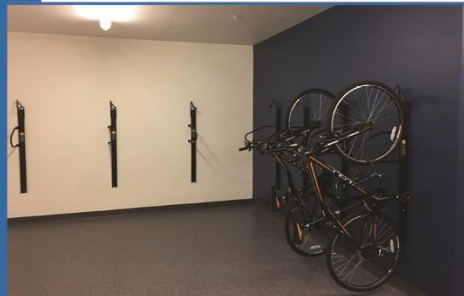
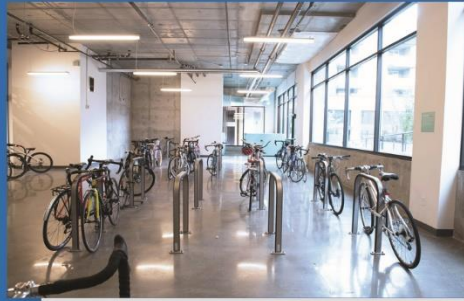


BICYCLE PARKING CODE UPDATE

Proposed Draft
December 2018



PBOT
PORTLAND BUREAU OF TRANSPORTATION



Bureau of Planning and Sustainability
Innovation. Collaboration. Practical Solutions.
City of Portland, Oregon



The Bicycle Parking Code Update Project is updating Portland’s zoning code to ensure new development and major redevelopment is providing adequate, secure and convenient short- and long-term bicycle parking:

For more information:

Visit the project website: <https://www.portlandoregon.gov/transportation/70439>

Email the project team: bicyclecodeupdate@portlandoregon.gov

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Traducción o interpretación	Chuyển Ngữ hoặc Phiên Dịch	翻译或传译	Письменный или устный перевод
Traducere sau Interpretare	Письмовий або усний переклад	翻訳または通訳	Turjumida ama Fasiraadda
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How to Testify

The **Bicycle Parking Code Proposed Draft** will be considered by the Portland Planning and Sustainability Commission (PSC). The public is invited to submit formal comments (called public testimony) to the PSCS in writing, in person at a public hearing, or online via the Map App. Testimony on the **Proposed Draft** is directed to PSC, which may amend the proposal and subsequently vote to recommend the changes to Portland City Council. This is called the **Recommended Draft**, and the public will have an opportunity to testify on that draft when it is reviewed by City Council.

Testify in person at the Planning and Sustainability Commission (PSC) public hearing	Testify in writing between now and Tuesday, January 22, 2019
<p>Tuesday, January 22, 2019, at 5 p.m. 1900 SW 4th Ave, Suite 2500 (2nd floor) Portland, OR 97201</p> <p>To confirm the date, time and location, check the PSC calendar at: https://www.portlandoregon.gov/bps/35452</p>	<p>Map App: www.portlandoregon.gov/bps/mapapp Select Bicycle Parking Code Update Project and click on the “Testify” button. You can testify about specific proposals or the proposals in general. Testifying in the Map App is as easy as sending an email. Once your testimony is submitted, you can read it in real time.</p> <p>US Mail: You must provide your full name and mailing address. Portland Planning and Sustainability Commission Bicycle Parking Testimony 1900 SW 4th Ave, Suite 7100 Portland, OR 97201</p>

Next Steps



The next draft of the proposal – the **Recommended Draft** – will incorporate the changes the PSC makes to the **Proposed Draft**. The **Recommended Draft** will be forwarded to City Council for additional public testimony and hearings, deliberations, possible amendments and vote. The **Recommended Draft** should be at City Council in Spring/ Summer 2019.

Acknowledgments

Portland City Council

Ted Wheeler, *Mayor, Commissioner-in-charge*

Chloe Eudaly, *Commissioner*

Nick Fish, *Commissioner*

Amanda Fritz, *Commissioner*

Dan Saltzman, *Commissioner*

Portland Planning and Sustainability Commission

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Table of Contents

Section I.	Introduction.....	6
Section II.	Relationship to the Comprehensive Plan.....	8
Section III.	Public Involvement.....	13
Section IV.	Proposal and Analysis.....	18
Section V.	Zoning Code Amendments.....	31
	33.266 Parking, Loading, and Transportation and Parking Demand Management.....	32
	33.120 Multi-Dwelling Zones.....	84
	33.130 Commercial/Mixed Use Zones.....	86
	33.229 Elderly and Disabled High Density Housing.....	90
	33.258 Nonconforming Development.....	92
	33.266 Parking, Loading, And Transportation and Parking Demand Management.....	94
	33.510 Central City Plan District.....	96
	33.281 Schools and School Sites	98
	33.815 Conditional Uses	100

Section I: Introduction

Project Summary

City goals and policies support a vision of Portland as a vibrant city where most people have the option to use active transportation like walking, bicycling and transit, to get around and meet their basic needs.

In addition to this overarching active transportation vision, Portland has a goal that 25 percent of all trips are made using a bicycle by 2030. The Bureau of Transportation is working to build the connected safe network of bicycle infrastructure that will support this goal. However, we will not be able to reach this goal without making sure that people have a place to safely and securely park a bicycle at the end of their trips.

The City of Portland's Zoning Code requires the inclusion of long- and short-term bicycle parking in new development and some redevelopment projects. The current text of the bicycle parking section of City Code was largely written and adopted in 1996. While there was a significant update in 2004 to address short-term bicycle parking needs, the bicycle parking section of Title 33 has been largely dormant for 20 years. Meanwhile, the bicycle commute mode split in Portland has increased from 1.2 percent in 1996 to just over 7 percent in 2014. Even so, Portland has hit a plateau in its bicycle mode split over the last few years. The code update project is one of the City's tools to continue to support and encourage bicycling as a mode of transportation.

Framing the Work

Guiding City Policy

Several City policy and planning documents provide the framework that guides the bicycle parking requirements:

Comprehensive Plan 2035

The Comprehensive Plan 2035 guides long-range land use and transportation planning. The plan focuses on improving Portland as a place that is walkable, bikeable and transit-friendly, and includes a specific policy goal of providing sufficient, usable bicycle parking throughout the city.

Climate Action Plan for 2030

In 1993, Portland was the first city in the United States to create a local action plan for cutting carbon emissions. The 2015 Climate Action Plan outlines the specific actions the City and Multnomah County will take to reduce greenhouse gas emissions, including:

- Reduce daily per capita vehicle miles traveled by 30 percent from 2008 levels by 2030.
- Create vibrant neighborhoods where 80 percent of residents can easily walk or bicycle to meet all basic daily, non-work needs and have safe pedestrian or bicycle access to transit by 2030.

City Adopted Mode Split Goals

Mode split is the percentage of travelers using a particular type of transportation. For this project, the City of Portland's bicycle mode split goals were used to guide the updated methodology for the required amounts of bicycle parking.

- Portland Bicycle Plan for 2030 – 25% bicycle mode split for all trips by 2030
- Transportation System Plan – 25% bicycle mode split for commute trips by 2035

Why is Bicycle Parking Important?

Portland is a growing city with strong climate and transportation goals. Currently, nearly 45% of all trips that are made by car in the Portland region are less than 3 miles.¹ To meet City goals, these shorter trips need to be increasingly made on foot and by bike instead of by car. This will free up capacity for longer trips, such as commuting and freight trips, that need to be made by vehicles.

Riding a bicycle is an important low-cost transportation option. Transportation is the second highest household cost. For many households, the option of biking and walking for a portion of their daily trips can mean lowering household costs by potentially reducing the number of vehicles their household owns.

Finally, in their 2012 report on *Barriers to Cycling*, the Community Cycling Center found that the lack of a safe and secure place to park a bicycle is a key barrier for bicycling as transportation or recreation. For example, after an audit conducted by the Community Cycling Center and property managers with Hacienda CDC, the lack of safe and secure bicycle parking was elevated as a top priority. The audit found that over a two-year period, 85 bicycles had been stolen from residents, which was nearly 1 bicycle per household. After the audit, Hacienda CDC provided secure bicycle parking in existing buildings, and began including lockable bike storage into the design of new buildings owned by the affordable housing organization.

For all these reasons, Portland has adopted policies that require bicycle parking in private development and the Bicycle Parking Code Update project is revising them to support current and future transportation goals.

Major Proposed Changes

This project focused on ensuring that new development and major redevelopment provides secure and convenient short and long-term bicycle parking. The proposals include the following amendments:

- **Update the minimum required amounts of short- and long-term bicycle parking.**
- **Expand the use of geographic tiers to all Use Categories, creating two different rates of required bicycle parking based on geography.**
- **Enhance security standards to help prevent bike theft.**
- **Expand options for space saving rack configurations.**
- **Accommodate a variety of types of bicycles and people of all abilities.**
- **Require that a percentage of long-term bicycle parking in residential buildings is located in bike rooms rather than in residential units.**

¹ 2011 Oregon Household Activity Survey. Vehicle trips by length for trips wholly within Clackamas, Multnomah, Washington and Clark Counties.

Section II: Relationship to Comprehensive Plan

Comprehensive Plan Guiding Principles

The Bicycle Parking Code Update Project helps implement the following guiding principles of the City of Portland Comprehensive Plan in the following ways.

- **Economic Prosperity.** *Support a low-carbon economy and foster employment growth, competitiveness, and equitably-distributed household prosperity.*

This project advances this principle by supporting low-cost, low-carbon transportation options for all Portlanders. Transportation is the second highest household cost and owning a car can cost a family approximately \$8,500 a year.² These standards support low-cost, active transportation options which can provide tangible economic benefits to individuals and households across Portland.

- **Human Health.** *Avoid or minimize negative health impacts and improve opportunities for Portlanders to lead healthy, active lives.*

This project advances this principle by supporting the use of bicycles as a form of transportation and recreation. Regular physical activity, including the use of active transportation, helps improve overall health and fitness and reduces risk for many chronic diseases. This project helps facilitate active mobility by providing safe and secure place to park and store a bicycle.

- **Environmental Health.** *Weave nature into the city and foster a healthy environment that sustains people, neighborhoods, and fish and wildlife. Recognize the intrinsic value of nature and sustain the ecosystem services of Portland's air, water, and land.*

This project helps implement this principle by increasing the supply of bicycle parking, which supports bicycling, a low-carbon transportation option. Climate change threatens not just Oregon's natural treasures, but also Portlanders' jobs and health. Nearly 40 percent of all local carbon emissions come from transportation sources. Utilizing active transportation is one of the key strategies to reduce carbon emissions from the transportation sector.

- **Equity.** *Promote equity and environmental justice by reducing disparities, minimizing burdens, extending community benefits, increasing the amount of affordable housing, affirmatively furthering fair housing, proactively fighting displacement, and improving socio-economic opportunities for underserved and underrepresented populations. Intentionally engage underserved and underrepresented populations in decisions that affect them. Specifically recognize, address, and prevent repetition of the injustices suffered by communities of color throughout Portland's history.*

² AAA, "True Cost of Vehicle Ownership", <https://newsroom.aaa.com/tag/cost-to-own-a-vehicle/>, 2017

This project helps implement this principle by establishing standards for bicycle parking that consider the needs of people with all abilities and by supporting the ease and convenience of low-cost transportation.

- **Resilience.** *Reduce risk and improve the ability of individuals, communities, economic systems, and the natural and built environments to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change, and economic shifts.*

This project helps implement this principle in that the promotion of bicycling supports compact development at the neighborhood level and the use of low-carbon transportation options. End of trip facilities to support bicycling is one important element of developing a low-carbon resilient infrastructure system for the City of Portland.

Goals and Policies

The Comprehensive Plan 2035 includes goals and policy language designed to support and further the guiding principles. The Bicycle Parking Code Update Project primarily supports Chapter 9: Transportation. However, the project also supports the closely-linked goals and policies around development, urban form and the environment. These span the breadth of the Comprehensive Plan, but most clearly relate to the goals and policies of the following chapters of the Comprehensive Plan: Chapter 3, Urban Form; Chapter 4, Design and Development; Chapter 5, Housing; Chapter 6, Economic Development; Chapter 7, Environment and Watershed Health; and Chapter 10, Land Use Designations and Zoning.

Key Comprehensive Plan Goals and Policies supported by the Bicycle Parking Code project are listed below.

Urban Form

Goal 3.A A city designed for people - Portland's built environment is designed to serve the needs and aspirations of all Portlanders, promoting prosperity, health, equity, and resiliency. New development, redevelopment, and public investments reduce disparities and encourage social interaction to create a healthy connected city.

Goal 3.B A climate and hazard resilient urban form – Portland's compact urban form, sustainable building development practices, green infrastructure, and active transportation system reduce carbon emissions, reduce natural hazard risks and impacts, and improve resilience to the effects of climate change.

Policy 3.1 Urban Design Framework. Use the Urban Design Framework (UDF) as a guide to create inclusive and enduring places, while providing flexibility for implementation at the local scale to meet the needs of local communities.

Policy 3.4 All ages and abilities. Strive for a built environment that provides a safe, healthful, and attractive environment for people of all ages and abilities.

Policy 3.5 Energy and resource efficiency. Support energy-efficient, resource-efficient, and sustainable development and transportation patterns through land use and transportation planning.

Design and Development

Goal 4.A Context-sensitive design and development – New development is designed to respond to and enhance the distinctive physical, historic, and cultural qualities of its location, while accommodating growth and change.

Goal 4.C Human and environmental health – Neighborhoods and development are efficiently designed and built to enhance human and environmental health: they protect safety and livability; support local access to healthy food; limit negative impacts on water, hydrology, and air quality; reduce carbon emissions; encourage active and sustainable design; protect wildlife; address urban heat islands; and integrate nature and the built environment.

Policy 4.1 Pattern areas. Encourage building and site designs that respect the unique built natural, historic, and cultural characteristics of Portland’s five pattern areas described in Chapter 3: Urban Form.

Policy 4.10 Design for active living. Encourage development and building and site design that promotes a healthy level of physical activity in daily life.

Housing

Policy 5.36 Impact of regulations on affordability. Evaluate how existing and new regulations affect private development of affordable housing, and minimize negative impacts where possible. Avoid regulations that facilitate economically-exclusive neighborhoods.

Economic Development

Goal 6.B Development - Portland supports an attractive environment for industrial, commercial, and institutional job growth and development by 1) maintaining an adequate land supply; 2) a local development review system that is nimble, predictable, and fair; and 3) high-quality public facilities and services.

Policy 6.28 Poverty reduction. Encourage investment in, and alignment of, poverty-reduction efforts that address economic development, land use, transportation, housing, social services, public health, community development, and workforce development.

Environment and Watershed Health

Goal 7.A Climate – Carbon emissions are reduced to 50 percent below 1990 levels by 2035.

Transportation

Goal 9.E Equitable transportation – The transportation system provides all Portlanders options to move about the city and meet their daily needs by using a variety of safe, efficient, convenient, and affordable modes of transportation. Transportation investments are responsive to the distinct needs of each community.

Policy 9.3 Transportation System Plan. Maintain and implement the Transportation System Plan (TSP) as the decision-making tool for transportation related projects, policies, programs, and street design.

Policy 9.5 Mode share goals and Vehicle Miles Traveled (VMT) reduction. Increase the share of trips made using active and low-carbon transportation modes. Reduce VMT to achieve targets set in the most current Climate Action Plan and Transportation System Plan, and meet or exceed Metro’s mode share and VMT targets.

Policy 9.8 Affordability. Improve and maintain the transportation system to increase access to convenient and affordable transportation options for all Portlanders, especially those who have traditionally been underserved or underrepresented or have historically borne unequal burdens.

Policy 9.9 Accessible and age-friendly transportation system. Ensure that transportation facilities are accessible to people of all ages and abilities, and that all improvements to the transportation system (traffic, transit, bicycle, and pedestrian) in the public right-of-way comply with the American with Disabilities Act of 1990. Improve and adapt the transportation system to better meet the needs of the most vulnerable users, including the young, older adults, and people with different abilities.

Policy 9.10 Geographic policies. Adopt geographically-specific policies in the Transportation System Plan to ensure that transportation infrastructure reflects the unique topography, historic character, natural features, system gaps, economic needs, demographics, and land uses of each area. Use the Pattern Areas identified in Chapter 3: Urban Form as the basis for area policies.

Policy 9.20 Bicycle transportation. Create conditions that make bicycling more attractive than driving for most trips of approximately three miles or less.

Policy 9.21 Accessible bicycle system. Create a bicycle transportation system that is safe, comfortable, and accessible to people of all ages and abilities.

Policy 9.55 Parking management. Reduce parking demand and manage supply to improve pedestrian, bicycle and transit mode share, neighborhood livability, safety, business district vitality, vehicle miles traveled (VMT) reduction, and air quality. Implement strategies that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability.

Policy 9.61 Bicycle parking. Promote the development of new bicycle parking facilities including dedicated bike parking in the public right-of-way. Provide sufficient bicycle parking at high-capacity transit stations to enhance bicycle connection opportunities. Require provision of adequate off-street bicycle parking for new development and redevelopment. Encourage the provision of parking for different types of bicycles. In establishing the standards for long-term bicycle parking, consider the needs of persons with different levels of ability.

Policy 9.63 New development impacts. Prevent, reduce, and mitigate the impacts of new development and redevelopment on the transportation system. Utilize strategies including transportation and parking demand management, transportation system analysis, and system and local impact mitigation improvements and fees.

Land Use Designations and Zoning

Policy 10.4 Amending the Zoning Code. Amendments to the zoning regulations must be done legislatively and should be clear, concise, and applicable to a broad range of development situations faced by a growing city. Amendments should:

10.4.a. Promote good planning:

1. Effectively and efficiently implement the Comprehensive Plan.
2. Address existing and potential land use problems.
3. Balance the benefits of regulations against the costs of implementation and compliance.
4. Maintain Portland's competitiveness with other jurisdictions as location in which to live, invest, and do business.

10.4.b. Ensure good administration of land use regulations:

1. Keep regulations as simple as possible.
2. Use clear and objective standards wherever possible.
3. Maintain consistent procedures and limit their number.
4. Establish specific approval criteria for land use reviews.
5. Establish application requirements that are as reasonable as possible, and ensure they are directly tied to approval.
6. Emphasize administrative procedures for land use reviews while ensuring appropriate community engagement in discretionary decisions.
7. Avoid overlapping reviews.

10.4.c. Strive to improve the code document:

1. Use clear language.
2. Maintain a clear and logical organization.
3. Use a format and layout that enables use of the document by lay people as well as professionals.
4. Use tables and drawings to clarify and shorten the document.
5. Identify and act on regulatory improvement suggestions.

Section III: Public Involvement

Development of the Bicycle Parking Code Update Project concepts and the resulting Zoning Code proposals were informed by a range of public involvement activities. This section outlines those activities.

Stakeholder Advisory Committee Process

To facilitate a conversation amongst the various interested parties, PBOT convened a Stakeholder Advisory Committee (hereafter referred to as Committee) to advise on the preliminary phase of the update to the bicycle parking chapter. The Committee met seven times from February 2016 to October 2017.

The Committee was composed of technical experts from City Bureaus, community members and business representatives. The Committee was an advisory body providing direction and recommendations to the PBOT Director. The culmination of the Committee's work was formalized in a [Recommendation Report](#) and presented to the Portland Planning and Sustainability Commission in November 2017.

The purpose of the Committee was to provide early input to PBOT in developing the general concepts of the code amendments. Then PBOT staff worked closely with the Bureau of Planning and Sustainability (BPS) and the Bureau of Development Services (BDS) staff to develop the actual code amendments that are in this document.

Stakeholder Advisory Committee's Guiding Principles

The following guiding principles were developed and adopted by the Committee to provide the overarching direction for the package of recommendations for updating the bicycle parking chapter.

Principle A – Adequate Amount of Bicycle Parking

The amount of bicycle parking is adequate to accommodate future increases in demand, specifically the City's 25% bicycle mode split goal for all trips.

Principle B – Prioritizing Bicycle Parking

Bicycle parking is intentionally planned, with consideration for location and within the design of the building. Bicycle parking is available via a direct and accessible route.

Principle C – Accessible and Convenient Bicycle Parking

Bicycle parking accommodates users of all ages and abilities as well as a variety of different types of bicycles.

Principle D – Bicycle Parking is Secure and Safe to Use

Design provides sufficient security provisions to prevent bike theft and promotes safe spaces for users (e.g. lighting, visibility and location).

Principle E – Bicycle Parking is Feasible

Requirements allow for innovation and adaptability in design, while being straightforward to implement. Requirements consider project feasibility and cost implications.

Apartment Community Survey

In March 2017, staff conducted an online community survey to gather input from people who live in apartment buildings and own bicycles. This user survey asked a range of questions including: the major challenges of parking a bicycle at the building and the user's preference for where to park their bicycle. The survey garnered 323 total responses. Out of the 323 responses, 260 came from people who live in apartments. The remaining responses came from people who do not currently live in apartments but had general comments about bicycle parking needs and standards.

The summary of the survey results can be read in the appendices of the Stakeholder Advisory Committee Recommendation Report. These are several key takeaways:

- The majority of responses (67%) indicated that people who live in apartments and own a bicycle, preferred to park their bicycle in a secure room dedicated to bicycle parking.
- Respondents identified the following as the most challenging part of parking a bicycle at their apartment:

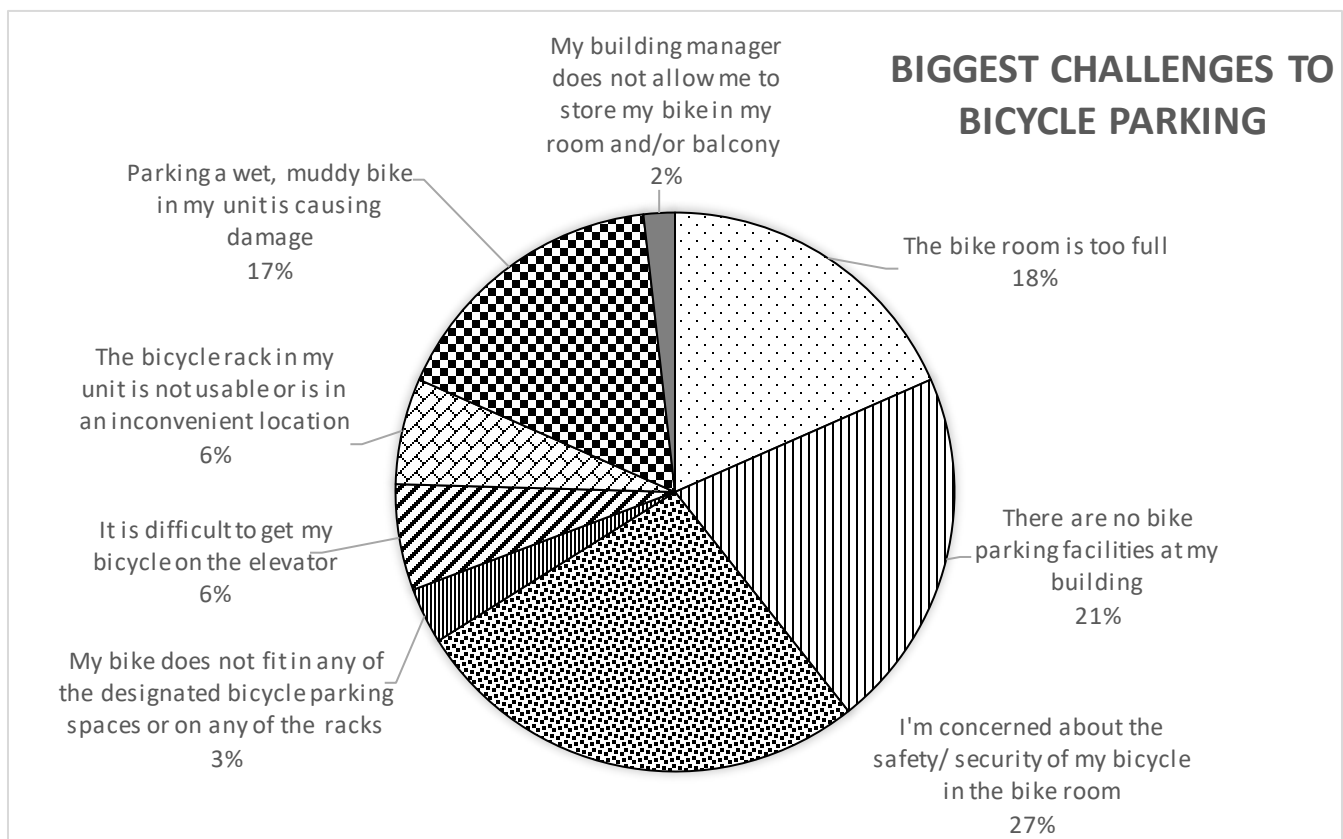


Figure 1 – Results from Community Survey (general survey) – what are your biggest challenges to bicycle parking?

It is important to note that the responses came almost exclusively from people who live in market-rate apartment buildings. To broaden the scope of the survey, PBOT staff worked with Portland Housing Bureau (PHB) staff to target the community survey to affordable housing tenants, property managers and developers.

Tenants of affordable housing prioritized the same top three barriers to parking their bicycles at their homes as the general population did (above).

The following are key points PBOT staff heard from affordable housing developers:

- Developments on small sites make fitting in all development requirements, including bicycle parking very difficult.
- Usage of bicycle parking at some sites, in particular those that serve elderly and disabled populations and very low-income, is very low.
- It is important for the standards to be flexible.

While the response rates were lower, staff were able to gather some important feedback via the survey and the exercise led to more in-depth conversations with affordable housing providers about bicycle parking.

Online Open House

Prior to wrapping up the Stakeholder Advisory Committee's Recommendation Report, PBOT conducted an Online Open House to gather feedback on the entire package of recommendations coming from the Stakeholder Advisory Committee. The Online Open House provided an early opportunity for public feedback on the early code concepts.

The following were some general themes in the feedback received from the Online Open House:

- General agreement on all the recommendations.
- Very strong support for the requirements to accommodate different types of bikes (i.e. cargo bikes, bikes with trailers, and electric bikes).
- Strong support for increasing the proportion of racks that are usable for people of all abilities.

This public input informed the development of the conceptual themes for the Bicycle Parking Code Update Project.

Site Visits, Interviews and Case Studies

Throughout 2017 and 2018, PBOT staff conducted site visits to apartment and office buildings to tour bicycle parking facilities and interview property managers and developers about bicycle parking opportunities and challenges. Site visits are useful to assess various bicycle parking configurations in action, assess the usage rates of bicycle parking facilities, and see what is working and what isn't working for bicycle parking at specific buildings and project types.

PBOT staff also worked with affordable housing developers and architects to visit a few sites, including the NAYA Generations Apartments, Miracles Central Apartments and Hacienda CDC properties.

Details on some of the site visits can be found in Appendix F in the [Stakeholder Advisory Committee's Recommendation Report](#) and an additional overview of site visits are included in Appendix C of this Proposed Draft.

Discussion Draft Public Input

The Discussion Draft, published on August 14, 2018, served as the first opportunity for the public to review and comment on the draft zoning code regulations. Prior to that date, the public had opportunities to review and respond to the concepts that guided the zoning code regulations.

The public review period of the Discussion Draft was from August 14 through October 1, 2018. During this period, staff used a variety of approaches for community members to learn about the Discussion Draft proposals and provide comments, including:

- A news blog post emailed to project list and hosted on project website.
- Posts on social media, including Facebook and Twitter
- Articles in local newspapers, online newspapers and local blog platforms.
- Presentations and discussions were held at 16 meeting of community groups and other organizations.
- An online survey provided a convenient way to comment on the Discussion Draft.
- A Bicycle Parking Wonk Night with BikePortland.org
- Several additional in-person meetings or phone meetings with developers, architects and interested parties

There were several recurring themes that emerged in the comments received. These themes include:

- Usability of bicycle parking for all people and all types of bicycles
- Housing affordability and bicycle parking in affordable housing
- General importance of end-of-trip facilities
- Security and bicycle theft concerns
- Concerns around allowing in-unit bicycle parking, while others expressed that in-unit bicycle parking should still be an option
- Flexibility in implementation
- Letting the market forces drive the provision of bicycle parking

See Appendix A for a compilation of comments on the Discussion Draft.

Proposed Draft – Changes from the Discussion Draft

Based on public comments, input from City bureaus, and additional analysis, staff incorporated refinements to the proposals as part of the Proposed Draft. These include the following:

1. **Self-Service storage amounts.** In Table 266-6, add a Use Category under Commercial Categories for Self-Service Storage and add amounts for required long- and short-term bicycle parking.
2. **Affordable housing in-unit standards.** Develop an in-unit standard for Affordable Housing projects that looks to balance the need for deep affordable units and convenient and accessible long-term bicycle parking.
3. **Long-term security.** Create separate long-term security standards for residential uses and non-residential uses, acknowledging the differences in how bicycle parking is used. For non-residential uses, the lockable room does not have to be designated for bicycle parking, therefore bicycle parking spaces could be co-located with staff work areas on upper floors or in the back-office area of a small retail establishment.
4. **Accessible route.** Remove the reference to accessible access route for long-term bicycle parking because ADA standards capture access to bicycle parking rooms; but add standards for access to in-unit bicycle parking for buildings that don't have elevators.

5. **Long-term location – personal garage.** Clarify that long-term bicycle parking can be in a personal, structured parking space and this does not count towards being in a residential dwelling unit.
6. **Long-term location – underground, structured parking.** Remove the standard that if long-term bicycle parking is located in underground, structured parking areas then it must be located on the level closest to the ground floor of the building. Therefore, long-term bicycle parking can be at any level of the parking garage, as long as there is elevator access.
7. **E-bikes.** Remove the requirement for outlets to charge e-bikes because of the logistical plan review issues of checking outlets during Planning and Zoning Review. However, a future electrification project will look at requiring charging for e-bikes and EVs.
8. **Short-term Bicycle Parking Fund.** Remove the all or nothing aspect of the Short-term Bicycle Parking Fund to allow partial placement of short-term requirement on-site with the remainder paid into the Fund.
9. **Long-term bicycle parking for schools (K through 12).** Given the different needs of long-term bicycle parking at schools for students and for staff, the proposal exempts and creates specific long-term bicycle parking requirements for schools to address location, security, weather-protection and horizontal racks.

Section IV: Proposal and Analysis

This section summarizes the major Zoning Code changes proposed by the Bicycle Parking Code Update Project. This section briefly describes each proposal, provides an explanation of the problems and policy issues the proposal is intended to help address. This section also serves to provide background on some of the changes between the earlier drafts and the Proposed Draft. The proposals are organized based on the Guiding Principles of the Stakeholder Advisory Committee.

Adequate Amount of Bicycle Parking to accommodate future increases in demand, specifically the City's 25% bicycle mode split goal for all trips.

Proposals:

1. Adopt two geographic tiers for minimum bicycle parking amounts to be applied to all Use Categories.
2. Calculate amounts of long- and short-term bicycle parking based on data points, including trip generation rates, employees per square footage, and visitation rates.

Issues Addressed:

The majority of Table 266-6, which sets the minimum required bicycle parking amounts for all Use Categories, has not been updated since 1996. Therefore, a major section of the code update project is focused on updating the amounts of required long-term and short-term bicycle parking to better reflect current and goal bicycle mode splits.

Proposal Approach:

1. A Tiered Approach to Bicycle Parking

Although the City of Portland has a citywide goal of 25% of people using a bicycle for all trips, mode splits are different throughout the city.

Under the current Zoning Code Multi-Dwelling developments have two different required bicycle parking minimums, one for the Central City and one for the rest of the city. The proposal would expand the higher minimums outside the Central City. This project proposal also expands the use of tiered standards to all of the Use Categories in Table 266-6.

The tiers are based on the Pattern Areas in the Comprehensive System Plan 2035 and the Transportation System Plan (TSP):

1. Rivers
2. Central City
3. Inner Neighborhoods
4. Western Neighborhoods
5. Eastern Neighborhoods

Additionally, staff looked at the four identified Bicycle Districts in the TSP. The Gateway Bicycle District was the only Bicycle District outside of the Central City or the Inner Neighborhood Pattern Areas. As such, it is recommended for inclusion in Standard A as described below.

The following two tiers are proposed to be applied to all Use Categories in Table 266-6 for the required amounts of both long-term and short-term bicycle parking:

Standard A – Central City, Inner Neighborhoods, and Gateway Plan District

Standard B – Western and Eastern Neighborhoods, River

The tiered approach accounts for the differences in bike use and thus bike parking demand in Portland. It parallels the tiered approach in the Transportation System Plan to setting target mode share rates for the different pattern areas.

There was some concern expressed from the public through comments on the Bicycle Parking Online Open House and in an initial briefing of the Portland Planning and Sustainability Commission (PSC), that a lower bicycle parking requirement in the outer neighborhoods (Standard B), supports the perception that these neighborhoods are often overlooked for investment in bicycle infrastructure. It is important to note that PBOT is committed to improving and expanding bicycle infrastructure everywhere in the City, and lower bicycle parking rates do not reflect a lower level of commitment.



Figure 2 – Pattern Area Map.
Standard A – Central City, Inner Neighborhoods, and Gateway Plan District
Standard B – Western and Eastern Neighborhoods, River

The proposal increases the required minimum bicycle parking spaces in both Standard A and Standard B. The Standard B amounts are based on a target of 15% bicycle mode split for all trips and 10% for commute trips. For context, the current bicycle commute mode split in the Eastern Neighborhoods is under 4%. With further public investment and monitoring, these standards may be modified in the future.

2. Minimum Required Amount Calculations

The required numbers of bicycle parking spaces were calculated using data points such as the average square footage per employee (or employee density); visitation rates from Transportation System Development Charges, and target bicycle mode split to build out the methodology for updating the amounts. The two tables below offer examples on how long-term and short-term bicycle parking amount standards were developed for Office Use:

How to calculate amount of required long-term bicycle parking (for Table 266-6) for Office Use:

Assumptions:

- *Employee density of 350 sq. ft. per employee**
- *Commute mode split Standard A = 20%*
- *Commute mode split Standard B = 10%*

*Standard A = 1,000 sq. ft. ÷ 350 x 20% = .57 spaces per 1,000 sq. ft.
= 1,000 sq. ft. ÷ .57 = **1 long-term space per 1,754 sq. ft. rounded to 1,800 sq. ft.***

*Standard B = 1,000 sq. ft. ÷ 350 x 10% = .29 spaces per 1,000 sq. ft.
= 1,000 sq. ft. ÷ .29 = **1 long-term space per 3,440 sq. ft. rounded to 3,500 sq. ft.***

**Note: Employee density from City of Portland Bureau of Planning and Sustainability: Economic Opportunities Analysis - Sections 2/3 Supply & Demand, Figure 35, Square Feet per Employee, p 46.*

How to calculate amount of required short-term bicycle parking (for Table 266-6) for Office Use:

Assumptions:

- *TSDC* rate = 1-person trip per 1,000 sq. ft. per PM peak*
- *20% visitor rate*
- *Mode Split Standard A = 25%*
- *Mode Split Standard B = 15%*

*Standard A = 1 x 20% x 25% = .05 spaces per 1,000 sq. ft.
= 1,000 sq. ft. ÷ .05 = **1 long-term space per 20,000 sq. ft.***

*Standard B = 1 x 20% x 15% = .03 spaces per 1,000 sq. ft.
= 1,000 sq. ft. ÷ .03 = **1 long-term space per 33,333 sq. ft. rounded to 33,000 sq. ft.***

** TSDC - Transportation System Development Charge*

During much of the time that staff was working with the Stakeholder Advisory Committee on updating the bicycle parking chapter, the TSP Proposed Draft Stage Three included a 15% commute mode split goal. However, while the Stakeholder Committee was in its final stage of finalizing their recommendations, with the release of the TSP Proposed Draft in August 2017, this mode split goal was changed to 25%. Staff, with support of the Stakeholder Committee, continued with the 15% target citywide commute modes split for the long-term bicycle parking methodology and calculation. The following main points helped influence that decision:

- A 15% commute mode split is still moving the dial forward on increasing the total amount of bicycle parking.
- Staff and the Stakeholder Committee spent considerable time coming to group consensus on the formula and are comfortable with the amounts of bicycle parking produced by a 15% target.
- The 15% target represents an incremental step, moving toward the 25% commute mode split by 2035.
- Zoning Code is intended to represent a “minimum” requirement. Some developers will do more, but the focus is on what is needed as a baseline for current development.

Finally, staff compared the amounts of required bicycle parking produced by the formulas with requirements from comparable cities and what the development market in Portland is already producing for bicycle parking. For example, in the Office Use example, Portland is seeing a number of developers in the “Standard A” areas building to a higher bicycle parking standard of 1 space per 1,000 square feet to accommodate demand. See Appendix D for more information about how the proposed amounts compare to other cities and existing Portland projects.

Long-term Bicycle Parking – Portland Proposed Amounts versus Other Cities							
Use Category	Portland Proposed Code (proposed 2018)	Boulder, CO (2014)	Seattle, WA (2018)	Los Angeles, CA (2017)	Madison, WI (2014)	San Francisco, CA (2013)	PBOT 1994 Task Force Recommendations
Household Living – Multi-Dwelling	Standard A – 1.5 per unit Standard B – 1.1 per unit	2 per unit (75% long-term and 25% short-term)	1 per unit	1 per unit	1 per unit up to 2-bedrooms, ½ space per add’l bedroom.	1 per unit. For buildings containing more than 100 dwelling units, 100 spaces plus 1 for every 4 units.	1 per unit; unless garages are provided, in which case, none are required
Retail Sales and Services	Standard A – 1 per 3,800 sq. ft. Standard B – 1 per 7,500 sq. ft.	1 per 750 sq. ft. (25% long-term and 75% short-term)	1 per 4,000 sq. ft.	1 per 2,000 sq. ft.	1 per 2,000 sq. ft.	1 per 7,500 sq. ft.	1 per 8,000 sq. ft.
Retail Sales and Services – Restaurant and Bar	Standard A – 1 per 2,300 sq. ft. Standard B – 1 per 4,800 sq. ft.	1 per 750 sq. ft. (25% long-term and 75% short-term)	1 per 5,000 sq. ft.	1 per 2,000 sq. ft.	5% of capacity of persons	1 per 7,500 sq. ft.	N/A
Office	Standard A – 1 per 1,800 sq. ft. Standard B – 1 per 3,500 sq. ft.	1 per 1,500 sq. ft. (75% long-term and 25% short-term)	N/A	1 per 5,000 sq. ft.	1 per 2,000 sq. ft.	1 per 5,000 sq. ft.	1 per 3,000 sq. ft.
Medical Centers	Standard A – 1 per 2,700 sq. ft. Standard B – 1 per 5,500 sq. ft.	1 per 1,500 sq. ft. (75% long-term and 25% short-term)	1 per 4,000 sq. ft.	1 per 5,000 sq. ft.	1 per 2,000 sq. ft.	1 per 15,000 sq. ft. (Hospitals or In-Patient Clinic) 1 per 5,000 (Medical Offices or Out-patient clinic)	1 per 7,000 sq. ft.

Prioritizing Bicycle Parking to be intentionally planned, with consideration for location and within the design of the building.

Proposals:

3. Specify options for location of long-term bicycle parking.
4. Require a percentage of long-term bicycle parking to be in bike rooms.
5. Affordable Housing in unit bicycle parking exemptions.
6. In mixed-use developments, ensure all building tenants have access to long-term bicycle parking.
7. Require applicants to provide sufficient bicycle rack detail in submitted plans.

Issues Addressed:

During the code concept phase the following key priorities were identified for required long-term bicycle parking:

- Easy to find
- Access without stairs
- Direct access (preferably direct entry from the street if possible)
- Prominent location

The proposed updates to the bicycle parking chapter aim to provide more clarity for bicycle parking in new or redeveloped buildings. These proposals are focused on location and accessibility of long-term bicycle parking. In some cases, the City has seen bicycle parking requirements added at the very end of a project, without much consideration to how people will find or access these spaces, and as a result bicycle parking racks are hidden in back corners of buildings or parking garages.

The Discussion Draft included a proposal to require that at least one access route to bicycle parking must be designed so that a person doesn't have to lift their bicycle over any obstacles, including stairs or a curb. ADA requirements, including the provision of an accessible route, must apply to any common room for a Multi-Dwelling or Commercial Building. A bicycle parking room is considered a common room. Therefore, the access route does not need to be addressed in Zoning Code, as it will be addressed during the Life Safety Review, and thus, the reference is removed from the code draft.

The following proposals provide clearer direction as to the appropriate locations of long-term bicycle parking.

Proposal Approach:

3. Options for long-term bicycle parking location

The proposal lists location options for where long-term bicycle parking may be provided. Required long-term bicycle parking may be provided in one or more of the following locations:

- Within the building, including on the ground floor or on individual building floors;
- On-site, including in parking areas;
- In an area where the closest point is within 300 feet of the site; or
- *In a residential unit. The requirements for parking in residential units are addressed below.*

4. Standards for bicycle parking in dwelling units

One of the more debated elements to the Bicycle Parking Code Update Project is the topic of whether required long-term bicycle parking can use space within residential units of multi-dwelling projects. Under current code, 100% required long-term bicycle parking spaces could be provided within the unit.

Throughout the code update project process, PBOT staff have heard from stakeholders about the issues with bicycle parking within residential dwelling units, including, but not limited to:

- Bicycle racks being placed in unusable locations in the unit, including tucked into the far corners of bedrooms.
- Bicycle racks being removed and not returned when new tenants move in, thus reducing the overall capacity of bicycle parking in the building.
- Damage deposits being lost when wet, muddy bikes are parking within units.
- A strong user preference to parking their bikes in a bicycle parking room (from the PBOT Community Survey: Bicycle Parking in Apartments, 2017).
- Feedback from property managers for a preference for bicycle rooms and reducing the damage cause by bicycle parking in dwelling units.

PBOT staff conducted site visits at apartments around the city. While there were examples of effective in-unit bicycle parking, there were many more examples where a rack was placed in the residential unit in a way that made it hard to use. Examples seen by staff include in the bedroom, right next to or over the bed. In other cases, the bicycle rack, or multiple racks, were placed a significant distance from the front door, requiring the user to roll the bicycle through to the opposite end of the unit. In these buildings, in many cases the bike parking rooms were at, or over, capacity with parked bicycles. These site visits focused only on buildings permitted after 2010, when the 1.5 and 1.1 spaces per unit requirement went into effect.

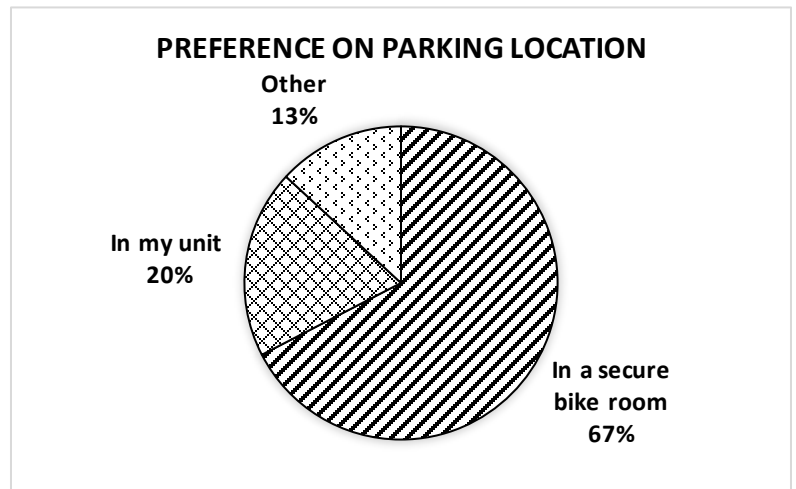


Figure 3 – Results from Community Survey (general survey) – where do people prefer to park their bicycle?

Most other cities do not allow bicycle parking spaces in an apartment unit or on a balcony to count toward the required long-term bicycle parking.

Finally, there is policy direction, from the adopted Bicycle Plan for 2030 to prohibit space within dwelling units for required long-term bicycle parking.³

³ Bicycle Plan 2030 – Recommendation 3.3.A Seek changes to regulations to ensure all land uses provide ample bike parking and end-of-trip facilities. Specifically, amend Portland’s zoning code to increase short and long-term bicycle parking requirements, including prohibiting space within dwelling units, balconies or required open spaces not specifically designed for bicycle parking from counting towards long-term bicycle parking requirements.

Given all the factors stated above, staff originally proposed to allow 0% of required long-term bicycle parking to be provided within a residential unit. However, during the code development process, staff heard loud and clear from the development community that requiring all bicycle parking to be outside of the dwelling units has an impact on how space is used in the building, which impacts development costs.

Therefore, the proposed requirement states that 80% of required long-term bicycle parking must be provided in bike rooms, while 20% can be provided within residential dwelling units if additional standards are met:

- Racks provided in-unit would not need to be as substantial as previously required (example, a bicycle hook would be acceptable).
- The five-foot maneuvering space must still be provided.
- The in-unit bicycle parking must be on the ground floor or on floors served by an elevator.



Figure 4 – Example of an in-unit rack that is placed right next to the bed.

This proposal moves toward the Bicycle Plan policy goal, while still responding to the concerns from the development community.

5. Affordable housing in-unit bicycle parking exemptions

During the Discussion Draft outreach period, PBOT staff continued to meet with affordable housing developers and the Portland Housing Bureau (PHB). There was overarching recognition that having secure and reliable bicycle parking is important and that encouraging a low-cost transportation options, like bicycling, is particularly important for residents of affordable housing. However, there remained concern about the impact of the requirements on the provision of affordable housing units in Portland. Specifically, the most stated concern was about the impact of the 80% out-of-unit requirement and that it might result in the loss of either a bedroom or a dwelling unit, which could have significant impact on the feasibility of affordable housing projects.

Recognizing the unique circumstances to getting affordable housing projects on the ground and the City of Portland's clear goal of improving housing affordability, especially for people living on very low incomes, PBOT staff worked closely with PHB on a proposal to address the specific concerns for affordable housing developers.

The proposal targets projects that are providing primarily affordable units and uses the standards from Better Housing by Design for affordability bonuses. The proposal for in-unit bicycle parking for such developments is to allow:

- Up to 50% of required long-term bicycle parking spaces may be provided in a residential dwelling unit.
- Up to 100% of required long-term bicycle parking spaces may be provided in a residential dwelling unit if the site has 10 dwelling units or less.

The nature of bicycle parking provided in new multi-dwelling residential developments will have a significant effect on how convenient – and in many cases, how feasible – it is for residents to use bicycles for daily transportation. These buildings will shape bicycle use for decades to come. The requirements described above provide a balance between development concerns and overall policies to accommodate growth in the city.

6. Access for all building tenants in mixed-use buildings

An issue elevated during the code concept development was ensuring that all tenants, especially in mixed-use developments can access the building's long-term bicycle parking spaces.

The proposal states that developments with multiple primary uses must provide access to bicycle parking for all tenants. For example, in a mixed-use building, spaces dedicated to long-term bicycle parking must be accessible for retail/commercial tenants and employees, as well as residential tenants. The bicycle parking can be provided in a common space with restricted access or in multiple separate location, but all tenants must have access to at least the amount of long-term bicycle parking that is required for the appropriate Use Category.

7. Provide sufficient bicycle rack detail in submitted plans

The code does not currently require the inclusion of details about the bicycle parking racks in submitted plans. Although the Bureau of Development Services (BDS) staff typically require this information from in land use review or building permit applications, codifying the requirement helps to ensure consistent review of required bicycle parking.

The proposed approach is similar to Joint Use Parking (33.266.110) and Environmental Zones (33.430.130) requirements for submittal of necessary documentation as part of a building permit or zoning application.

Accessible and Convenient Bicycle Parking that accommodates users of all ages and abilities as well as a variety of different types of bicycles.

Proposals:

- 8.** Require a minimum percentage of long-term bicycle parking to be provided in horizontal racks.
- 9.** Provide a few bicycle parking spaces for larger bikes, like recumbents or bikes with trailers.
- 10.** Ensure that double-decker bicycle racks include a lift-assisted mechanism to access the upper tier.

Issues Addressed:

The Comprehensive Plan 2035 calls for long-term bicycle parking standards that consider the needs of persons with different levels of ability. Further, the PBOT Community Survey of apartment users identified that 27% of the respondents reported owning some other type of bike, e-bike, cargo bike, etc. The proposals in this category are aimed at increasing the availability of racks for non-standard bicycles as well as ensure that a proportion of bicycle spaces can accommodate different levels of ability (specifically, reducing the need to lift bicycles).

To reduce the burden of these additional long-term bicycle parking requirements on small developments, the following proposals are only triggered when a development is required to have more than 20 required long-term bicycle parking spaces.

Proposal Approach:

8. Minimum percentage of horizontal racks

When the current code language was developed over 20 years ago, the assumption was that all bicycle parking was provided in ground-mounted, horizontal racks. However, advances in rack design now allow for the use of wall-mounted, vertical racks and double-decker racks. While these vertical, wall-mounted racks provide space-efficient bicycle parking, they create usability issues for people who are not able to lift their bikes onto a wall-mounted rack or for people with bikes that do not fit vertically, due to length, fender placement, etc.

To provide bicycle parking spaces that do not require the lifting of a bicycle, a minimum of 30% of required spaces must be in a horizontal rack or on the lower level of a stacked bicycle parking racks. This will ensure the provision of racks that can be used by people of all abilities, while still maintaining the flexibility for developers to use space-efficient options in constrained building space.

9. Provide spaces for large types of bicycles including cargo bikes and bikes with trailers

The current code requirements do not accommodate different types of bicycles that have become much more common over the past few years, including cargo bikes, bikes with trailers and tricycles. As Portland continues to work towards its bicycle mode split goal, it is important to support all people who ride, which means bicycle parking for a variety of types of bicycles. The proposal requires a minimum of 5 percent of required bicycle parking spaces with a larger footprint of 3 feet by 10 feet, which must be provided in a horizontal rack.






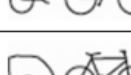

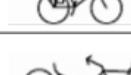
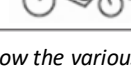
BICYCLE TYPE		DIMENSIONS (FEET)		
		Length	Height	Width
Standard Bicycle		6	4	2
Child Bicycle		5	2-3	2
Tandem Bicycle		9	4	2
Cargo Bicycle		8	4	3
Bicycle+Trailer Bike		10	4	2
Bicycle + Child Trailer		10	4	3
Bicycle and Child Seat		6	5	2
Recumbent Bicycle		7	4	3

Figure 5 – Table to show the various dimensions of different types of bicycles. Credit – San Francisco Zoning Administrator Bulletin No. 9.

The Discussion Draft included a requirement for a small percentage of electrical outlets to be provided in bicycle rooms for charging e-bikes. Portland is seeing an increase in the use of e-bikes, and staff maintain that providing sufficient charging areas is an important element of supporting the use of these types of bikes. However, there were a number of implementation challenges identified in reviewing electrical requirements during Planning and Zoning. Therefore, this proposal is removed and PBOT and BPS will be looking at e-bike charging as part of a future electrification project.

10. Double-decker racks are required to have a lift-assist mechanism

Double-decker, stacked bicycle racks are a space saving option that provides two levels of bicycle parking. This is a very space-efficient option, but it must be convenient and usable in order to meet Portland's bicycle parking goals. Parking a bicycle onto the top rack of a double-decker bicycle rack would mean lifting a bike approximately four to five feet off the ground and placing in the bicycle parking space. This was not deemed usable by staff or the Stakeholder Advisory Committee. Therefore, the code proposal includes a requirement that double-decker bicycle racks have a lift-assist mechanism to aid the user in parking their bicycle on the upper rack. The lift assist eliminates the need to fully lift a bicycle.

Bicycle Parking is Secure and Safe to Use where design provides sufficient security provisions to prevent bicycle theft and promotes safe spaces for users.

Proposals:

- 11.** Streamline and narrow the security requirements for long-term bicycle parking to help prevent bicycle theft.
- 12.** Enhance personal safety by requiring lighting for long-term bicycle parking.
- 13.** Require 100% of long-term bicycle parking to be covered to provide weather protection.

Issues Addressed:

Security was very important for the Stakeholder Advisory Committee and for the people who provided input in early public engagement activities. In Portland, nearly 3,000 bikes are reported stolen to the police each year, and this represents just a fraction of the actual number of bikes that are stolen and not reported.

Proposal Approach:

11. Streamline security requirements for long-term bicycle parking

BDS staff report that most projects satisfy the security requirement for long-term bicycle parking by placing racks in a locked room or enclosure (secure bike room or in-unit placement). However, some projects have satisfied the security requirement by less secure options, including solely relying on video surveillance. BDS staff prefer to streamline and simplify this security section by providing fewer options to meet the code.

During the Online Open House respondents provided strong feedback that a camera should also be required as an additional element of bicycle parking security. This camera requirement was not included in the final proposal, in order to focus on the most important element of security, which is a locked enclosure. Also, cameras can break or be removed after the building is built, and thus are not as effective as a permanent measure.

The security standards proposal removes a number of the standalone security options, and instead provides three options for long-term bicycle parking security:

- 1) A lockable room or enclosure, with restricted access and designated for bicycle parking;
- 2) A bicycle locker; or
- 3) Placement in a residential unit, per the standards for in-unit bicycle parking.

The proposal also develops different security standards for residential uses and non-residential uses. This is because long-term bicycle parking is sometimes used legitimately more for storage purposes at residential buildings, as opposed to an office building.

12. Lighting requirements

Adequate lighting helps ensure personal safety for people using bicycle parking areas. Since short-term bicycle parking is located near the main entrance of buildings, staff assume that the area would already include lighting. However, for long-term bicycle parking that could be placed in a basement or in an underground parking area, lighting is an important security component.

The proposal for lighting is based on existing standards in Title 33 under pedestrian standards for commercial/ mixed use zones (33.130.205) and multi-dwelling zones (33.120.210).

13. Weather Protection

The current code only requires 50 percent of the required long-term bicycle parking spaces to be covered. However, staff and the Stakeholder Advisory Committee felt very strongly that 100 percent of long-term bicycle parking should be covered and include weather protection.

The proposal also more clearly defines weather protection, including stipulating the dimensions of a cover and how far the cover must extend beyond the bicycle footprint.

Bicycle Parking is Feasible and requirements allow for innovation and adaptability in design, while being straightforward to implement; additionally, requirements consider project feasibility and cost implications.

Proposals:

- 14.** Increase options for space saving racks in code.
- 15.** Streamline spacing requirements for horizontal and diagonal racks to match the right-of-way standards.
- 16.** Exempt bike room space from Floor Area Ratios.

Issues Addressed:

During the code concept development phase and the work with the Stakeholder Advisory Committee, there was agreement that it was important to support and improve project feasibility. The current code makes it difficult for development projects to use space saving racks like vertical wall racks and double-decker, stacked racks.

Proposal Approach:

14. Increase options for space saving racks in code

The current bicycle parking code only addresses standards for horizontal, floor-mounted rack placement and spacing. However, there are many rack designs available that allow for closer spacing between bikes, with a vertical stagger that provides enough space to avoid handlebar and pedal conflicts. Narrower spacing makes it easier to provide more bicycle parking in a smaller area.

BDS and PBOT are already allowing these “space saving” racks through the modification and adjustment process, but codifying the standards streamlines the development process.

The proposals address spacing standards for vertical, wall racks and double-decker, stacked racks, both of which are common rack designs in development.

15. Streamline spacing standards for horizontal racks

The proposal also includes spacing standards for horizontal and diagonal racks that match the requirements in PBOT’s bike parking in the right-of-way guidelines. These proposals allow for additional flexibility in rack configuration, while still maintaining usability of the racks.

16. Exempt bike room space for FAR

The recent amendments to the Commercial/ Mixed Use Chapter (33.130) included an FAR (Floor Area Ratio) exemption for structured parking up to a maximum FAR of 0.5 to 1. The proposal creates a FAR exemption at a similar rate for long-term bicycle parking provided outside of the dwelling unit. This helps promote development of the most effective type of bicycle parking, secure bicycle parking rooms and incentivizes their placement above ground.

It is important to note that the Better Housing by Design Project that is updating the multi-dwelling zones chapter and is proposing the same FAR exemption for structured parking. If that proposal is adopted, the Bicycle Parking Code project also proposes to include a similar FAR exemption for bike rooms.

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Section V: Zoning Code Amendments

This section presents staff proposed zoning code amendments. The section is formatted to facilitate readability by showing draft code amendments on the right-hand pages and related commentary on the facing left-hand pages. Proposed new code is shown as underlined and current code proposed for deletion is shown with a ~~striketrough~~.

Note: Sections of the existing code have been substantially rewritten, and the order of the current code sections have been moved around for the proposed zoning code amendments. Therefore, the majority of the new code is underlined. The commentary identifies where the code language has mostly stayed the same, but because of the reorganization and re-numbering of the sections, the language is underlined.

Commentary on draft Chapter 33.266.200 code amendments is in summary form. For more detail on the concepts, research and background related to the draft code amendments, see the [Bicycle Parking Code Update Project website](#).

This project deals primarily with Chapter 33.266.200, but there are some proposed changes to additional sections of Title 33:

- 33.120 Multi-Dwelling Zones
- 33.130 Commercial/ Mixed Use Zones
- 33.229 Elderly and Disabled High Density Housing
- 33.258 Nonconforming Development
- 33.266 Parking, Loading, And Transportation And Parking Demand Management
- 33.510 Central City Plan District
- 33.281 Schools and School Sites
- 33.815 Conditional Uses

Commentary

33.266.200 Minimum Required Bicycle Parking

These amendments remove the Section's overarching purpose statement to create two primary purpose statements for the Bicycle Parking Section of Chapter 266:

1. Minimum Required Bicycle Parking
2. Bicycle Parking Development Standards

The proposal develops a separate purpose statement for the Minimum Required Bicycle Parking section, which includes the updated City bicycle mode split goal to 25% of all trips. The update to the purpose statement also outlines the basic methodology for how the minimum required bicycle parking amounts were developed. This will support BDS staff who work on adjustments and modifications.

33.266.210.A. Number of spaces required.

This amendment will expand the tiered approach that is used for the Multi-Dwelling developments in the current code chapter to all use categories in Table 266-6. A tiered approach for the number of required bike spaces accounts for differences in bike use and thus bike parking demand in Portland. While Portland has a citywide goal of 25% bicycle mode split of all trips, bicycle use rates are different in various parts of the city and meeting the 25% citywide goal includes higher and lower rates in various parts of the city.

The Transportation System Plan (TSP) uses a tiered approach for setting target mode split rates for the five different Pattern Areas.

The proposed code will introduce two standard rates based on the TSP Pattern Areas and the Bicycle Districts. Standard A (green) - Central City, Inner Neighborhoods, Gateway Plan District and Standard B (blue) - Western and Eastern Neighborhoods. The Gateway Bicycle District was the only bicycle district outside of Central City or the Inner Pattern Area, so it was incorporated into the Standard A.

The intent of developing a tiered system is to acknowledge that a one-size fits all approach does not necessarily work for development across Portland.

33.266.210.B. Calculations involving more than one use. This section has been moved, so it is underlined, but there are no changes to the content.

33.266 Parking, Loading, and Transportation and Parking Demand Management

266

Bicycle Parking:

~~33.266.200 Purpose Minimum Required Bicycle Parking~~

~~33.266.210 Required Bicycle Parking Bicycle Parking Development Standards~~

~~33.266.220 Bicycle Parking Standards~~

33.266.200 Purpose Minimum Required Bicycle Parking

- A. Purpose.** Bicycle parking is required for most use categories to encourage the use of bicycles by providing secure and convenient places to park bicycles. These regulations ensure adequate short and long-term bicycle parking based on the demand generated by different uses. Minimum bicycle parking facilities are based on the City's mode split goals, while acknowledging the usage rates for different uses. These regulations will help meet the City's goal that 25 percent of all trips be made by bicycle, while still acknowledging that to meet the citywide goal the bicycle mode split will vary by geographic area.

~~33.266.210 Minimum Required Bicycle Parking~~

- B. Number of spaces required.** The required minimum number of bicycle parking spaces for each use category is shown in Table 266-6. No bicycle parking is required for uses not listed. Minimum bicycle parking is calculated on a geographic hierarchy based upon current and future bicycle usage. See Map 266-1. Standard A applies to sites within the Central City Plan District, the Inner Pattern Areas and in the Gateway Plan District. Standard B applies to all other areas of the city.
- C. Calculations involving more than one use.** The required minimum number of bicycle parking spaces is based on the primary uses on a site. When there are two or more separate primary uses on a site, the required bicycle parking for the site is the sum of the required parking for the individual primary uses.

Commentary

Map 266-1 - Bicycle Parking Areas

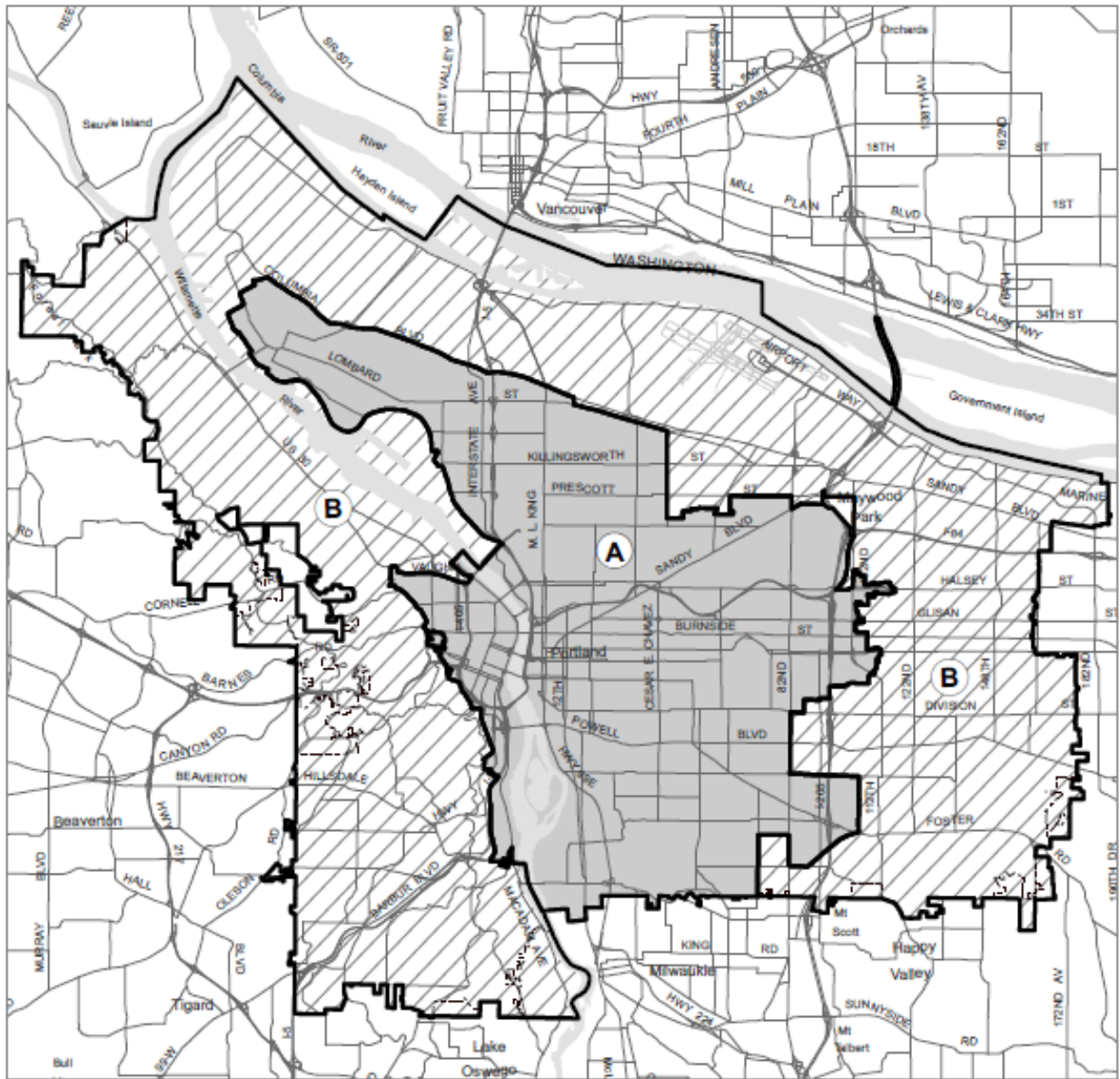
This amendment adds the new geographic tier map, Map 266-1.

Note at the time of code implementation, this map layer will be included in Portlandmaps.org and Map Works for applicants and staff to verify the specific tier for a project site.

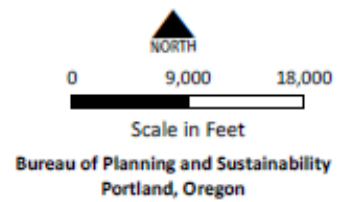
Bicycle Parking Areas

Map 266-1

Map Revised Xxxxx XX, 201X



- City Boundary
- Standard A area
- Standard B area



Commentary

Updated Table 266-6 - Minimum Required Bicycle Parking Spaces

With the exception of a few changes in 2010, the majority of the minimum required bicycle parking space amounts have not been updated since 1996. These amendments are to update the minimum required amounts of long- and short-term bicycle parking. The updates to the minimum required amounts are based on average square footage per employee (long-term rates); visitation rates (short-term rates; and target mode split goals. The full methodology can be read under the Proposal and Analysis Section (see page 20).

Removing the reference to "Per CU or IMP"

The proposal removes the reference to "per CU or IMP review" review from the entire Table 266-6. Any requests to deviate from the amount of required bicycle parking in code can be processed through an Adjustment, which gives the City the benefit of approval criteria to use to evaluate the request.

Adding new Uses and Specific Uses to Table 266-6:

These amendments will add additional Specific Use Categories into Table 266-6:

- Add a new Specific Use to Group Living to separate more social-service-related group living such as nursing homes, transitional housing and people with low-income from other group living development types that serve a more traditional household living function. This change was a result of feedback from affordable housing developers and the Portland Housing Bureau.
- Add a new Specific Use to Retail Sales and Services to distinguish bars and restaurants because they have a much higher visitor rate than the majority of other retail sales categories. Additionally, bars and restaurants have a higher employee density than other retail services.
- Add a new Use Category of Self-Service Storage under the Commercial Category. This category previously had no requirements for short- or long-term bicycle parking.

Commercial Parking:

The proposal exempts Commercial Parking facilities that have fewer than 10 vehicle spaces from the long-term bicycle parking requirements. With the implementation of the Comprehensive Plan Update, the regulations allowing the creation or conversion of parking areas into commercial parking were expanded. It is now possible in some commercial zones for a portion of a structured parking garage to be developed for commercial parking. It is also possible for non-required accessory parking to be converted to commercial parking. The conversion or creation of a smaller set of parking to be used for commercial parking, either for the general public or for sharing shouldn't trigger a requirement to add long-term bike parking.

		<u>Long-term Spaces</u>		<u>Short-term Spaces</u>	
<u>Uses</u>	<u>Specific Uses</u>	<u>Standard A</u>	<u>Standard B</u>	<u>Standard A</u>	<u>Standard B</u>
<u>Residential Categories</u>					
<u>Household Living</u>	<u>Multi-Dwelling</u>	<u>2, or 1.5 per unit</u>	<u>2, or 1.1 per unit</u>	<u>2, or 1 per 20 units</u>	<u>2, or 1 per 20 units</u>
	<u>Elderly and Disabled Housing</u>	<u>2, or 1 per 8 units</u>	<u>2, or 1 per 10 units</u>	<u>2, or 1 per 20 units</u>	<u>2, or 1 per 20 units</u>
<u>Group Living</u>		<u>2, or 1 per 4 bedrooms</u>	<u>2, or 1 per 4 bedrooms</u>	<u>2, or 1 per 20 bedrooms</u>	<u>2, or 1 per 20 bedrooms</u>
	<u>Units with restricted tenancy [1]</u>	<u>2, or 1 per 5 bedrooms</u>	<u>2, or 1 per 10 bedrooms</u>	<u>2, or 1 per 20 bedrooms</u>	<u>2, or 1 per 20 bedrooms</u>
	<u>Dormitory</u>	<u>2, or 1 per 4 bedrooms</u>	<u>2, or 1 per 4 bedrooms</u>	<u>4 spaces</u>	<u>4 spaces</u>
<u>Commercial Categories</u>					
<u>Retail Sales and Services</u>		<u>2, or 1 per 3,800 sq. ft. of net building area</u>	<u>2, or 1 per 7,500 sq. ft. of net building area</u>	<u>2, or 1 per 2,700 sq. ft. of net building area</u>	<u>2, or 1 per 4,400 sq. ft. of net building area</u>
	<u>Temporary Lodging</u>	<u>2, or 1 per 20 rentable rooms</u>	<u>2, or 1 per 20 rentable rooms</u>	<u>2, or 1 per 40 rentable rooms; and 1 per 5,000 sq. ft. of conference, meeting room</u>	<u>2, or 1 per 40 rentable rooms; and 1 per 10,000 sq. ft. of conference, meeting room</u>
	<u>Restaurant and Bar</u>	<u>2, or 1 per 2,300 sq. ft. of net building area</u>	<u>2, or 1 per 4,800 sq. ft. of net building area</u>	<u>2, or 1 per 1,000 sq. ft. of net building area</u>	<u>2, or 1 per 1,600 sq. ft. of net building area</u>
<u>Office</u>		<u>2, or 1 per 1,800 sq. ft. of net building area</u>	<u>2, or 1 per 3,500 sq. ft. of net building area</u>	<u>2, or 1 per 20,000 sq. ft. of net building area</u>	<u>2, or 1 per 33,000 sq. ft. of net building area</u>
<u>Commercial Parking [2]</u>		<u>10, or 1 per 10 auto spaces</u>	<u>10, or 1 per 10 auto spaces</u>	<u>None</u>	<u>None</u>
<u>Commercial Outdoor Recreation</u>		<u>2, or 1 per 12,500 sq. ft. of net building area</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 2 acres</u>	<u>2, or 1 per 3 acres</u>
<u>Major Event Entertainment</u>		<u>10, or 1 per 10,000 sq. ft. of net building area</u>	<u>10, or 1 per 20,000 sq. ft. of net building area</u>	<u>10, or 1 per 40 seats</u>	<u>10, or 1 per 40 seats</u>
<u>Self-Service Storage</u>		<u>2, or 1 per 100,000 sq. ft. of net building area</u>	<u>2, or 1 per 200,000 sq. ft. of net building area</u>	<u>2, or 1 per 26,000 sq. ft. of net building area</u>	<u>2, or 1 per 53,000 sq. ft. of net building area</u>

Commentary

Updated Table 266-6 - Minimum Required Bicycle Parking Spaces (continued)

Adding new Specific Uses to Table 266-6:

These amendments add additional Specific Use Categories into Table 266-6:

- In current code, Light Rail Station and Transit Centers are combined under one Specific Use line. This amendment will separate the two combined Specific Uses under Basic Utilities into two separate lines. This acknowledges the differences in bicycle parking needs for a Light Rail Station and a Transit Center.

Chapter 33.920.400 provides examples of Specific Uses under Basic Utilities and separates out Light Rail Stations and Transit Centers. The following information provides more detail about the differences between these two specific uses:

- Light Rail Transit Stations - A location where light rail vehicles stop to load or unload passengers, on a station platform. Generally, this is equivalent to "Transit Station" defined in 33.910.
- Transit Centers - where multiple transit lines and sometimes light rail lines converge on one location; examples include Hollywood Transit Center and Parkrose Transit Center.

Given the various use cases for bicycle parking at light rail stations and transit centers and that TriMet usually has a nominal fee for using its bike lockers and bike cages, both short- and long-term bicycle parking are required to ensure various types of demands are met.

- This proposal adds the new Specific Use of Libraries, Community Centers and Museums to the Community Service Use Category, to account for the higher visitor rate than more general Community Service uses. Current code only distinguishes Park and Ride under the Community Service Use Category.
- This amendment reconfigures the breakout of Specific Uses under Schools to better match the most prevalent grade structures at elementary, middle and high schools in Portland. For Schools, long-term bicycle parking is intended to serve staff, while the short-term bicycle parking will serve students, parents dropping off kids, or other visitors to the school. This amendment also adds bicycle parking requirements for grades K through 1.
- This amendment adds required short-term bicycle parking for the Daycare Use Category. Long-term bicycle parking is for the employees of the daycare, but short-term bicycle parking is needed for parents who are dropping off or picking up their children and for other visitors.

Uses	Specific Uses	Long-term Spaces		Short-term Spaces	
		Standard A	Standard B	Standard A	Standard B
Industrial Categories					
<u>Manufacturing and Production</u>		<u>2, or 1 per 5,000 sq. ft. of net building area</u>	<u>2, or 1 per 9,000 sq. ft. of net building area</u>	<u>2, or 1 per 67,000 sq. ft. of net building area</u>	<u>2, or 1 per 111,000 sq. ft. of net building area</u>
<u>Warehouse and Freight Movement</u>		<u>2, or 1 per 12,500 sq. ft. of net building area</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 200,000 sq. ft. of net building area</u>	<u>2, or 1 per 333,000 sq. ft. of net building area</u>
Institutional Categories					
<u>Basic Utilities</u>	<u>Transit Centers</u>	<u>30 spaces</u>	<u>30 spaces</u>	<u>12 spaces</u>	<u>12 spaces</u>
	<u>Light Rail Stations</u>	<u>12 spaces</u>	<u>12 spaces</u>	<u>4 spaces</u>	<u>4 spaces</u>
<u>Community Service</u>		<u>2, or 1 per 6,700 sq. ft. of net building area</u>	<u>2, or 1 per 12,500 sq. ft. of net building area</u>	<u>2, or 1 per 6,300 sq. ft. of net building area</u>	<u>2, or 1 per 10,000 sq. ft. of net building area</u>
	<u>Libraries, community centers and museums</u>	<u>2, or 1 per 3,000 sq. ft. of net building area</u>	<u>2, or 1 per 5,900 sq. ft. of net building area</u>	<u>2, or 1 per 1,200 sq. ft. of net building area</u>	<u>2, or 1 per 2,000 sq. ft. of net building area</u>
	<u>Park and Ride</u>	<u>12, or 5 per acre</u>	<u>12, or 5 per acre</u>	<u>6 spaces</u>	<u>6 spaces</u>
<u>Parks and Open Areas</u>		<u>None</u>	<u>None</u>	<u>2, or 1 per 2 acres</u>	<u>2, or 1 per 3 acres</u>
<u>Schools</u>	<u>Grades K through 5</u>	<u>4 per classroom</u>	<u>2 per classroom</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 100,000 sq. ft. of net building area</u>
	<u>Grades 6 through 8</u>	<u>5 per classroom</u>	<u>3 per classroom</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 100,000 sq. ft. of net building area</u>
	<u>Grades 9 through 12</u>	<u>5 per classroom</u>	<u>5 per classroom</u>	<u>2, or 1 per 25,000 sq. ft.</u>	<u>2, or 1 per 100,000 sq. ft.</u>
<u>Colleges</u>	<u>Excluding dormitories (see group living, above)</u>	<u>2, or 1 per 10,000 sq. ft. of net building area</u>	<u>2, or 1 per 20,000 sq. ft. of net building area</u>	<u>2, or 1 per 10,000 sq. ft. of net building area</u>	<u>2, or 1 per 16,000 sq. ft. of net building area</u>

Commentary

Updated Table 266-6 - Minimum Required Bicycle Parking Spaces (continued)

<u>Uses</u>	<u>Specific Uses</u>	<u>Long-term Spaces</u>		<u>Short-term Spaces</u>	
		<u>Standard A</u>	<u>Standard B</u>	<u>Standard A</u>	<u>Standard B</u>
<u>Medical Centers</u>		<u>2, or 1 per 2,700 sq. ft. of net building area</u>	<u>2, or 1 per 5,500 sq. ft. of net building area</u>	<u>2, or 1 per 50,000 sq. ft. of net building area</u>	<u>2, or 1 per 100,000 sq. ft. of net building area</u>
<u>Religious Institutions</u>		<u>2, or 1 per 11,000 sq. ft. of net building area</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 14,000 sq. ft. of net building area</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>
<u>Daycare</u>		<u>2, or 1 per 3,000 sq. ft. of net building area</u>	<u>2, or 1 per 6,000 sq. ft. of net building area</u>	<u>2, or 1 per 25,000 sq. ft. of net building area</u>	<u>2, or 1 per 33,000 sq. ft. of net building area</u>
<u>Other Categories</u>					
<u>Aviation and Surface Passenger Terminals</u>		<u>2, or 1 per 4,500 sq. ft. of net building area</u>	<u>2, or 1 per 4,500 sq. ft. of net building area</u>	<u>None</u>	<u>None</u>
<u>Detention Facilities</u>		<u>2, or 1 per 5,000 sq. ft. of net building area</u>	<u>2, or 1 per 5,000 sq. ft. of net building area</u>	<u>None</u>	<u>None</u>

[1] Group Living units with restricted tenancy are units that are regulated affordable housing per the Portland Housing Bureau requirements. The applicant must provide a letter from the Portland Housing Bureau certifying that the group living development meets any income restrictions and administrative requirements. The letter is required to be submitted before a building permit can be issued for the development but is not required in order to apply for a land use review. The applicant must also execute a covenant with the City that complies with the requirements of Section 33.700.600. The covenant must ensure that the group living use will remain limited to households meeting any income restrictions and administrative requirements of the Portland Housing Bureau.

[2] No long-term bicycle parking is required for a Commercial Parking facility with less than 10 vehicle parking spaces.

Note: Wherever this table indicates two numerical standards, such as “2 or 1 per 3,000 sq. ft. of net building area,” the larger number applies.

Commentary

33.266.210.A. Purpose

This proposal combines all the individual purpose statements from the Bicycle Parking Development Parking Standards Subsections under 33.266.210 into one overarching purpose statement for the Section. This eliminates the need for repetition in separate purpose statements for all bicycle parking, long-term bicycle parking, and short-term bicycle parking.

33.266.210.B. Where these standards apply.

This proposal adds language to clarify where each of the Subsections of the Section apply, regarding all bicycle parking standards, long-term bicycle parking and short-term bicycle parking.

33.266.210.C. Standards for all bicycle parking.

There are no substantial changes to the standards for bicycle racks. However, since there is a re-ordering of the entire code chapter to put the standards for all bicycle parking first, followed by long-term and then short-term bicycle parking standards, these sections are underlined.

33.266.210 Bicycle Parking Development Standards

- A. Purpose.** These standards ensure that required bicycle parking is designed so people of all ages and abilities can access the bicycle parking and securely lock their bicycle without undue inconvenience. Bicycle parking is in areas that are reasonably safeguarded from theft and accidental damage. Long-term bicycle parking is in secure and weather protected facilities that can allow for a variety of bicycle types and is intended for building and site occupants, and others who need bicycle parking for several hours or longer. Short-term bicycle parking is located in publicly accessible, highly visible locations that serve the main entrance of a building. Short-term bicycle parking is visible to pedestrians and bicyclists on the street and is intended for building and site visitors.
- B. Where these standards apply.** The standards of Subsection C and D apply to required long-term bicycle parking, and the standards of Subsection C and E apply to required short-term bicycle parking.
- C. Standards for all bicycle parking.** The Bureau of Transportation maintains a bicycle parking handbook that includes information on rack standards, siting guidelines and other standards of this code chapter. Required long-term and short-term bicycle parking must be provided in lockers or racks that meet the following standards:
1. Bicycle parking area standards. The area devoted to bicycle parking must be hard surfaced.
 2. Bicycle Racks. Where required bicycle parking is provided in racks, the racks must meet the following standards:
 - a. The bicycle frame and one wheel can be locked to the rack with a high security, U-shaped shackle lock if both wheels are left on the bicycle;
 - b. The rack must support the bicycle at two points, including the frame, and must support the bicycle in a stable position so that the bicycle cannot be pushed or fall in a manner that will damage the wheels or components; and
 - c. The rack must be securely anchored with tamper-resistant hardware.

Commentary

33.266.210.C. Standards for all bicycle parking (continued)

2. Bicycle Parking Space, Maneuvering Area, and Clearance Dimensions and Table 266-7

This amendment adds a new Table 266-7 to show all required minimum dimensions for the various bicycle parking configurations; including bicycle space depth, width, height, maneuvering area, and wall clearances. Table 266-7 includes the standard spacing requirements as well as alternative spacing requirements as described below.

a. Standard Bicycle Parking Spacing Requirements

This amendment maintains the 2 foot by 6 foot bicycle standard spacing, but adds a third dimension for height/ depth of a bicycle. The 3 feet 4 inch (40 inch) depth measurement is particularly important for vertical bicycle parking racks; since the current code does not address vertical dimensional standards. The standard spacing dimensions are intended to provide the baseline space requirement for a bicycle parking space. This baseline is to be used for measuring all bicycle parking spaces unless otherwise stated in code.

The amendment also moves the required maneuvering area requirements to this section. The maneuvering area is measured from the end of the depth of bicycle (6 ft if placed horizontally, or 3 feet 4 inches if placed vertically).

Table 266-7						
Minimum Dimensions for Bicycle Parking Spaces [1]						
		<u>Bicycle Space Depth</u>	<u>Bicycle Space Width</u>	<u>Bicycle Space Height</u>	<u>Maneuvering Area Width</u>	<u>Clearance to rack from walls</u>
Standard Spacing		<u>6 ft.</u>	<u>2 ft.</u>	<u>3 ft. 4 in.</u>	<u>5 ft.</u>	<u>2 ft. 6 in.</u>
Alternative Spacing						
	<u>Horizontal: Side by Side</u>	<u>6 ft.</u>	<u>1 ft. 6 in.</u>	<u>3 ft. 4 in.</u>	<u>5 ft.</u>	<u>2 ft. 6 in.</u>
	<u>Horizontal: Wall Attached</u>	<u>6 ft.</u>	<u>2 ft.</u>	<u>3 ft. 4 in.</u>	<u>5 ft.</u>	<u>1 ft.</u>
	<u>Horizontal: Diagonal (45-60 degree)</u>	<u>6 ft.</u>	<u>1 ft. 6 in.</u>	<u>3 ft. 4 in.</u>	<u>5 ft.</u>	<u>3 ft.</u>
	<u>Vertical Spaces [2]</u>	<u>3ft. 4 in.</u>	<u>1 ft. 5 in.</u>	<u>6 ft.</u>	<u>5 ft.</u>	<u>--</u>
	<u>Stacked Spaces [3]</u>	<u>--</u>	<u>1 ft. 5 in.</u>	<u>--</u>	<u>8 ft.</u>	<u>--</u>

Notes:

[1] See Figures 266-8 through 266-13.

[2] The alternative spacing allowed for vertical bicycle parking spaces requires a minimum vertical stagger of 8 inches between each space.

[3] The alternative spacing allowed for stacked bicycle parking spaces requires a vertical stagger to be included in the manufacturer design.

3. Bicycle Parking Space, Maneuvering Area, and Clearance Dimensions. Bicycle parking spaces, aisles and clearances must meet the minimum dimensions contained in Table 266-7.

a. Standard Bicycle Parking Space Requirements.

(1) The standard required bicycle space is 2 feet wide, 6 feet long and 3 feet 4 inches tall. See Figure 266-8;

(2) There must be at least 5 feet behind all required bicycle parking spaces to allow room for bicycle maneuvering. Where required short-term bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way;

(3) A wall clearance of 2 feet 6 inches must be provided. See Figure 266-9.

Commentary

33.266.210.C. Standards for all bicycle parking.

Bicycle Parking Space, Maneuvering Area, and Clearance Dimensions (continued)

b. Alternative Spacing Requirements

There are configurations of bicycle racks that due to layout and stagger, eliminate handlebar and pedal conflicts between bicycles, accommodating more bicycle parking spaces in less space than the standard bicycle rack dimensions.

These amendments acknowledge those rack options, providing alternative layouts, and dimensional standards found in Table 266-7 that can be applied in lieu of the typical required bicycle standard spacing. If an applicant wants to deviate from the prescribed layouts (over the next few pages), they must demonstrate how the standard bicycle parking footprint is maintained.

(1) Horizontal Spacing Requirements

These amendments provide narrower spacing requirements and allow for other configurations for horizontal racks dimensional standards:

- Side-by-Side racks - a minimum of 3 feet between racks
- Diagonal racks - a minimum of 3 feet between racks placed on 45 to 60-degree angle
- Horizontal racks attached to wall must provide a 1-foot clearance between rack and wall

These amendments add detail for the spacing requirements for vertical and stacked bicycle parking. These types of bicycle parking are known as "space saving" and allow for more bicycle parking to be accommodated in a smaller area. While these are commonly used types of bicycle parking, developers currently must get an adjustment or modification for use in projects. The inclusion of these standards in code will allow these "space saving" racks without requiring an adjustment or modification.

(2) Vertical Bicycle Parking Spacing Requirements

These amendments add the following spatial standards for vertical, wall racks.

- Minimum 1 ft. 5 in. (17 inch) spacing between each rack space, with a minimum vertical stagger of 8 inches.
- At least 3ft. 4 in. (40 inches) must be provided for the depth of the vertical bicycle parking space, measured from the wall to the required aisle (new dimension of the bicycle footprint).

(3) Stacked Bicycle Parking Spacing Requirements

These amendments add the following spatial standards for stacked, bicycle parking.

- A minimum of 1 ft. 5 in. (17 inch) spacing between spaces, with a vertical stagger between each space.
- A maneuvering area of 8 feet is required behind the rack.

b. Alternative Spacing Requirements. The following bicycle parking layouts may be provided as an exception to the minimum bicycle footprint standards in Subparagraph C.3.a. See Table 266-7 for the alternative dimensions.

(1) Horizontal bicycle parking spaces. Horizontal bicycle parking spaces secure the parked bicycle horizontal to the ground.

- Horizontal: Side by Side. Horizontal bicycle parking that is placed side by side as shown in Figure 266-9 may meet the alternative side by side dimensions in Table 266-7.
- Horizontal: Wall Attached. Horizontal bicycle parking that is attached to the wall as shown in Figure 266-10 may meet the alternative wall attached dimensions in Table 266-7.
- Horizontal: Diagonal. Horizontal bicycle parking that is placed at a diagonal as shown in Figure 266-11 may meet the alternative diagonal, 45-60 degree dimensions in Table 266-7.

(2) Vertical bicycle parking space. Vertical bicycle parking secures the parked bicycle perpendicular to the ground. Vertical bicycle parking that is placed as shown in Figure 266-12 may meet the alternative vertical dimensions in Table 266-7.

(3) Stacked bicycle parking spaces. Stacked bicycle parking are racks that are stacked, one tier on top of another. Bicycles are horizontal when in the final stored position. Stacked bicycle parking that is placed as shown in Figure 266-13 may meet the alternative stacked dimensions in Table 266-7 and the following:

- The rack must include a mechanically-assisted lifting mechanism to mount the bicycle on the top tier.

Commentary

Figures 266-8 through 266-11

These are new code figures to illustrate the various bicycle parking space dimensions.

Figure 266-8
Standard Spacing Requirements

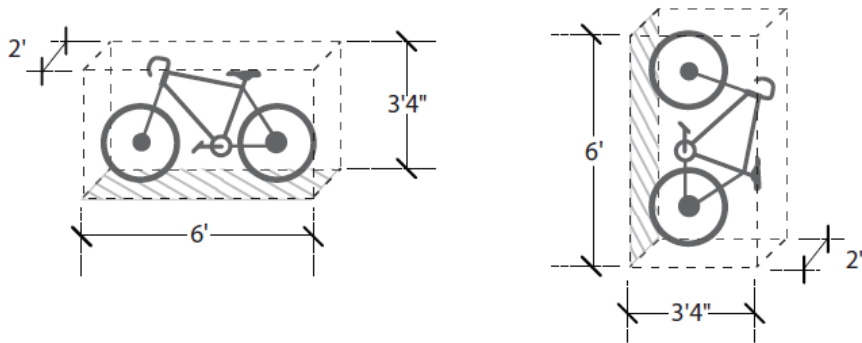


Figure 266-9
Horizontal Spaces: Side-by-Side

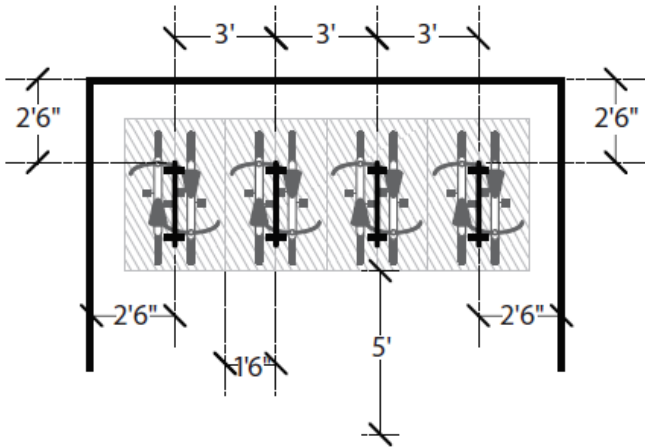


Figure 266-10
Horizontal Spaces: Wall Attached

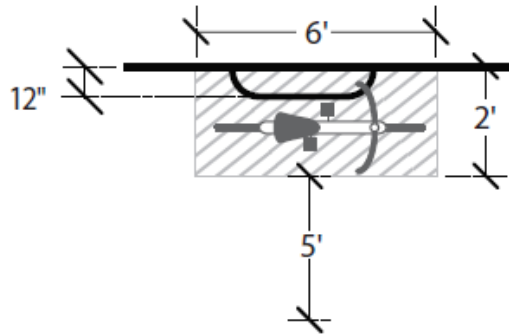
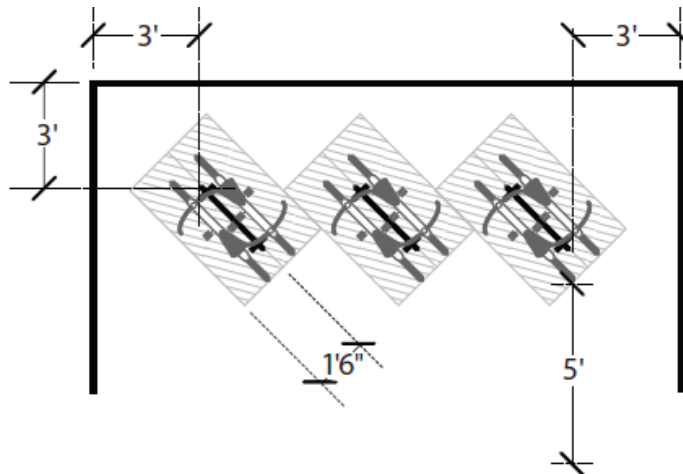


Figure 266-11
Horizontal Spaces: Diagonal (45-60 degree)



Commentary

Figures 266-12 and 266-13

These are new code figures to illustrate the various bicycle parking space dimensions.

Figure 266-12
Vertical Spaces

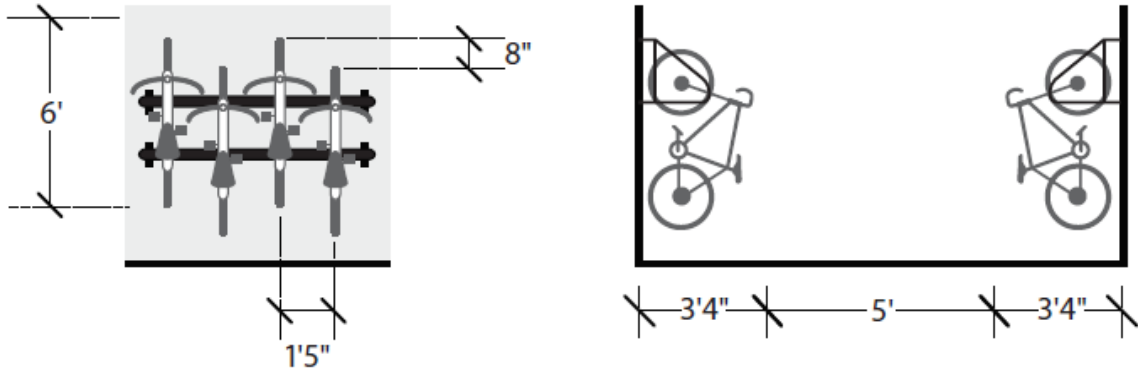
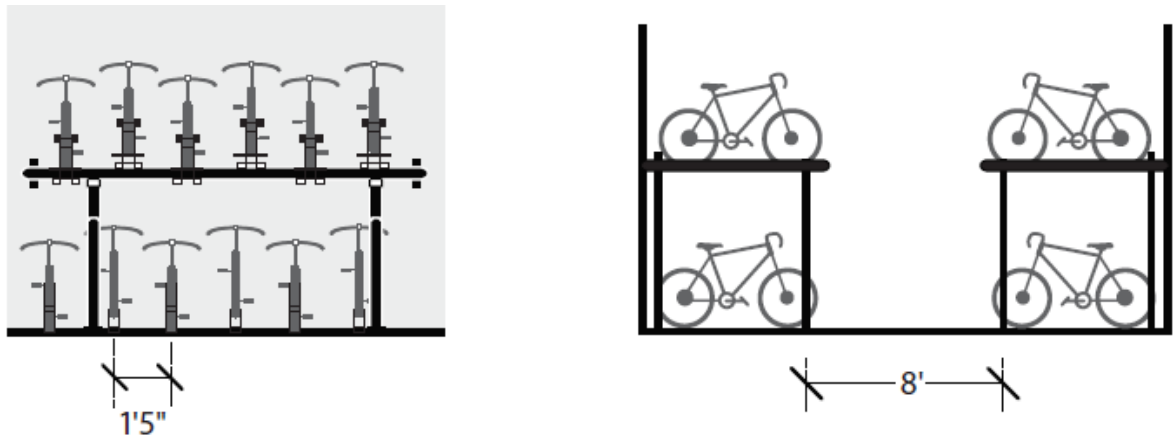


Figure 266-13
Stacked Spaces



Commentary

3. Bicycle Lockers.

These amendments add specific dimensions for bicycle lockers to set a minimum standard for functional lockers.

The amendment adds dimensional standards for triangular locker layouts that allow for two bikes to utilize a single locker space.

Also, a minimum access door height of 3 feet 11 inches (47 inches) is added for all bicycle lockers.

4. Signage

No change to existing signage requirements.

5. Bicycle Parking Information in Plans.

Current code does not require that applicants provide any detail in their applications regarding the types of bicycle racks to be used for a development. These amendments codify the level of detail and information needed for consistent review of required bicycle parking. This includes the new requirements for a minimum amount of horizontal bicycle parking, accommodating a larger bicycle footprint, and e-bikes. Applicants need to demonstrate compliance with these requirements by submitting specific information with either their building permit or land use review applications.

BDS staff currently receives much of this information, but this section adds clarity and consistency regarding what is required.

This approach is similar to how Joint Use Parking (33.266.110) and Environmental Zones (33.430.130) include enhanced detail of necessary documentation to be submitted as part of a building or zoning permit application or land use review.

3. Bicycle lockers. Bicycle lockers are fully enclosed and secure bicycle parking spaces.
 - a. The locker must be securely anchored to the ground.
 - b. There must be an aisle at least 5 feet wide behind all bicycle lockers to allow room for bicycle maneuvering.
 - c. Locker Dimensions. All bicycle lockers must meet one of these:
 - (1) The locker space has a minimum depth of 6 feet, with an access door of 2 feet wide and a minimum height of 3 feet 11 inches.
 - (2) A locker space provided in a triangle locker layout for two bicycle parking spaces must have a minimum depth of 6 feet 6 inches; and an access door with a minimum width of 2 feet 6 inches; and a minimum height of 3 feet 11 inches.
4. Signage
 - a. Light rail stations and transit centers. If required bicycle parking is not visible from the light rail station or transit center, a sign must be posted at the station or center indicating the location of the bicycle parking.
 - b. Other uses. If required bicycle parking is not visible from the streets or main building entrances, a sign must be permanently posted at the main entrance indicating the location of the bicycle parking.
5. Bicycle Parking Information in Plans. The following information must be submitted with applications for a building permit or land use review:
 - a. Location, access route to long-term bicycle parking and number of bicycle parking spaces for short-term and long-term bicycle parking requirements;
 - b. The model or design of the bicycle parking facilities to be installed;
 - c. Dimensions of all aisles and maneuvering areas; and
 - d. If applicable, information adequate to illustrate the racks and spaces that satisfy the minimum horizontal requirement, and the racks and spaces that accommodate a larger bicycle footprint.

Commentary

33.266.210.D. Standards for long-term bicycle parking.

1. Development Standards a. Location Standards.

This amendment removes the individual purpose statement under Standards for Long-Term Bicycle Parking, as all of the separate purpose statements were consolidated into one statement under the above section for Bicycle Parking Development Standards (33.266.210).

The remaining amendments in this section address the location standards for long-term bicycle parking. The code details the appropriate locations for long-term bicycle parking. The list is comprehensive, and long-term bicycle parking must be provided in one of the listed options.

Long-term bicycle parking can be located in one of the following locations:

- Within a building - bicycle parking can be located on the ground floor or other floors of the building. However, given the access requirements, if long-term bicycle parking is provided on floors other than the ground floor, then there must be elevator access to these other floors.
- On-site - bicycle parking can be located on-site, including in parking areas. On-site bicycle parking may also be located in personal structured parking areas that are dedicated in townhouses or other multi-dwelling buildings. If the bicycle parking is located on-site but outside of the building, then all required long-term bicycle parking spaces must be covered.
- In an area within 300 feet from the site - this option is being maintained from current code so that long-term bicycle parking can be in a location where the closest point is within 300 feet of the development site. This provision is not commonly used, but it provides flexibility for a developer to locate required long-term bicycle parking off-site.

Note: During the comment period, there were a number of questions about how bicycle parking requirements interact with the ground floor active use requirement and the ground floor window requirement. Ground floor active use references the general use categories (retail, office, community service) of the building, while the ground floor window requirements address the "things" that one can look at through the ground floor windows. Under both the Central City Plan District (33.510.220) and the Commercial/ Mixed Use Zones (33.130.230) Ground floor windows into bicycle parking areas are allowed to qualify for up to 25 percent of the ground floor windows coverage requirement.

Therefore, if a two-story office building were proposed, and the ground floor contained the reception desk, some unused conference rooms, storage, bike rooms, and the restrooms, while all the offices and employees were located upstairs, the ground floor active use requirement would be met, in that 100% of the ground floor was dedicated to an active use (office). However, to meet the ground floor window requirements, views into certain types of features would not be allowed. If the window looked into the storage and utility rooms, they wouldn't be allowed to be included as qualifying window features. However, up to 25% of the required ground floor windows are allowed to look into the bicycle parking room.

D. Standards for Long-Term Bicycle Parking.

1. Development Standards. Required long-term bicycle parking must be provided in lockers or racks that meet the following standards. Long-term bicycle parking for Schools may choose between (1) or (5) or a combination of those two locations:

a. Location Standards. Required long-term bicycle parking may be provided in one or more of the following locations:

(1) Within the building, including on the ground floor or on individual building floors;

(2) On-site, including in parking areas and structured parking;

(3) In an area where the closest point is within 300 feet of the site; or

Commentary

Location Standards (continued)

(4) In a dwelling unit.

This amendment continues the list of permissible locations for long-term bicycle parking. In-unit bicycle parking is a challenging issue. In-unit parking is often awkwardly located and easily removed by building managers, and many people prefer to park their bikes in a secure bicycle parking room when they have a choice. In buildings without an elevator, tenants must carry their bicycles up stairs to their units. Because of these factors, the majority of cities in the United States do not allow bicycle parking spaces in an apartment unit or on a balcony to count toward the required long-term bicycle parking.

On the other hand, requiring all bicycle parking to be outside of the dwelling units has an impact on how space is used in a building, which impacts development costs.

The proposed requirement presents a compromise allowing up to 20% percent of required long-term bicycle parking can be accommodated in-unit if additional standards are met. Racks provided in unit would not need to be as substantial as previously required (designed such that a u-lock shackle can lock both bicycle frame and one wheel to the rack). A requirement for buildings with no elevators was included to ensure accessing required bicycle parking did not involve carrying the bike up stairs.

(5) Location standards for Schools.

These amendments, and the subsequent standards on the next few pages, respond to concerns from school district representatives and others that work with students. Long-term bicycle parking is intended to provide convenient, secure and weather-protected facilities for employees and students. In a school setting, students and employees have different needs when it comes to bicycle parking.

A number of the standard security and location requirements create challenges when applied to a school setting. Specifically, secure bicycle rooms are difficult for students to access and locating student bicycle parking any significant distance from school main entrances creates additional barriers to use.

Therefore, this proposal limits the location of long-term school parking to within the building and/or within an area near a main entrance. The proximity to the main entrance is also designed to address bicycle parking security. While this proposal allows the majority of long-term school bicycle parking to be placed outside, this amendment ensures that bicycles are stored in higher activity zones on site.

Additional school specific standards are found under Long-term Bicycle Parking Security Standards and Additional Development Standards.

- (4) In a residential dwelling unit. Up to 20 percent of required long-term bicycle parking spaces may be provided in a residential dwelling unit, if they meet the following. Long-term bicycle parking provided in a residential dwelling unit does not need to meet the requirements for Paragraph C.1. above. No adjustments or modification are permitted to this section.
- Be provided in a rack that meets the standard bicycle parking spacing dimensions in Table 266-7. See Figure 266-8.
 - For buildings with no elevators, required long-term bicycle parking must be located in the ground floor units.
- (5) For Schools, long-term bicycle parking must be placed where the closest space is within 100 feet of a main entrance.

Commentary

Affordable housing exemptions to in-unit standards.

During the Discussion Draft outreach period, staff continued to meet with affordable housing developers and the Portland Housing Bureau (PHB). There was recognition that having secure and reliable bicycle parking is important and that supporting use of low-cost transportation is particularly important for residents of affordable housing. However, there was still concern regarding the impact of the 80% bicycle parking room requirement on the feasibility of affordable housing projects.

Recognizing the unique circumstances to getting affordable housing projects on the ground and the City of Portland's clear goal of improving housing affordability, especially for people living on very low incomes, staff worked closely with PHB to address the specific concerns of affordable housing developers and advocates.

Staff developed two proposals to address the concerns around two types of projects: first, deeply affordable housing projects, including small infill projects and second, smaller home ownership projects.

Exceptions. The first proposal targets affordable housing projects that meet a deeper affordability threshold. This threshold was developed in the ongoing Better Housing by Design project, and staff anticipate that this threshold will primarily be met by non-profit affordable housing developers:

- Up to 50% of required long-term bicycle parking spaces may be provided in a residential dwelling unit.

The second proposal responds to affordable housing developers' concerns that the level of affordability precludes a subset of projects that encourage moderate-income family housing. This proposal targets smaller sites where there is less room to provide separate bicycle parking rooms:

- Up to 100% of required long-term bicycle parking spaces may be provided in a residential dwelling unit if the site has 10 dwelling units or less.

b. Exceptions.

- (1) For projects where at least 50 percent of all dwelling units on the site are affordable to those earning no more than 60 percent of area median income, up to 50 percent of required long-term bicycle parking spaces may be provided in dwelling units. All other in-unit standards in Subsubparagraph D.1.a.(4)., above must be met. The applicant must provide a letter from the Portland Housing Bureau certifying that the development meets this affordability standard and any administrative requirements of the Portland Housing Bureau. The letter must be submitted before a building permit can be issued for the development, but is not required in order to apply for a land use review.
- (2) For projects with under 10 dwelling units, where at least 50 percent of the dwelling units are affordable to those earning no more than 100 percent of the area median income, up to 100 percent of required long-term bicycle parking spaces may be provided in dwelling units. All other in-unit standards in Subsubparagraph D.1.a.(4)., above must be met. To qualify the applicant must provide a letter from the Portland Housing Bureau certifying that the development meets this standard and any administrative requirements of the Portland Housing Bureau. The letter must be submitted before a building permit can be issued for the development, but is not required in order to apply for a land use review.

Commentary

Location Standards (continued)

c. Sites with multiple uses. The amendments to the location standards for long-term bicycle parking also include a provision to ensure that all tenants of mixed use buildings (employees and residents) can access long-term bicycle parking spaces. The bicycle parking can be provided in a common space with restricted access or in multiple separate locations, but all tenants must have access to at least the amount of long-term bicycle parking that is required for that Use Category.

d. Covered bicycle parking. The amendments to the covered bicycle parking standards state that 100 percent of long-term bicycle parking must be covered, compared to 50 percent in current code. Additionally, this proposal adds dimensional standards for the cover to ensure protection of bicycles from wind-driven rain.

- c. For sites with multiple primary uses, long-term bicycle parking must be provided in an area that can be accessed from each use. If bicycle parking is provided in a common area on the site, the area must be accessible for all tenants.
- d. Covered bicycle parking. All required long-term bicycle parking must be covered. Where required covered bicycle parking is not within a building or locker, the cover must be:
 - (1) Permanent;
 - (2) Impervious; and
 - (3) The cover must project out a minimum of 2 feet beyond the bicycle footprint of the required spaces.

Commentary

33.266.210.D. Standards for long-term bicycle parking.

2. Security Standards

Security is one of the stakeholder advisory group's guiding principles for the bicycle parking code update, and a primary issue brought up by a number of people during the community outreach and engagement work. Security needs are different in residential buildings than non-residential buildings. In some cases, bicycle parking at a residential building may act more as storage because not everyone uses a bicycle every day, and it requires more security and dedicated space.

The amendments provide two sets of security requirements. Long-term bicycle parking for residential uses must be provided in a lockable, restricted access room or enclosure that is designated primarily for bicycle parking. For all other use categories, bicycle parking must be located in a lockable room or enclosure but does not require that the space be designated for bicycles. For example, this distinction would allow the flexibility of co-locating bicycle parking spaces with staff work areas on upper floors in an office use or in the back-office area of a small retail establishment.

These amendments remove the following options as standalone security provisions, because they are easily removed or changed during the life of the building and thus do not provide the necessary security for long-term residential bike parking:

- Within view of an attendant or security guard;
- Within 100 feet of an attendant or security guard;
- In an area that is monitored by a security camera; or
- In an area that is visible from employee work areas.

Finally, this section also includes additional school standards to better meet the needs of students and staff. During outreach, staff heard concerns that while locked enclosures are necessary for adult employees storing their bicycles all day, they can pose a challenge for students to use, particularly given the short time windows when students need access to bicycle parking.

Therefore, the proposal allows up to 90% of required bicycle parking to be located outside of a lockable enclosure. These spaces will still need to meet other requirements, such as 100% weather protection and located on-site, within 100 feet from a main entrance. The remaining 10% of parking that must meet the standard security requirements and is intended to serve school staff.

b. Lighting

These amendments add lighting standards for long-term bicycle parking and access routes. This language is consistent with the lighting requirement under the pedestrian standards section in 33.120.255 and 33.130.240.

2. Security Standards.

a. Long-term bicycle parking must meet the following security standards:

(1) Long-term bicycle parking for residential uses must be provided in one of the following:

- A restricted access, lockable room or enclosure, designated primarily for bicycle parking;
- A bicycle locker; or
- In a residential dwelling unit meeting Subsubparagraph 1.a.(4), above.

(2) Long-term bicycle parking for all other uses must be located in one of the following locations. For Schools, a minimum of 10 percent of required bicycle parking must be located in the following:

- A restricted access, lockable room or enclosure; or
- A bicycle locker.

b. All access routes and the bicycle parking spaces must be lighted to a level where the system can be used at night by the employees and residents.

Commentary

3. Additional Development Standards

This section sets new development standards for bicycle racks to ensure usability for people of all abilities and to accommodate a variety of different types of bicycles.

To reduce the burden on smaller developments, these standards only apply to sites where more than 20 long-term bicycle parking spaces are required.

a. Minimum horizontal bicycle parking spaces.

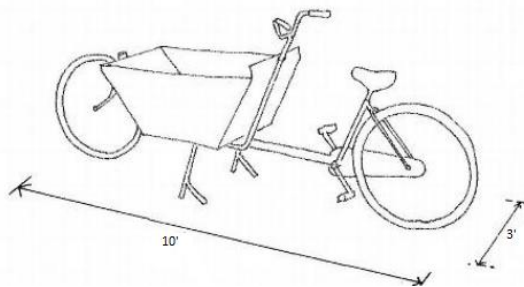
Current code does not distinguish between ground-mounted, horizontal racks and wall-mounted, vertical racks. This has led to the use of exclusively vertical racks in some developments. While vertical racks can be space efficient, they present usability issues for some people and some bicycles.

To provide bicycle parking spaces that do not require lifting of a bicycle, a minimum of 30% of required spaces must be in a horizontal rack or on the lower level of a stacked bicycle parking rack.

Finally, recognizing that students may have difficulty using vertical or stacked parking, this amendment requires all outdoor bicycle parking at schools to be placed horizontally.

b. Parking for larger bicycle footprint.

To accommodate larger bikes like cargo bikes, recumbent bikes, and bikes with trailers, a minimum of 5% of required bicycle parking spaces must accommodate a bicycle footprint of 3 feet by 10 feet and be provided in a horizontal rack. The bicycle parking spaces that fit the larger bicycle footprint standard will also count toward the minimum horizontal bicycle parking spaces.



3. Additional Development Standards. The following standards apply to sites where more than 20 long-term bicycle parking spaces are required:
- a. Minimum number of horizontal bicycle parking spaces. At least 30 percent of required spaces must be in a horizontal rack, or on the lower level of a stacked bicycle parking rack. For Schools, all required spaces located outside of the building must be in a horizontal rack.
 - b. Parking for larger bicycle footprint. At least 5 percent of required spaces must accommodate a larger bicycle footprint of 3 feet by 10 feet, placed in a horizontal rack. These spaces may be included to meet the requirement for Subparagraph D.3.a.

Commentary

33.266.210.E. Standards for short-term bicycle parking

Purpose.

The purpose statement for the short-term bicycle parking was combined into the single purposed statement for the Bicycle Parking Development Standards (33.266.210).

Most of the language in this section is the same as existing code, but the number references have changed, therefore this section is entirely underlined.

E. Standards for Short-term Bicycle Parking.

1. Development Standards. Required short-term bicycle parking must meet the following standards:
 - a. Location Standards. Required short-term bicycle parking must meet the following location standards:
 - (1) On-site, outside a building;
 - (2) At the same grade as the sidewalk or at a location that can be reached by an accessible route; and
 - (3) Within the following distances of the main entrance:
 - Building with one main entrance. For a building with one main entrance, the bicycle parking must be within 50 feet of the main entrance to the building as measured along the most direct pedestrian access route. (See Figure 266-8)
 - Building with more than one main entrance. For a building with more than one main entrance, the bicycle parking must be along all façades with a main entrance, and within 50 feet of at least one main entrance on each façade that has a main entrance, as measured along the most direct pedestrian access route. (See Figure 266-9)
 - Sites with more than one primary building. For sites that have more than one primary building, but are not an institutional campus, the bicycle parking must be within 50 feet of a main entrance as measured along the most direct pedestrian access route, and must be distributed to serve all primary buildings (See Figure 266-11);
 - Institutional Campus. On an institutional campus with more than one building or main entrance, the bicycle parking must be either:
 - Within 50 feet of a main entrance as measured along the most direct pedestrian access route; or
 - If the short-term bicycle parking is more than 50 feet from a main entrance, it must be in a common bicycle parking location along a pedestrian access route.

Commentary

33.266.210.E. Standards for short-term bicycle parking (continued)

b. Bicycle Parking Fund.

This proposal removes the all or nothing aspect of the Short-term Bicycle Parking Fund to allow partial placement of the short-term requirement on-site and the remainder paid into the Fund.

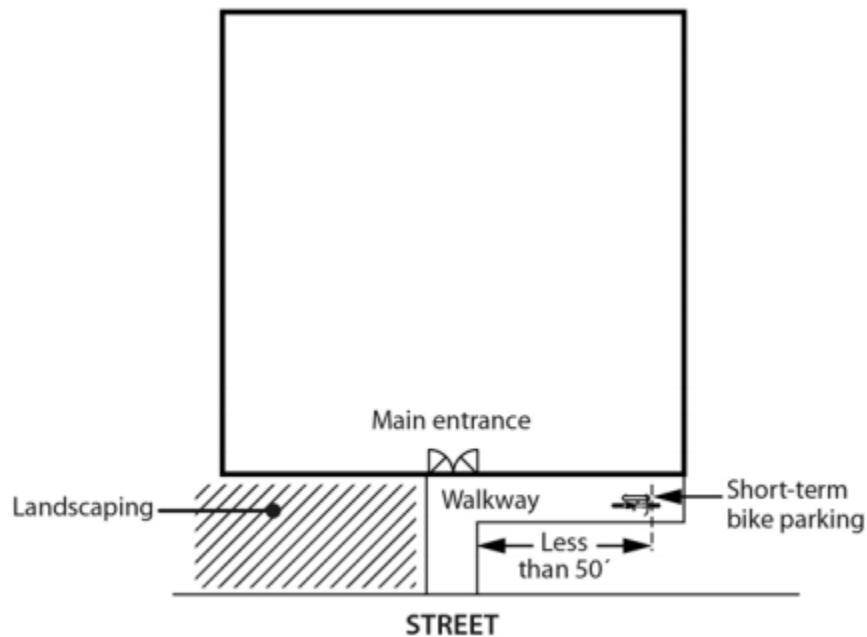
Short-term Bicycle Parking Figures

There were no changes made to these figures, however the Figure Numbers have changed.

b. Bicycle Parking Fund.

- (1) This option may be used if any of the required short-term bicycle parking cannot be provided on site in a way that complies with all of the standards in Subsection C and E. This option may not be used if:
- There are surface parking areas, plazas, exterior courtyards, or other open areas on the site, other than required landscaping;
 - Those open areas are large enough, separately or in combination, to accommodate all required short-term bicycle parking; and
 - The open areas meet the location requirements of Subparagraph E.1.a., above.
- (2) Fund use and administration. The Bicycle Parking Fund is collected and administered by the Bureau of Transportation. The funds collected will be used to install bicycle parking and associated improvements in the right-of-way.

Figure 266-14
Short-term bike parking – one building, one entrance



Commentary

Short-term Bicycle Parking Figures (continued)

There were no changes made to these figures, however the Figure Numbers have changed.

Figure 266-15
Short-term bike parking – one building, multiple entrances

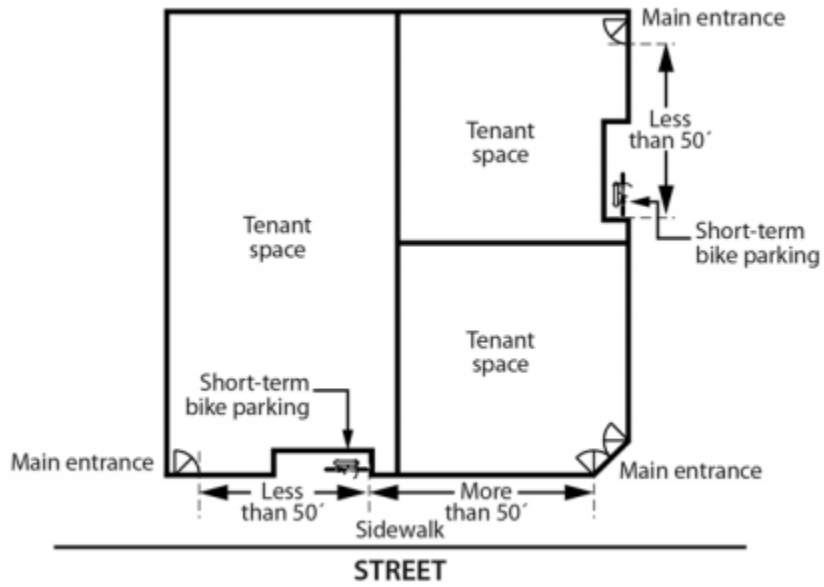
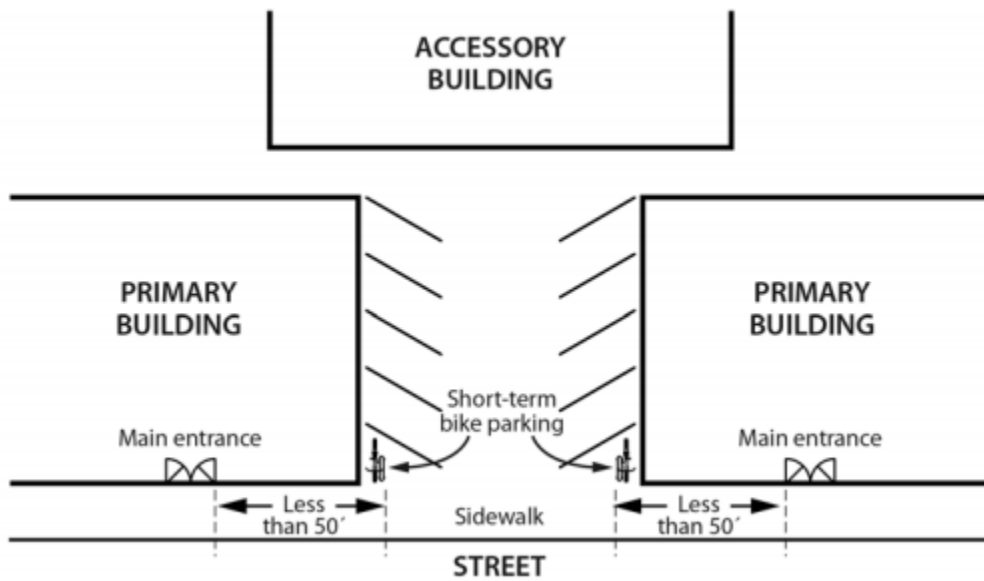


Figure 266-15
Short-term bike parking – multiple buildings, multiple entrances



Commentary

Strikethrough of Current Code.

Due to the changes in the order of this code chapter and the significant changes to the standards for all bicycle parking standards and long-term bicycle parking standards, all of the current code is strike through.

33.266.200 Purpose

Bicycle Parking is required for most use categories to encourage the use of bicycle by providing safe and convenient places to park bicycles. These regulations ensure adequate short and long term bicycle parking based on the demand generated by the different use categories and on the level of security necessary to encourage the use of bicycles for short and long stays. These regulations will help meet the City's goal that 10 percent of all trips be made by bicycle.

33.266.210 Required Bicycle Parking

A. Number of spaces required.

1. The required minimum number of bicycle parking spaces for each use category is shown on Table 266-6. No bicycle parking is required for uses not listed.
2. The required minimum number of bicycle parking spaces is based on the primary uses on a site. There are no bicycle parking requirements for accessory uses. However, if the required number of spaces for the primary uses is based on net building area, the net building area of accessory uses is included with the primary uses in the calculation. For example, a Manufacturing and Production uses of 45,000 square feet with 15,000 square feet of accessory Office use would have a bicycle parking requirement of 4 spaces, based on 60,000 square feet of net building area. If the primary use is not listed in Table 266-6, no bicycle parking is required for the accessory use.
3. When there are two or more separate primary uses on a site, the required bicycle parking for the site is the sum of the required parking for the individual primary uses.

B. Exemptions.

1. No long term bicycle parking is required on a site where there is less than 2,500 square feet of gross building area.
2. No bicycle parking is required for a Commercial Parking facility on a surface parking lot in the Central City plan district.

33.266.220 Bicycle Parking Standards

A. Short term bicycle parking.

1. Purpose. Short term bicycle parking encourages shoppers, customers, messengers, and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Short term bicycle parking should serve the main entrance of a building and should be visible to pedestrians and bicyclists.
2. Standards. Required short term bicycle parking must meet the following standards:
 - a. Short term bicycle parking must be provided in lockers or racks that meet the standards of Subsection 33.266.220.C.

Commentary

Strikethrough of current code continued.

- b. Location Standards. Required short-term bicycle parking must meet the following location standards:
- (1) Outside a building;
 - (2) At the same grade as the sidewalk or at a location that can be reached by an accessible route; and
 - (3) Within the following distances of the main entrance:
 - Building with one main entrance. For a building with one main entrance, the bicycle parking must be within 500 feet of the main entrance to the building as measured along the most direct pedestrian access route. (See Figure 266-8)
 - Building with more than one main entrance. For a building with more than one main entrance, the bicycle parking must be along all façades with a main entrance, and within 50 feet of at least one main entrance on each façade that has a main entrance, as measured along the most direct pedestrian access route. (See Figure 266-9)
 - Sites with more than one primary building. For sites that have more than one primary building, but are not an institutional campus, the bicycle parking must be within 50 feet of a main entrance as measured along the most direct pedestrian access route, and must be distributed to serve all primary buildings (See Figure 266-110);
 - Institutional Campus. On an institutional campus with more than one building or main entrance, the bicycle parking must be either:
 - Within 50 feet of a main entrance as measured along the most direct pedestrian access route; or
 - If the short-term bicycle parking is more than 50 feet from a main entrance, it must be in a common bicycle parking location along a pedestrian access route.
- c. Bicycle Parking Fund.
- (1) This option may be used only if it is not possible to provide all of the required short-term bicycle parking on-site in a way that complies with all of the standards in Subsection A and D. This option may not be used if:
 - There are surface parking areas, plazas, exterior courtyards, or other open areas on the site, other than required landscaping;
 - Those open areas are large enough, separately or in combination, to accommodate all required short-term bicycle parking; and
 - The open areas meet the location requirements of D.2., above.
 - (2) Fund use and administration. The Bicycle Parking Fund is collected and administered by the Bureau of Transportation. The funds collected will be used to install bicycle parking and associated improvements in the right-of-way.
 - (3) This option may not be used if any required short-term bicycle parking is provided on-site.

Commentary

Strikethrough of current code continued.

**Table 266-6
Minimum Required Bicycle Parking Spaces**

Use Categories	Specific Uses	Long-term Spaces	Short-term Spaces
Residential Categories			
Household Living	Multi-dwelling	1.5 per 1 unit in Central City plan district; 1.1 per 1 unit outside Central City plan district	2, or 1 per 20 units
Group Living		2, or 1 per 20 residents	None
	Dormitory	1 per 8 residents	None
Commercial Categories			
Retail Sales And Service		2, or 1 per 12,000 sq. ft. of net building area	2, or 1 per 5,000 sq. ft. of net building area
	Temporary Lodging	2, or 1 per 20 rentable rooms	2, or 1 per 20 rentable rooms
Office		2, or 1 per 10,000 sq. ft. of net building area	2, or 1 per 40,000 sq. ft. of net building area
Commercial Parking		10, or 1 per 20 auto spaces	None
Commercial Outdoor Recreation		10, or 1 per 20 auto spaces	None
Major Event Entertainment		10, or 1 per 40 seats or per CU review	None
Industrial Categories			
Manufacturing And Production		2, or 1 per 15,000 sq. ft. of net building area	None
Warehouse And Freight Movement		2, or 1 per 40,000 sq. ft. of net building area	None

Commentary

Strikethrough of current code continued.

Table 266-6 Minimum Required Bicycle Parking Spaces			
Use Categories	Specific Uses	Long-term Spaces	Short-term Spaces
Institutional Categories			
Basic Utilities	Light rail stations, transit centers	8	None
Community Service		2, or 1 per 10,000 sq. ft. of net building area	2, or 1 per 10,000 sq. ft. of net building area
	Park and ride	10, or 5 per acre	None
Parks And Open Areas		Per CU review	Per CU review
Schools	Grades 2 through 5	2 per classroom, or per CU or IMP review	None
	Grades 6 through 12	4 per classroom, or per CU or IMP review	None
Colleges	Excluding dormitories (see Group Living, above)	2, or 1 per 20,000 sq. ft. of net building area, or per CU or IMP review	2, or 1 per 10,000 sq. ft. of net building area, or per CU or IMP review
Medical Centers		2, or 1 per 70,000 sq. ft. of net building area, or per CU or IMP review	2, or 1 per 40,000 sq. ft. of net building area, or per CU or IMP review
Religious Institutions		2, or 1 per 4,000 sq. ft. of net building area	2, or 1 per 2,000 sq. ft. of net building area
Daycare		2, or 1 per 10,000 sq. ft. of net building area	None
Other Categories			
Aviation And Surface Passenger Terminals, Detention Facilities		Per CU Review	Per CU Review

Note: Wherever this table indicates two numerical standards, such as "2, or 1 per 3,000 sq. ft. of net building area," the larger number applies.

Commentary

Strikethrough of current code continued.

B. Long term bicycle parking.

1. Purpose. Long term bicycle parking provides employees, students, residents, commuters and other who generally stay at a site for several hours, a secure and weather protected place to park bicycles. Although long term parking does not have to be provided on site, the intent of these standards is to allow bicycle parking to be within a reasonable distance in order to encourage bicycle use.
2. Standards. Required long term bicycle parking must meet the following standards:
 - a. Long term bicycle parking must be provided in lockers or racks that meet the standards of Subsection 33.266.220.C.
 - b. Location. Long term bicycle parking must be located on the site or in an area where the closest point is within 300 feet of the site;
 - c. Covered Spaces. At least 50 percent of required long term bicycle parking must be covered and meet the standards of Paragraph 33.266.220.C.5., Covered Bicycle Parking; and
 - d. Security. To provide security, long term bicycle parking must be in at least one of the following locations:
 - (1) In a locked room;
 - (2) In an area that is enclosed by a fence with a locked gate. The fence must be either 8 feet high, or be floor to ceiling;
 - (3) Within view of an attendant or security guard;
 - (4) Within 100 feet of an attendant or security guard;
 - (5) In an area that is monitored by a security camera; or
 - (6) In an area that is visible from employee work areas.

C. Standards for all bicycle parking.

1. Purpose. These standards ensure that required bicycle parking is designed so that bicycles may be securely locked without undue inconvenience and will be reasonably safeguarded from intentional or accidental damage.
2. Bicycle lockers. Where required bicycle parking is provided in lockers, the lockers must be securely anchored.
3. Bicycle racks. The Office of Transportation maintains a handbook of racks and siting guidelines that meet the standards of this paragraph. Required bicycle parking may be provided in floor, wall, or ceiling racks. Where required bicycle parking is provided in racks, the racks must meet the following standards:
 - a. The bicycle frame and one wheel can be locked to the rack with a high security, U shaped shackle lock if both wheels are left on the bicycle;

Commentary

Strikethrough of current code continued.

- b.—A space 2 feet by 6 feet must be provided for each required bicycle parking space, so that a bicycle six feet long can be securely held with its frame support so that the bicycle cannot be pushed or fall in a manner that will damage the wheels or components. See Figure 266-11; and
 - c.—The rack must be securely anchored.
- 4.—Parking and maneuvering areas.
 - a.—Each required bicycle parking space must be accessible without moving another bicycle;
 - b.—There must be an aisle at least 5 feet wide behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way; and
 - a.—The area devoted to bicycle parking must be hard surfaced.
- 5.—Covered bicycle parking. Covered bicycle parking, as required by this section, can be provided inside buildings, under roof overhangs or awnings, in bicycle lockers, or within or under other structures. Where required covered bicycle parking is not within a building or locker, the cover must be:
 - a.—Permanent;
 - b.—Designed to protect the bicycle from rainfall; and
 - c.—At least 7 feet above the floor or ground.
- 6.—Signs.
 - a.—Light rail stations and transit centers. If required bicycle parking is not visible from the light rail station or transit center, a sign must be posted at the station or center indicating the location of the parking;
 - b.—Other uses. For uses other than light rail stations and transit centers, if required bicycle parking is not visible from the street or main building entrance, a sign must be posted at the main building entrance indicating the location of the parking.
- 7.—Use of required parking spaces.
 - a.—Required short-term bicycle parking spaces must be available for shoppers, customers, messengers, and other visitors to the site.
 - b.—Required long-term bicycle parking spaces must be available for employees, students, residents, commuters, and others who stay at the site for several hours.

Commentary

Chapter 33.120 Multi-Dwelling Zones

33.120.280 Detached Accessory Structures

This amendment adds covered bicycle parking to the list of examples for detached covered accessory structures.

33.120.280 Detached Accessory Structures

- A. [no change]
- B. [no change]
- C. Detached covered accessory structures. Detached covered accessory structures are items such as garages, greenhouse, artist’s studios, guest houses, accessory dwelling units, laundry or community buildings, storage buildings, covered bicycle parking, wood sheds, water collection cisterns, and covered decks or patios. The following apply to all detached covered accessory buildings. Garages are also subject to the standards of 33.120.283.

Commentary

Chapter 33.130 Commercial/Mixed-Use Zones

33.130.205 Floor Area Ratio

This amendment adds long-term bicycle parking to the existing FAR exemption for structured parking in commercial/ mixed use zones. Any long-term bicycle parking spaces provided outside of the dwelling unit, but within the building is exempt from FAR similar to the exemption for structured parking. This provides an incentive to provide dedicated bicycle parking areas or to include the bicycle parking areas within the structured parking area. The maximum floor area that can be exempt for both of these types of parking is 0.5 to 1 FAR.

Note: When the Better Housing by Design Project is complete, then the FAR exemption for long-term bicycle parking areas will be consistent with this proposal for Commercial/Mixed-Use Zones.

33.130.205 Floor Area Ratio

- A. [no change]
- B. **FAR standard.** The maximum floor area ratios are stated in Table 130-2 and apply to all uses and developments. Additional floor area may be allowed through bonus options, as described in Section 33.130.212, or transferred from historic resources per Subsection C. Except in the CR zone, floor area for structured parking and required long-term bicycle parking, up to a maximum FAR of 0.5 to 1, is not calculated as part of the FAR for the site. Adjustments to the maximum floor area ratios are prohibited.
- C. [no change]

Commentary

33.130.265 Detached Accessory Structures

This amendment adds covered bicycle parking to the list of examples for detached covered accessory structures.

33.130.265 Detached Accessory Structures

A. [no change]

B. [no change]

C. **Setbacks.**

1. [no change]

2. Covered structures.

a. Covered structures such as storage buildings, greenhouses, covered bicycle parking, and work sheds are subject to the setbacks for buildings.

Commentary

Chapter 33.229 Elderly and Disabled High Density Housing

33.229.040 Design Standards

The bicycle parking amount for Elderly and Disabled Housing, is being included in the updated Table 266-6; therefore, this separate reference in this chapter is not necessary and this amendment removes the reference.

33.229.040 Design Standards

C. Parking and passenger loading.

1. [no change]
2. Bicycle Parking. The project must meet the bicycle parking requirements of Chapter 33.266, Parking and Loading.
 - ~~a.~~
 - ~~b.—Exception. The minimum required long-term bicycle parking for units restricted by covenant is one space for every eight units.~~
3. [no change]

Commentary

Chapter 33.258 Nonconforming Development

33.258.070

Under current code, if a site with development not meeting the current development standards makes improvements above a financial threshold, then the "nonconforming" development must be brought closer to current standards. This includes bringing short- and long-term bicycle parking up to code. However, there are two exemptions to the standard. If a development does not have accessory surface parking or if the development is within the Central City or Lloyd District, then only short-term bicycle parking must be brought up to code standard.

The current code results in insufficient provision of new bicycle parking, especially in areas like the Central City, where Portland has a very high bicycle mode split. The amendments in this section remove the exemption for developments within the Central City or Lloyd District, but maintain the exemption for developments that do not have accessory surface parking, since those projects would have to repurpose existing building area to comply.

The proposed amendments require projects that meet the threshold of a major remodel to upgrade both required short-term and long-term bicycle parking to code standards. As defined below, major remodels are large scale renovations or additions to a building that are more likely to include revisions to site and floor plans that can incorporate bike parking.

Definition of major remodel (33.910): Projects where the floor area is being increased by 50 percent or more, or where the cost of the remodeling is greater than the assessed value of the existing improvements on the site. Assessed value is the value shown on the applicable county assessment and taxation records for the current year.

There are a number of examples in code where the major remodel definition is used as a threshold to apply standards, including, but not limited to the following examples:

- 33.130.282: The large site pedestrian connectivity standard applies to major remodels if the site is over 5-acres (i.e. this would be above any NCU).
- 33.229.010 & 33.229.030: The elderly housing bonuses and standards are only available for new development and major remodeling projects.
- 33.292.020 The superblock requirements get triggered for major remodels that also have certain requirements
- 33.510.211 CCPD requires a shadow study for a major remodeling project that increases a building height above 100-ft on certain sites along the Parks blocks.
- 33.510.223 CCPD bird safe glazing requirements apply to a major remodel that is also altering at least 75% of the façade
- 33.510.225 CCPD ground floor active use standards apply to major remodels on certain frontage streets

33.258.070 Nonconforming Development

D. Development that must be brought into conformance.

2. Nonconforming development with an existing nonconforming use, allowed use, limited use, or conditional use. Nonconforming development associated with an existing nonconforming use, an allowed use, a limited use, or a conditional use, must meet the requirements stated below. When alterations are made that are over the threshold of Subparagraph D.2.a., the site must be brought into conformance with the development standards listed in Subparagraph D.2.b. The value of the alterations is based on the entire project, not individual building permits.

a. [no change]

b. Standards which must be met. Development not complying with the development standards listed below must be brought into conformance or receive an adjustment.

(1) [no change]

(2) [no change]

(3) Bicycle parking by upgrading existing racks and providing additional spaces in order to comply with 33.266.220, Bicycle Parking as follows:

- Major remodeling projects must meet the standards for all bicycle parking;
- Sites with surface parking must meet the standards for all bicycle parking;
- In all other situations, the amounts and standards Sites that do not have accessory surface parking or are inside the Central City Core Area or Lloyd District, as shown on Map 510-8, are not required to meet this standard for long-term bicycle parking, but are required to meet this standard for short-term bicycle parking must be met.

Commentary

Chapter 33.266 Parking, Loading, And Transportation And Parking Management

33.266.110.D. - Exceptions to the minimum number of parking spaces.

This amendment adds an exemption to the minimum number of parking spaces by replacing the existing vehicle parking with bicycle parking. The proposal allows required vehicle parking areas to be converted to accommodate required bicycle parking minimums.

Current code allows a number of exceptions to the minimum required parking spaces if developments include items that are beneficial to overall livability; tree preservation, transit-oriented plazas, carshare spaces and bikeshare stations. This amendment is also similar to the 33.266.130.G.3.e. which allows the amount of required vehicle parking to be reduced by the amount needed to accommodate the minimum interior parking lot landscaping required by current code.

This proposal was added as "c", so the remainder of the current exemptions are renumbered.

Note: Title 33 defines "parking area" and "parking space" in terms of motor vehicles:

- **Parking area.** A parking area is all the area devoted to the standing, maneuvering, and circulation of motor vehicles. Parking areas do not include driveways or areas devoted exclusively to non-passenger loading.
- **Parking space.** A space designed to provide standard area for a motor vehicle.

33.266.110.D

D. Exceptions to the minimum number of parking spaces. The minimum number of required parking spaces may be reduced as follows

1. [no change]
2. Other exceptions. The minimum number of required parking spaces may not be reduced by more than 50 percent through the exceptions of this Paragraph. The 50 percent limit applies cumulatively to all exceptions in this Paragraph:
 - a. [no change]
 - b. Replacement of parking areas with non-required bicycle parking. Bicycle parking may substitute for up to 25 percent of required parking spaces. For every 5 non-required bicycle parking spaces that meet the short or long-term bicycle parking standards, the motor vehicle parking requirement is reduced by one space. Existing parking may be converted to take advantage of this provision.
 - c. Replacement of existing parking areas with required bicycle parking. Existing required parking spaces may be converted to bicycle parking to accommodate required bicycle parking minimums. The amount of parking spaces required is reduced by the amount needed to accommodate the minimum bicycle parking required.
 - d. [no change]
 - e. [no change]
 - f. [no change]
 - g. [no change]

Commentary

Chapter 33.510 Central City Plan District

33.510.261.G. - Preservation Parking and 33.510.261.I.

This amendment removes the references to bicycle parking in this chapter to clean up the multiple, sometimes conflicting references to bicycle parking requirements. The update to Table 266-6 addresses the required bicycle parking amounts for Commercial Parking, and the regulations do not need to be repeated under the Central City Plan District Chapter.

33.510.261.G

G. Preservation Parking. The regulations of this subsection apply to Preservation Parking. Adjustments to this subsection are prohibited.

1. [no change]
2. [no change]
3. [no change]
4. [no change]
5. ~~Bicycle parking. Preservation Parking facilities must provide 1 long-term bicycle parking spaces for every 14 motor vehicle parking spaces.~~

33.510.261.I

I. All parking built after (insert effective date). The regulations of this subsection apply to all new parking regardless of type.

1. [no change]
2. [no change]
3. [no change]
4. [no change]
5. [no change]
6. [no change]
7. ~~Bicycle parking. Bicycle parking is regulated by Chapter 33.266, Parking and Loading. For most types of development, bicycle parking requirements are based on the primary use, such as Office or Retail Sales And Service. For Commercial Parking, which includes Visitor Parking, bicycle parking is based on the number of motor vehicle parking spaces. There are additional bicycle parking requirements for Preservation Parking, see Paragraph G.5.~~

Commentary

Chapter 33.281 Schools and School Sites

33.281.050.A.3

This amendment adds bicycle parking to the list of exterior improvements that are exempt from the 1,500 square foot limitation, that are allowed without a conditional use review.

33.281.050.A

- A. Allowed.** Alterations to the site that meet all of the following are allowed without a conditional use review
1. [no change]
 2. [no change]
 3. Increases of exterior improvement areas up to 1,500 square feet. Fences, handicap access ramps, on-site pedestrian circulation systems, Community Gardens, Market Gardens, bicycle parking, and increases allowed by Paragraphs A.5 and A.8 are exempt from this limitation;
 4. [no change]
 5. [no change]
 6. [no change]
 7. [no change]
 8. [no change]

Commentary

Chapter 33.815 Conditional Uses

33.815.040.B.1.d

This amendment adds bicycle parking to the list of exterior improvements that are exempt from the 1,500 square foot limitation, that are allowed without a conditional use review.

33.281.050.B

- B. Proposals that alter the development of an existing conditional use.** Alterations to the development on a site with an existing conditional use may be allowed, require an adjustment, modification, or require a conditional use review, as follows:
1. Conditional use review not required. A conditional use review is not required for alterations to the site that comply with Subparagraphs a through f. All other alterations are subject to Paragraph 2, below. Alterations to development are allowed by right provided the proposal:
 - a. [no change]
 - b. [no change]
 - c. [no change]
 - d. Does not increase the exterior improvement area by more than 1,500 square feet. Fences, handicap access ramps, ~~and~~ on-site pedestrian circulation systems, ground mounted solar panels, Community Gardens, Market Gardens, bicycle parking, and parking space increases allowed by 33.815.040.B.1.f, below, are exempt from this limitation;
 - e. [no change]
 - f. [no change]

