sidewalks, curb ramps, or shared use path	3
Project scope includes marked crosswalks	2
Project scope includes pedestrian wayfinding signs	1
Project scope does not include pedestrian facilities	0
Project identified as a priority in the Regional Bicycle and Pedestrian Plan and incorporates facility improvements	2
Incorporates Traffic Calming and Design Improvements	4
Project Addresses Location with History of Fatal Bike/Ped Crashes	

Federal Sources

Don't be fooled by the designation "federal funds." Revenue derived from federal sources contributes to many local projects across the country, including bicycling and walking projects. The project selection is usually completed by state Departments of Transportation or regional governments. Protected bike lanes in cities such as Atlanta, GA, Eugene, OR, Indianapolis, IN, Memphis, TN, St. Georges, DE, and Syracuse, NY have been paid for, in part, with various federal funding sources.

Some projects are funded by standard federal-aid highway sources, such as:

- » Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- » Highway Safety Improvement Program (HSIP)
- » Surface Transportation Program (STP), and
- » Transportation Alternatives Program (formerly known as Transportation Enhancements).

To learn more about each of these federal sources and how they are applicable for biking and walking, please visit www.advocacyadvance.org/MAP21.

In at least one case – Atlanta – Surface Transportation Frogram funds are flexed to a Federal Transit Administration program (FTA Section 5307) for easier implementation. Other projects are funded by other opportunities like the federal Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant program or the American Recovery and Reinvestment Act (ARRA) program.

Memphis, TN

One of the leaders in using federal-aid funds for protected bike lanes is Memphis. This is, in part, because of how the region designed its funding criteria for project selection. The region's Surface Transportation Program criteria process, for example, explicitly awards points for projects that include a "cycle track or shared-use path" (see table at left).

Below: Overton Park Road, Memphis. Many of Memphis' upcoming separated infrastructure projects are being paid for with federal funds, such as the Surface Transportation Program (STP), the Congestion Mitigation and Air Quality Improvement Program (CMAQ), and the Highway Safety Improvement Program (HSIP). (Photo courtesy of the City of Memphis)



Federal Funding Usage Spotlight: City of Memphis

Memphis is one of the first cities to use **Highway Safety Improvement Program (HSIP)** funds for protected bike lanes. Here's how the city made it happen:

- The City of Memphis requested that Tennessee DOT (TDOT) install protected bike lanes in conjunction with an already planned resurfacing project near downtown Memphis.
- TDOT agreed to install the protected bike lanes.
 Any components that caused TDOT to exceed their original planned budget for the project would be paid for by the City of Memphis.
- TDOT's Bike/Ped Coordinator confirmed that the striping and delineators could be covered under HSIP.
- 4. The state's HSIP manager confirmed that they would cover those costs using HSIP funds at the 100% federal reimbursement.
- 5. The staff high-fived in the office!

The City of Memphis recently bundled several protected bike lane projects – including 50 miles of lane segments on a Congestion Mitigation and Air Quality (CMAQ) Improvement Program project and 25 miles of lane projects in a STP project. Bundling made the federal process worth pursuing, allowed the city to demonstrate sufficient air quality improvements to be competitive for CMAQ funds, and benefited large portions of the city. That said, Bicycle/Pedestrian Coordinator Kyle Wagenschutz recommends that cities contract a consultant to help them manage the scoping, environmental protections, and contracting paperwork.

State Sources

Many communities use state revenue sources to pay for their protected bike lanes. State funding sources include state bicycle and pedestrian grants, state multi-modal funds, and state Safe Routes to Schools funds.

Advocacy Advance has developed a list of state revenue sources that can be used for bicycle and pedestrian projects. The chart of sources by state is available on the next page, but also available in an interactive format at http://bit.ly/StateBikeWalkRevenue.







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Summary of State Revenue Sources

In addition to federal funding, states have found additional public revenue sources to fund bicycling and walking projects. Statewide advocates can use this list to see what kinds of state revenue sources exist and find examples of successful campaigns to win that particular revenue.

Assertion Assert		Dedicated funding source	Alternative fuel tax	Bicycle registration	Bicycle user fee	Bond proceeds	Development impact fees	Drivers license fees	Gambling (not including lottery)	General fund	Highway safety fees	Highway use tax	Land value tax	License plates	Local planning assistance grants	Lottery revenue	Naming rights	Public private partnerships	Real estate recordation tax	School zone speeding fines	Severance fees	State fuel (gas) tax	Title fees	Toll credits	Toll roads	Traffic violations	Vehicle and truck tax	Vehicle miles traveled (VMT) fee	Vehicle registration fees	Vehicle transfer fees
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Below Left: Alder Street separated bike lane in Eugene, OR. (Photo courtesy of Bicycle Transportation Alliance.) **Below Right:** The Onondaga Creek Boulevard Greenway in Syracuse, NY, was paid for in part by a state funding source, the "Dormitory Authority of the State of New York." (Photo courtesy of Mike Greenlar/The Post-Standard)





Eugene, OR

It is not only large cities that are building protected bike lanes. The City of Eugene, population of 157,986, used a state bicycle and pedestrian grant to build its first separated infrastructure. The Alder and 13th Streets pedestrian and bicycle enhancements were part of a larger \$2.3 million street rehabilitation project on Alder and 13th Streets.

The separated bikeway on Alder Street was primarily paid for by an Oregon Bicycle and Pedestrian Grant through the Oregon Department of Transportation (ODOT). "The grant was for \$706,998 and the City of Eugene provided \$78,554 in local match from our System Development Charge funds," says Eugene Transportation Planning Manager Rob Inerfeld. "These are often called impact fees in other states." Development impact fees are one-time charges collected from developers for financing new infrastructure construction and operations.

The ODOT Bicycle and Pedestrian Grant program has since been combined with the state's Transportation Alternatives Program to form a new funding program called STIP Enhance, through which "Area Commissions on Transportation" prioritize projects for funding. Through STIP Enhance, the City of Eugene will fund three projects for implementation in 2016-2018, a total of about \$4 million. The projects include a cycle track, shared-use path, and building all of the bike boulevards called for in a large section of Eugene.





Local and Regional Sources

Local and regional funds were the most common and broad category used to pay for protected bike lanes, even projects using federal funds require a state or local match. Many protected bike projects are built as part of larger road projects, as in Boston, Cambridge, and Denver, or are otherwise wrapped into a city's local Capital Improvement Program or general public works budget, as in Salt Lake City, Memphis, and Syracuse. In addition to using general city funds, cities get resourceful and use some of the following:

Bond measures

Voter-passed initiatives are used to pay for transportation infrastructure.

- » In 2007 Denver citizens passed the Better Denver Bond Initiative to fund 319 projects for \$550 million. One of those projects included a one-way, contraflow, curb-protected bikeway.⁴
- The City of Chicago used general obligation bond funds to pay for several of its protected bike lane projects.
- » Nashville used funds from a local bond for a protected bikeway on 28th Avenue.
- » Voters in San Francisco passed the general obligation bond Proposition B for street improvements, which helped fund a bikeway at Fell and Oak Streets.

State law generally sets the conditions under which a local government can issue general obligation debt.

Some advocates have undertaken and won campaigns for voter-approved bond measures for bicycling and walking. To learn more about these campaigns, see our report, "Success at the Ballot Box: Winning Bicycle-Pedestrian Ballot measures": http://bit.ly/BallotBoxSuccess.

Business improvement districts

Atlanta's Midtown Community Improvement District (MCID), a self-taxing district of commercial property owners, is investing in protected bike lanes after 75-percent of survey respondents indicated they wanted more bike lanes and bike projects.⁵ Legislation is necessary to permit local governments to create BIDs.

Regional bike program fund

Some areas, like California, have regional bike funds that set aside resources for bicycling infrastructure. San Francisco's Cargo Way is an example of a protected bike lane funded this way.

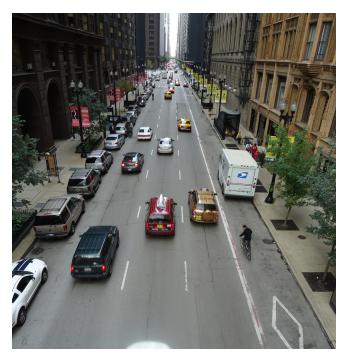
⁵ Midtown Alliance, "Midtown Improvement District: Putting Your Investment to Work." http://bit.ly/V5uQcJ

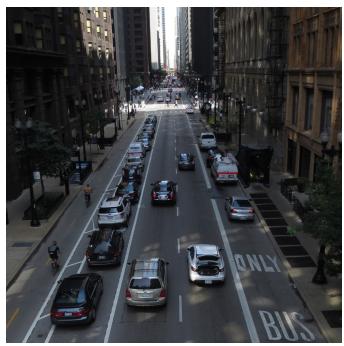




⁴ City of Denver, CO, "Better Denver Bond Program." http://bit.ly/1nxOBA5

Before and after on Dearborn Street, Chicago. The cycle track was paid for with tax increment financing (TIF) and general obligation bonds. (Photos courtesy of Mike Amsden/ City of Chicago)





Tax increment financing (TIF)

Chicago uses tax increment financing (TIF) for protected bikeways when a project is located within a TIF district and the local alderman is supportive of using the funds. TIFs are a financing method wherein a set of community improvements are expected to increase the property tax revenues in an area. The amount of taxes that goes to basic services is frozen and the tax revenue that exceeds that amount goes to repay the cost of the improvements. That difference is known as the increment.⁶

Voter-approved sales taxes

Two California cities used funds from voter-approved sales tax increases to pay for protected lanes. Long Beach used Proposition C funds and San Francisco used Proposition K funds. For more information on ballot measures, please see our report, "Success at the Ballot Box: Winning Bicycle-Pedestrian Ballot Measures" at http://bit.ly/BallotBoxSuccess.

⁶ City of Chicago, IL, "Tax Increment Financing" http://bit.ly/1izinbn





Below: JFK Drive in San Francisco was built using funds from local transportation sales tax, Transportation Fund for Clean Air (TFCA), Transportation Development Act Article 3 (TDA), and San Francisco Municipal Transportation Agency (SFMTA) operating funds. (Photo courtesy of the San Francisco Municipal Transportation Agency). (Photo courtesy of Seleta Reynolds/ SFMTA)

Far Below: Painting a Buffered Bike Lane in Cambridge, MA. (Photo courtesy of Cara Seiderman/City of Cambridge)





Private Sources

By providing healthy, affordable, and enjoyable transportation options, high-quality bicycling facilities add significant value to a community. Perhaps, therefore, it is no surprise that these projects can attract private – as well as public – investments. The following private sources were identified in our sample, but are not meant to be an exhaustive list of likely possibilities.

Developers

As a condition of receiving a building permit to develop new real estate, a city will often require the developer to help pay for street infrastructure on or adjacent to the project. For example, the 7th Avenue bikeway in Seattle was privately funded as part of a development project.

In **Cambridge, MA**, when a building project proposal does not comply with the zoning ordinance, special permits may be issued to allow non-conforming uses with additional conditions and limitations deemed as necessary by the city. Special permits may require Traffic Impact Studies and the demonstration that the project meets zoning requirements. The Planning Board then imposes requirements through the special permit to mitigate traffic impacts.⁷ On Binney Street, for example, the developer is reconstructing roadway as part of mitigation and permit requirements. The roadway reconstruction will include a cycle track.

Hospitals

Some institutions, like hospitals, see the connection between the mission-driven work that takes place inside their walls and the physical infrastructure that the community uses to get there. Seattle Children's Hospital, a gold-level Bicycle Friendly Business, committed to bicycle and pedestrian improvements in its Major Institution Master Plan. Specifically, Seattle Children's Hospital will improve nearby connections, including protected bike lanes, to the hospital and will invest \$2 million in a Bicycle and Pedestrian Fund to build infrastructure to help employers and visitors ride safety to the hospital.8

⁸ Seattle Children's Hospital, "Major Institution Master Plan." http://bit.ly/1izh2BB





City of Cambridge, MA, "Planning Board Special Permits" http://bit.ly/1jJixbl; "Zoning Regulation, Article 4" http://bit.ly/1jJixbl; "Project Review: Large Projects Seeking Planning Board Permit" http://bit.ly/1jJixbl; "Parking and Transportation Demand Management Ordinance" http://bit.ly/1q19Wlk

Below: Kinzie Street between Milwaukee Avenue and Wells Street, Chicago. The City uses a mix of funding sources for protected bike lanes and adapts the funding strategy over time. (Photo courtesy of Mike Amsden/ City of Chicago)



Philanthropy

As the MIT example demonstrates, private donations can support bicycling infrastructure. In the town of Munhall, PA, trail groups raised private funds for an on-street protected bikeway that provides an inviting connection to the popular Great Allegheny Passage Trail linking Pittsburgh, PA to Washington, DC.⁹

The Indianapolis Cultural Trail, one of the most ambitious protected bikeway projects in the country, was funded largely by private philanthropy in addition to public funds. The \$62.5 million, 8-mile trail connects downtown business and cultural districts and utilized \$15.5 million in federal funds, \$26.5 million from private funds - mostly from the Central Indiana Community Foundation, and a \$20.5 million US Department of Transportation TIGER grant. ¹⁰

Universities

Campuses have long been attractive bicycling locations for students, faculty, and staff, and many of them deal with challenging parking constraints, making encouraging bicycling to campus an attractive option.

- » Harvard University funded a protected bike lane on Western Ave, providing a connection between the City of Boston and the University.¹¹
- » University of Montana used student fees to build a two-way cycle track on its campus streets.
- The Massachusetts Institute of Technology used a private donation to fund a cycle track separated from the roadway with planted trees on Vassar Street.¹²

¹² Massachusetts Institute of Technology, "Vassar Streetscape West." http://bit.ly/1paoA0D





⁹ Pittsburgh Post-Gazette, "Allegheny Passage trail link under way." http://bit.ly/1qEAKyc

¹⁰ Partnership for Sustainable Communities (HUD/ DOT/ EPA), "Indianapolis Cultural Trail." http://bit.ly/T3aA9z

¹¹ Boston.com, "Standard, buffered bike lanes coming to stretch of Western Ave." http://bit.ly/1lKQPPn

Conclusion

It's all about the mix & flexibility

Innovative communities are nimble and flexible in regards to the range of funding sources they use to build protected bikeways. And it changes over time. The City of Chicago, for example, built its 2011-2012 protected lanes using local money to get the funds approved and projects built quickly. Now they are shifting primarily to federal funds – specifically CMAQ – for future projects, while using local funds for spot improvements.

There is no one standard source and communities draw on revenue from all different levels of government and the private sector to finance their bicycling infrastructure. What unites all of the projects reviewed here is the communities' commitment to creating separated space for people on bikes to travel comfortably and safely.

Questions?

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Additional Resources

Interested in protected bikeways? Here are some great additional resources:

- » Promotion: The Green Lane Project of PeopleForBikes encourages cities to build protected bikeways with workshops, study tours and grants. http://www.peopleforbikes.org/green-lane-project
 - Protected Bike Lanes 101: http://www.peopleforbikes.org/green-lane-project/pages/protected-bike-lanes-101
 - Resources: http://www.peopleforbikes.org/green-lane-project/pages/resources
- » Design Guidance: The National Association of City Transportation Officials (NACTO) provides guidance on how to design protected bikeways in their "Urban Bikeway Design Guide." http://nacto.org/cities-for-cycling/design-guide/
- » Recognition: The League of American Bicyclists' Bicycle Friendly America Program recognizes communities that promote bicycling through the five E's of Engineering, Education, Encouragement, Enforcement, and Evaluation. http://bikeleague.org/BFA
- » Funding: The Advocacy Advance Partnership between the League of American Bicyclists and the Alliance for Biking & Walking helps communities maximize the use of public funds for bicycling and walking projects and programs. http://www.advocacyadvance.org/
 - State sources: http://bit.ly/StateBikeWalkRevenue.
 - Federal sources: http://www.advocacyadvance.org/MAP21/finditfundit

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Specific funding sources for innovative on-street bicycle infrastructure

Note on cost estimates: The cost estimates in the following table are not apples to apples comparisons. Many bicycle facilities are part of larger road projects, making estimating precise project costs difficult. They are not meant to be estimates for future projects, or to be compared with each other, because they represent different parts of projects at different scales. Some estimates include design and construction, some only one or the other. Some estimates include the whole street project, some only the biking component. Some projects are more ambitious than others and cities have different labor and right-of-way acquisition costs.

To those unfamiliar the typical cost of transportation projects, the cost estimates may seem high. However, bicycling projects are significantly cheaper, in general, than most road projects¹³ and a higher proportion of the cost goes toward labor (as opposed to materials) than road projects, making them efficient job creators.¹⁴

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Atlanta, GA				
Juniper St Bike/Ped Facilities	1.00	Cycle track (plus bio-swale,	Total: \$4,184,000	LCI program (STP-Urban), flexed
(Ponce de Leon Av to 14th St)		road diet, streetscaping, ped xings)	Federal: \$3,347,200 Local: \$836,800	to FTA Section 5307 funding, 10% local match paid by Midtown Alliance
Cycle Atlanta Ph 1.0 – Bike	2.90	Bike lanes & sharrows on	Total: \$2,500,000	Last Mile Connectivity program
Mobility Improvements (Marietta St/Howell Mill Rd from Centennial Olympic Park (COP) to Chattahoochee Ave., and Walton Street from COP to Peachtree St)		Marietta/HM; Contra-flow bike lane on Walton	Federal: \$2,000,000 Local: \$500,000	(STP-Urban), flexed to FTA Section 5307 funding, 10% local match paid by City of Atlanta
W Peachtree Street (at 5th)	0.03	2-way, each side	\$53,000	Local, Midtown Community Improvement District (MCID), Grant
10th (from Monroe to Charles Allen)	1.34	2-way, one side	\$80-90,000	City of Atlanta, Midtown Community Improvement District
Peachtree Center Ave (from Edgewood to Peachtree St.)	0.68	2-way, one side	\$122,159	City of Atlanta, Atlanta Downtown Improvement District, STP-urban/ Livable Community Initiative
10th St (from Charles Allen to Piedmont)	0.44	2-way, one side	\$122,159	City of Atlanta, Midtown Community Improvement District
Charles Allen Dr	0.91	2-way, one side	\$173,295	City of Atlanta, Midtown Community Improvement District
Mangum	0.60	2-way, one side	\$117,188	City of Atlanta
Berkeley, CA				
Berkeley Bike Boulevard Network	-	Bike Boulevard Network	\$330,000	Transportation Fund for Clean Air (TFCA); Transportation Development Act, Article 3; Caltrans Safe Routes to School Funds

¹³ Advocacy Advance, "Lifting the Veil on Bicycle & Pedestrian Spending." http://bit.ly/LiftingTheVeil

¹⁴ Political Economy Research Institute, "Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts." http://bit.ly/1gsFi8s

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Boston, MA				
Western Ave	0.67	1-way, one side; paint w/ flex bollards and parked cars	~\$100,000/ mi	Harvard University
Malcolm X Blvd	_	2-way, one side; street level with constructed medians for bus stops.	\$965,000	City capital request
Seaver Street	_	1-way, 2 side, path/lane/ combo	Not available	Part of Public Works Department reconstruction project
Summer St	-	2-way, one side; sidewalk level, some parking	Not available	Crossroads reconstruction
Public Gardens (Charles, Boylston, Arlington and Beacon Streets)	_	2 way, one side, parking , street level with flex bollards or flower pots/ parking. Reconstruction of some islands and medians to maintain traffic volumes.	\$3,000,000	City capital request
Mt. Vernon St. (Boston/ Dorchester)	1.10	1-way, each side; paint only with flexible bollards. no parking	\$50-\$100,000	Boston Bikes' annual striping budget
Cambridge, MA				
Concord Ave	1.40	1-way, each side; sidewalk level	Not available	City funds, part of reconstruction
Vassar St (Main to Amesbury)	1.30	1-way, each side; Grade and landscaping; Blue at intersection shift to bike lane	Not available	Phase I: Main to Mass Ave; Funded by the Massachusetts Institute of Technology. Phase II: Mass Ave to Amesbury; Funded by private donation
Western Ave	1.10	1-way, one side; Grade; Unsignalized: raised sidestreet crosswalk/cycle track with green paint. Signalized: transition to street	~\$1,100,000	City funds, part of multimillion dollar complete roadway/sewer reconstruction project
Binney St	-	1-way, each side; Grade;	Not available	Developer reconstructing roadway as part of mitigation/ permit requirements; roadway reconstruction with cycle track
Chicago, IL				
18th St (Canal St. to Clark St.)	0.45	Protected Bike Lane	\$195,000	Tax Increment Financing (TIF)
Elston Ave (Milwaukee Ave to North Ave)	1.00	Protected/Buffered Bike Lane	\$194,000	Tax Increment Financing (TIF), General Obligation Bonds
Franklin Blvd (Sacramento Dr to Central Park Ave)	0.75	Protected Bike Lane	\$133,000	Tax Increment Financing (TIF)
Lake St (Central Park Ave to Damen Ave)	2.05	Protected Bike Lane	\$222,000	Tax Increment Financing (TIF)

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Chicago, IL continued				
55th St (Cottage Grove Ave to Lake Park Ave)	1.00	Protected/Buffered Bike Lane	\$207,000	Tax Increment Financing (TIF), General Obligation Bonds
Dearborn St (Polk St to Kinzie St.)	1.15	2-Way Protected Bike Lane	\$562,000	Tax Increment Financing (TIF), General Obligation Bonds
Milwaukee Ave (Kinzie St. to Elston Ave)	0.85	Protected/Buffered Bike Lane	\$233,500	Tax Increment Financing (TIF), General Obligation Bonds
Vincennes Ave (103rd St to 84th St)	2.65	Protected/Buffered Bike Lane	\$225,000	General Obligation Bonds, Surface Transportation Program (for resurfacing and pavement markings)
Canal St (Roosevelt Rd to Harrison ST.)	0.50	Protected Bike Lane	\$110,000	Tax Increment Financing (TIF), General Obligation Bonds
Denver, CO				
15th Street	0.70	1-way, one side; Bollards; Green. Two-stage turn boxes at intersections	\$460,000	Local, striping and street maintenance operational budgets
Bannock (14th to 15th)	0.10	1-way, one side (contra flow); Curb, sidewalk grade; Chevrons and dedicated bicycle traffic signal (14th/ Bannock) at intersection	Not available. Part of a larger project	2007 Better Denver Bond
Eugene, OR				
Alder St.	1.40	2-way, one side; Parked cars and painted buffer; Green bike boxes at intersection	\$785,552 Bike facility part of larger \$2,300,000 street rehab.	\$706,998 from Oregon Bicycle and Pedestrian Grant, now known as "STIP Enhance"; \$78,554 for local match from local System Development Charge funds ("impact fees")
Indianapolis, IN				
Indianapolis Cultural Trail	8.00	2-way, one side; Curb, parked cars; Protected signal phase, colored brick at intersections	\$64,000,000	Private philanthropy, TIGER (\$21 million), federal transportation grants (Transportation Alternatives Program, formerly called Transportation Enhancements)
Long Beach, CA				
3rd Street	1.10	1-way, one side; Parked cars, curbs, flexible delineators; Protected bike signal phase, green lanes at driveways	Design: \$206,400 Construction: \$639,593	Proposition C Local Return for Los Angeles County sales tax
Broadway	1.10	1-way, one side; Parked cars, curbs, flexible delineators; Protected bike signal phase, green lanes at driveways		

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Memphis, TN				
Overton Park Ave.	0.34	built	\$30,940	Local Capital Improvement Program (CIP)
Broad/Tillman	1.80	planned, 2014-15	\$4,500,000	Local CIP, Congestion Mitigation and Air Quality Improvement Program (CMAQ), Private
Craigmont Dr.	0.39	planned, 2014-15	\$35,634	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Crump Ave.	0.94	planned, 2014	TBD	State DOT, Highway Safety Improvement Program (HSIP)
Danny Thomas Blvd.	1.78	planned, 2014	TBD	State DOT, Highway Safety Improvement Program (HSIP)
Dr. MLK, Jr. Ave.	1.23	planned, 2014-15	\$111,616	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Evergreen St.	0.55	planned, 2014-15	\$50,280	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Florida St.	1.40	planned, 2014-15	\$127,403	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Graham St.	0.34	planned, 2014-15	\$30,621	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Jefferson Ave.	1.62	planned, 2015-16	\$4,500,000	Surface Transportation Program (STP)
Kirby Rd.	0.70	planned, 2014-15	\$63,731	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Levi Rd.	0.51	planned, 2014-15	\$46,283	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Manassas St.	0.23	planned, 2014-15	\$20,930	Local Capital Improvement Program (CIP)
McLean Blvd.	0.49	planned, 2014-15	\$540,000	Transportation Alternatives Program (TAP)
New Horn Lake Rd.	0.52	planned, 2014-15	\$47,309	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Memphis, TN continued				
Shelby Oaks Dr.	0.72	planned, 2014-15	\$65,028	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Waring Rd.	1.22	planned, 2014-15	\$110,327	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Watkins St.	1.30	planned, 2014-15	\$117,927	Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement Program (CMAQ)
Missoula, MT				
Campus streets	-	2-way, one side; Green at intersections	Not available	University of Montana student fees
Higgins Ave	0.42	1-way, each side; Curb - (Mountable brick), parked cars, meters; Green bike lane at intersections and driveway; part of larger Road Diet project	\$1,500,000	American Recovery and Reinvestment Act (ARRA), City of Missoula, Montana Legislature HB 645, Montana DOT
Munhall, PA				
E Waterfront Drive	0.66	2-way, one side; Flexible delineators	Design: \$15,000 Construction: \$46,412	Private funding through trail organization
Nashville, TN				
28th Ave	0.60	1-way, each side; Curb, bollards, trees and landscaping; distinguished from sidewalk by different concrete color and green.	Not available	City of Nashville funds from local bonds
Portland, OR				
SW Multnomah (22nd to 31st)	0.43	1-way, one side; Stormwater swale, curb	Not available	Local (state gas taxes) and Bureau of Environmental Services (planned sewer work in the roadway)
NE Multnomah (I-5 to 13th)	1.22	1-way, each side; Flexible delineators, planters, painted buffer	Design: \$52,000 Construction: \$140,900	Local (state gas taxes)
SW Moody	0.60	2-way, one side; Curb, sidewalk; Protected signal phase at entrance/exit	Not available	TIGER Discretionary Grant Program
NE Cully Boulevard	0.95	1-way, each side; Beveled curb and parked cars	Not available	Federal

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Salt Lake City, UT				
300 East (test)	0.29	1-way, each side; Flexible delineators and parked cars; Elephant tracks at intersection	Not available	Local Capital Improvement Program funds
200 West	_	proposed	Not available	Transportation Alternatives Program (TAP)
San Francisco, CA		•		
Cargo Way	1.40	2-way; Curb - raised 1' curb with chain link fence; Protected bike signal phase, green sharrows.	\$474,000	Proposition K (Local transportation sales tax), Association of Bay Area Governments (ABAG), San Francisco Port Capital, Caltrans Regional Bike Program (RBP)
JFK Drive	2.80	1-way, each side; Parked cars; Mixing zones	\$727,000	All phases: Proposition K (local transportation sales tax), Transportation Fund for Clean Air (TFCA), Transportation Development Act Article 3 (TDA), San Francisco Municipal Transportation Agency operating
John Muir	0.70	1 way, one side; Flexible delineators;	\$206,000	Design and construction: Proposition K (Local transportation sales tax), Transportation Fund for Clean Air (TFCA)
Cesar Chavez	1.00	1-way, each side; Flexible delineators	\$280,000	Proposition K (Local transportation sales tax), Transportation Fund for Clean Air (TFCA)
Fell St and Oak Street	0.27	1-way, one side; Current: Safe hit posts. Planter boxes will be added.	\$380,000	All phases of bikeway to date: Proposition K (local transportation sales tax), Proposition B (general obligation bond passed by voters in 2011 to pay for repaving and streetscape improvements)
San Jose, CA				
4th Street	-	1-way, one side; Curb - rubber	Not available	Transportation Development Act, Article III, State gas tax (resurfacing)
Seattle, WA				
7th Ave	0.25	Planned 2015/ 2016, 1-way, each side; Curb, landscaping	Not available	Privately funded as part of a development project.
Westlake	2.60	Planned, 2015	\$3,600,000	Grant, local http://www.seattle.gov/transportation/wct.htm
65th	0.26	2-way, one side; Barrier; Crossbike	\$250,000	Local funds, included significant pavement repair

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.

STREET	LENGTH (MILES)	TYPE & INTERSECTION TREATMENTS	COST*	FUNDING SOURCE(S)
Seattle, WA continued				
Linden Ave	1.60	2-way, one side; Curb, parked cars	Not available	Funded as part of a street reconstruction project http://www.seattle.gov/transportation/linden.htm
Cherry St, 7th Av	0.07	1-way, one side; Bollards; Left-turn box	\$5,000	Local funds
Broadway (Denny to Yesler)	1.18	2-way, one side; Curb; Green paint, detection and leading green phase or dedicated signal for cyclists, Copenhagen left turn boxes.	Not available	Funded as part of the First Hill Streetcar project. http://www. seattle.gov/transportation/ broadwaypbl.htm
St. Georges, DE				
St. Georges Bridge	2.00	One-way, each side; Flexible delineators with 2' painted buffer	\$72,429 (striping, signs & markers)	American Recovery and Reinvestment Act (ARRA)
Syracuse, NY				
Onondaga Creek Boulevard Greenway (Rich Street to Newell Street)	1.30	Road closed to traffic. Designated bike lanes and pedestrian walkway.	\$90,000	Local funding, Dormitory Authority of the State of New York (DASNY)
S Salina St W Onondaga to Water St	0.40	One way each side, floating parking	TBD	Local funding
"Connective Corridor," University Place	_	Granite curbing, pavers, green infrastructure, lighting, landscaping, bike lanes, public art and other urban design elements to create a "signature" strip for the Connective Corridor, and a showcase project for the City	\$4,600,000 streetscape project	TIGER Discretionary Grant Program, http://connectivecorridor. syr.edu/project-overview/key- project-highlights/
Waverly Ave (Irving to Comstock)	0.40	Two-way lanes on two-way road, buffered by floating parking	TBD	Local funding
West St (Walton St to W Onondaga)	0.50	Two-way lanes on one- way service road, floating parking	TBD	Local funding, State Multi Modal Fund (MM4), and Community Assistance and Preservation (CCAP)

^{*} Costs are rough estimates and include various phases. Costs are not reported identically by each city.